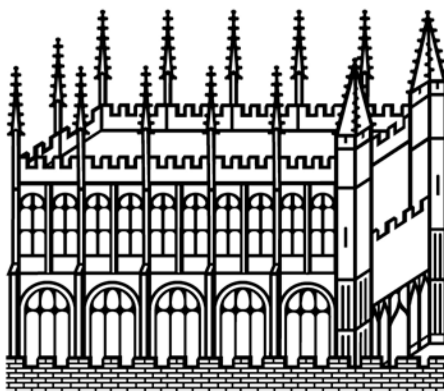

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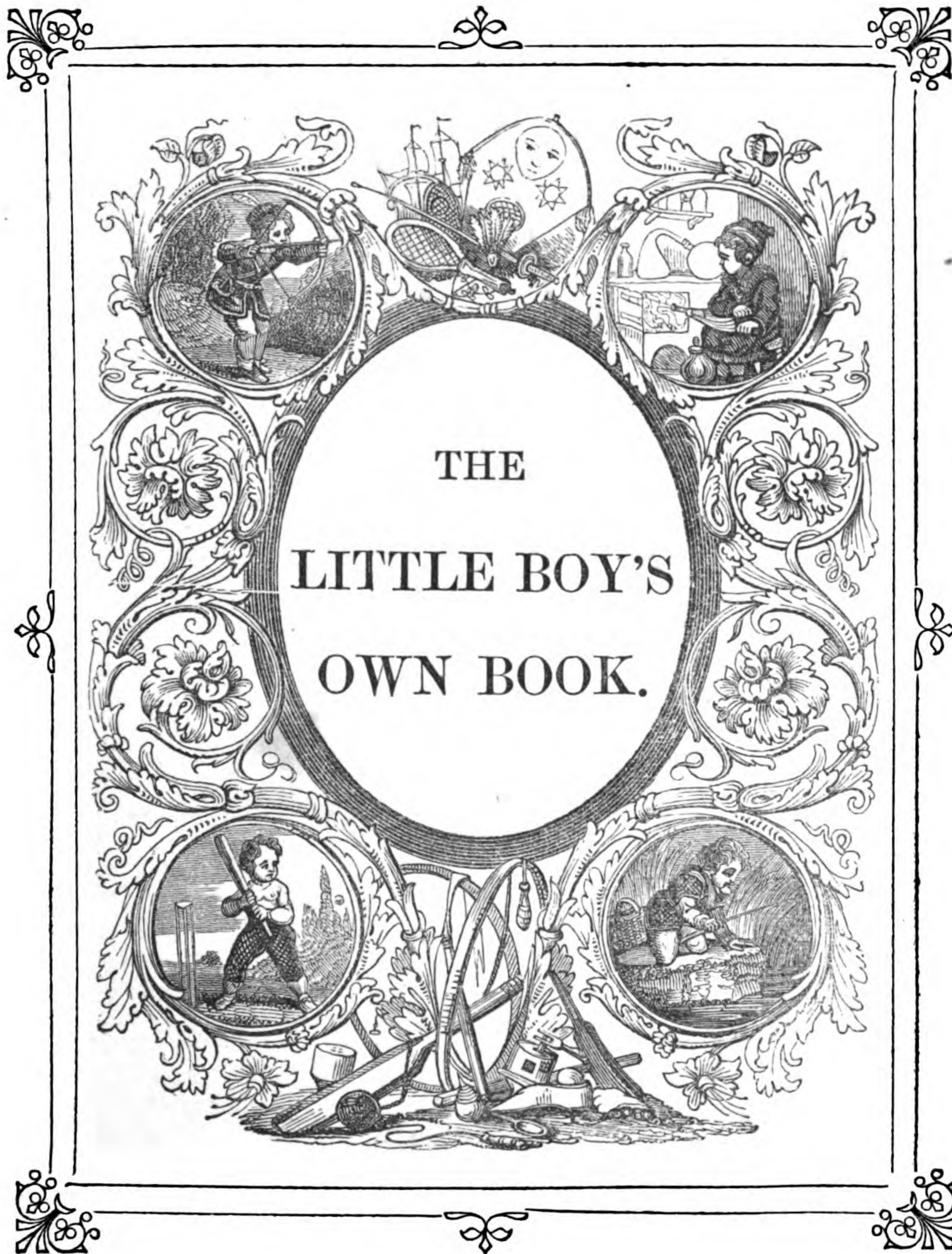
THE
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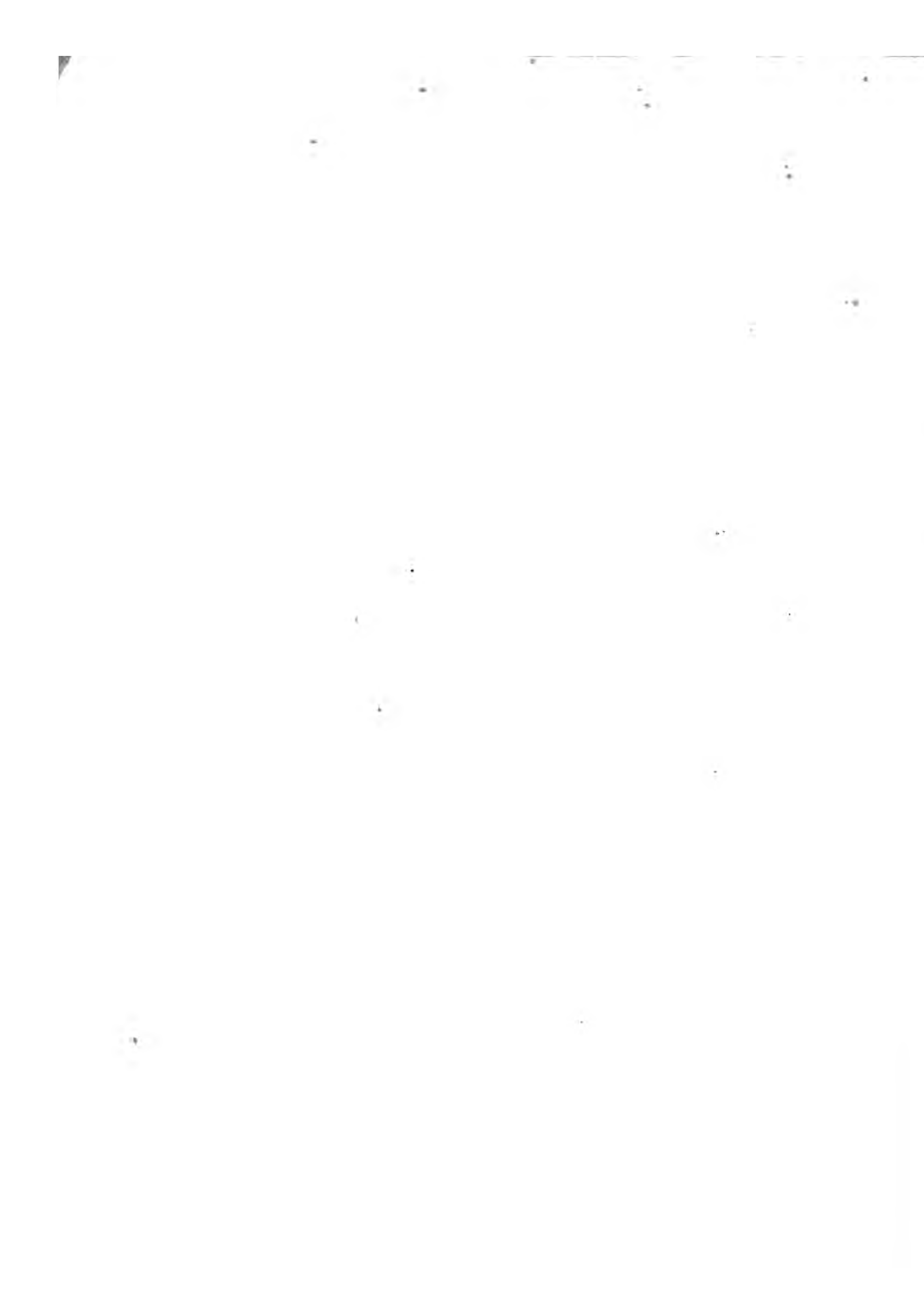

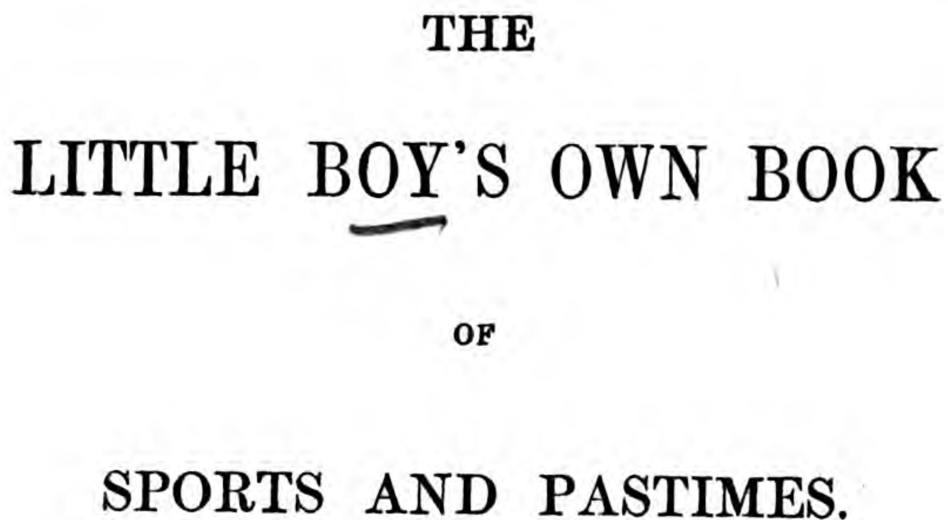

THE LITTLE BOY'S OWN BOOK OF SPORTS AND PASTIMES.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS.

"Blithe Boyhood is the holiday of life;
The joyous spirits then impart a zest
To tops and marbles, which man's graver toys,
Though bought at golden prices, ever lack."

LONDON:
DAVID BOGUE, 86, FLEET STREET.
MDCCCLV.

268. c. 134.

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Prelude.

A POPULAR ENCYCLOPÆDIA of the Sports and Pastimes of Youth,—a companion for all holidays,—THE BOY'S OWN BOOK,—unmixed with aught that was not highly interesting to himself, had long been a desideratum; to supply which, he was usually led to become his own caterer, and purchase publications of an objectionable character, merely because their low price placed them within his reach. The present Work was an attempt to obviate this inconvenience, by enabling those, who had the guardianship of youth, to present their young protegés, in the form of a Holiday or Birth-day Present, with a concentration of all that usually delights them, executed in such a manner as their own more matured judgment would approve, and much more amusing and instructive to the juvenile mind, than the cheap trash on which the hoarded shilling is usually expended. The event has fully justified the expectations of the Publishers; few works have met with so flattering a reception, from the press and the public; and this reception has stimulated them, as new editions have been called for, to increase the value of the work by successive improvements, and thus render it as distinguished for its execution as it was attractive for its novelty. Compared with the earlier editions, its present appearance is strikingly superior. A considerable quantity of extra matter, including several new subjects, has been introduced; many of the cuts have been re-engraved; the number of illustrations has been

increased; and, in short, neither labour nor expense has been spared to merit the extraordinary success with which the work has been honoured.

A wider field than has been taken cannot well be imagined. Our plan embraces the amusements of all minds, and of all seasons,—in winter and in summer,—at home and abroad. The robust and the delicate,—the contemplative and the ingenious,—have each their tastes provided for. The sports and exercises of out-door enjoyment,—the pastimes of a winter's fire-side,—and the recreations of science, are copiously detailed in our pages, which have been printed in a close type, that we might be enabled to compress a whole library of sportful lore in the brief compass of one little volume. We have attempted to please Seniors and Juniors,—to unite the suffrages of grey-beard Wisdom, and blooming Adolescence; no easy task!—but we have succeeded; the MINOR-ity has given us a MAJORITY; and we boldly make our appearance at the bar of public opinion, assured that a host of advocates, appreciating our industry and our motives, would each cheerfully undertake, on our behalf, the task of

A Pleader.

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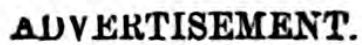


ADVERTISEMENT.

THE present volume consists of a selection of such portions of the BOY'S OWN BOOK as are more expressly suited for Little Boys; and will, it is hoped, serve as a pleasing prelude to the possession of the larger and more comprehensive work, when advancing years demand a more extended series of amusing and athletic sports.

MINOR SPORTS AND PASTIMES

Blythe Boyhood is the holiday of life;
The joyous spirits then impart a zest
To tops and marbles which man's graver toys,
Though bought at golden prices, ever lack.

WE heartily trust that our young readers will commence the perusal of our pages with pleasure equal to that which we feel in sitting down to write them, and that we shall go pleasantly together through our work. The description of these Minor Sports, most especially, will, we are convinced, be an agreeable pastime to us, and call up, from time to time, welcome reminiscences of those days of our boyhood, when we were a hero at "Ring-taw," and by no means a contemptible adversary even to the most accomplished youthful players at "Fives." It will remind us of our happy holidays and favourite school-fellows;—of feats of agility performed at "Follow my Leader," and trophies borne off in triumph at "Peg in the Ring;"—of those merry mornings, when the first glance of the sun awakened us, to snatch an additional half-hour for the playground, without encroaching on the allotted times for study;—when, during "winter's surly reign," we joined the active few, who, instead of moping in great coats, or shivering round a fire, sallied forth into the clear, cold, invigorating air, and marking out goals and bounds in the crisp hoar frost that mantled the ground, sought after, and found, warmth and high spirits in a game of

"Prisoner's Base,"—or made the brows glow at lofty "Leap-frog,"—or defied the frost by briskly plying the whip-top with eel-skin, and came in with glad hearts, ruddy cheeks, perfect willingness, and the best of appetites, to our morning repast and daily studies.

It will bring to our recollection also, those smooth and shady spots, where, when the noon-tide sun was midway in the heavens, in the sultry month of August, we alternately perused pleasant and instructive books, and played with our class-mates at "Increase-pound," or set up a pyramid of marbles for them to shoot at, or shot at one erected by one of them. It will carry us back in imagination to the hills and downs, where we flew our kites,—the loftiest soarers for miles around;—of mishaps through breaking of strings, and long races of rivalry after our falling favourites. It will remind us of that cheerful parlour, in which, during the winter vacation, when mince-meat, plum-puddings, and young parties, were most abundant,—on Christmas-eve, or merry Twefth-night, most especially,—we bore a part in the exhilarating and harmless fire-side sports of the season. It will revive the memory of that dilapidated ruin,—the court of that mouldering castle,—with a tall and stately eim rising from one of its corners, and ivy, apparently ages old, the constant home and nestling-place of innumerable birds, which bedecked and supported the outward side of its walls,—the scene of our chief exploits at Fives;—the garden walk, where our school-swing was erected, between two gigantic sister pear trees;—and, in brief, of all those places where we played the games which were the delight of our holidays; when a sportive bout at "Saddle my Nag," was in itself an ample recompense for the past two hours of study, employed in working an intricate question in arithmetic—composing a theme on some difficult subject— rendering a portion of the Iliad into Latin hexameters, or a passage of Pope into French prose.

We conceive that we are bringing no disgrace on our boyhood, by avowing that we dearly enjoyed the sports of the play-ground. The line of a talented writer, "A dunce at syntax, but a dab at taw," has, by a thoughtless few, been converted into a proverb, and those who were most eminent for their activity and love of the usual amusements of youth out of school, have thus been unjustly stigmatized as inattentive students. The reverse, we have generally found to be the fact; for we have often remarked, that the lads who led the sports in the play-ground, stood high in their classes in the school-room. "There is a time for all things," is a trite, but, in this case, an applicable observation; the scholastic discipline wisely allots certain hours in the day for recreation; they should be employed in healthful and agreeable pastime, so as to render the boy prepared to return with mental vigour to his books;—study should give a relish to sport, and sport to study. But while we recommend that the school-room should be forgotton on the play-ground, we wish to impress on our young readers the necessity of their forgetting the play-ground in the school-room.

GAMES WITH MARBLES.

There were, some years ago, and we believe, there still are, three or four different sorts of marbles: the Dutch, or variegated clay marbles, were reckoned the worst; those of yellow stone, with beautiful spots or circles of black or brown, were next in estimation; and what were called the real taws, of pink marble, with dark red veins, were preferred to all others. The games with marbles are not very numerous; the following pages contain descriptions of all that have come to our knowledge.

SPANS AND SNOPS.

This is the most simple of all games with marbles; one player first shoots his marble, the second then endeavours to strike or "snop" it, or otherwise, to shoot his own within a span of it. If he miss, or do not fire within the span, the first player, from the spot where his marble rests, in like manner, shoots at that of the second; and so on, until a snop or span is made, when the marble snopped or spanned is taken, and the game begun anew, by the winner.

BOST-ABOUT.

This game differs from the preceding one only in this respect, namely, that the marbles, instead of being shot with the fore-finger and thumb, are pitched, or to use the technical word, bosted, by the players.

HOLES.

Three small holes are dug, about a yard and a half asunder; a line is drawn about two yards from the first hole, from which the players begin the game. Chance decides who shall have the first shoot; the object is to drive the marble into the first hole; if this be done, the player shoots again, at the distance of a span, toward the second. If, however, he miss the hole, the other player begins, and each shoots, alternately, as the other misses. After having shot the marble into a hole, the player is allowed, if his adversary's marble be near, to drive it, with his own, as far as he can, and, if he strike it, to shoot again. The game is won by the player who gets first into the last hole, in the following order:—first hole, second, third, —second, first,—second, third. The loser places his knuckles at the first hole, the winner shoots as near to it as he can from the line, and fires three times, from the place where his marble rests, at the loser's knuckles.

KNOCK-OUT.

Two or more may play at this game. He who begins throws a marble gently against a wall, so that it rebounds to a distance not exceeding a yard; a second player throws another marble against the wall, endeavouring to make it rebound, so as to strike or come within a span of the first; if he can do neither, the first player takes up his own marble, and, in turn, strives to snop or span that of the second. The marble that is thus snopped or spanned, is won, and the winner begins again. Where only two play, it is best to knock out two or three marbles each, alternately, before they begin to use those on the ground. In this case, a player may win his own marbles, as they are common stock when down, and take up which he pleases, to play with.

THE CONQUEROR.

This is a sport which we do not much approve of, although, we must confess that, in the days of our youth, we were very fond of it. Strong stone marbles of a moderate size must be used. The game is commenced by one boy laying his taw on a piece of smooth and tolerably hard earth, (turf and pavement are both improper,) the other player throws his taw at it, as hard as he can, so as to split it, if possible. If he fail to do so, his own taw is thrown at in turn, and thus each player has, alternately, a cast at the taw of the other. A strong marble will frequently break, or conquer, fifty or a hundred others; where this game is much played, a taw that has become a conqueror of a considerable number, is very much prized, and the owner will not play it against any but those which have conquered a respectable quantity. "When Greek meets Greek," or when two conquerors are engaged, the number of marbles previously broken by

the vanquished is added to those of the victor; thus, if my taw having already split twenty marbles, conquers another that has split twenty, my taw then becomes a conqueror of forty-one,—that is, twenty, its previous score; twenty, the vanquished taw's score, and one for the broken taw itself. In the west of England, the game of "The Conqueror" is also played, with small, hard, variegated shells, which are found in old banks, and from which the snails, their former inhabitants, have disappeared. The shell is held in the forefinger of the right hand, and its peak pushed vigorously against that of the adversary's; the shell which breaks is, of course, conquered.

ARCH-BOARD.

This game, in some parts of England, is called "Nine-holes;" it has various names, and is sometimes played with iron bullets instead of marbles. The marbles are bowled at a board set upright, resembling a bridge, with nine small arches, all of them numbered; if the marble strike against the sides of the arches, it becomes the property of the boy to whom the board belongs; but, if it go through any one of them, the bowler claims a number equal to the number upon the arch it passed through. We have seen the boards, in this game, marked above some of the arches with nihils, in this order:—5, 0, 1, 2, 0, 3, 0, 4, 0. In some places, where there are no nihils on the board, and the numbers go beyond five, the bowler not only loses his marble, if it strike against the sides of the arches, but also gives the board-keeper a marble each time he bowls.

RING-TAW.

The rules of Ring-taw vary in different places; the following are the most general:—A circle is drawn, into which each party places as many marbles as may be agreed on. A line, called the offing, is then drawn at some distance, from which each in turn shoots at the ring. Shooting a marble out of the ring, entitles the shooter to go on again, and thus the ring may be sometimes cleared by a good player, before his companion or companions have a chance. After the first fire, the players return no more to the offing, but shoot, when their turn comes, from the place where their marbles rested on the last occasion. Every marble struck out of the ring, is won by the striking party; but if the taw at any time remain in the ring, the player is not only out, but if he have, previously, in the course of the game, struck out any marbles, he must put them in the ring again. And if one player strike with his taw the taw of another, the player whose taw is so struck, is out; and if he have, previously, shot any marbles out of the circle, he must hand them over to the party by whose taw his has been so struck.

INCREASE-POUND.

This is superior to any other game with marbles. It differs from "Ring-taw" in the following particulars:—If, previously to any marble or shot being struck out of the ring or pound, the taw of one of the players be struck by the taw of another, (except that of his partner,) or in case he shoot his taw within the pound, in either case, he puts a shot in the ring, and before either of the others play, shoots from the offing and continues in the game; but if the first of these events occur after one or more shots have been struck out of the pound, if he have previously, during that game, obtained any shots himself, he hands them over to the party who has struck him, and also puts a shot in as before, previously to his shooting from the offing; but if he have previously obtained no shots during the game, he is put out of the game entirely, or "killed," by his taw being so struck; and again, if after a shot or shots have been struck out of the pound, his taw get within it, (on the line is nothing,) he puts his shots, if he have obtained any, with an additional one, into the pound, and shoots from the offing; but if he have not obtained a shot or shots after his taw so remains within the ring, "or gets fat," as it is called, he is "killed," and stands out for the remainder of the game. When there is only one marble left in the ring, the taw may then remain inside it, without being "fat" at this game. The players seldom put more than one marble each in the ring at first.

THE PYRAMID.

A small circle is drawn on the ground, within which, one player builds a pyramid, by placing three marbles triangularly, and a fourth in the centre, on the top of them. Any other player may then shoot at the pyramid, at an agreed distance, by giving, for each time of shooting, to the one who keeps the pyramid, a marble. If the shooter strike the pyramid with his taw, as many of the marbles composing the pyramid, as may be driven out of the circle, belong to the shooter, and the pyramid is constantly to be kept up complete by its owner. This is a good in-door game; variety and additional interest may be given to it, by each player taking the office of pyramid-keeper, at stated intervals.

GAMES WITH TOPS.

HUMMING-TOP.

HUMMING-TOPS, of various sizes, are to be bought at the toy-shops; very little art is necessary to use them. After the string is wound about the upright piece, one end of it is taken in one hand, and the handle of the fork-piece in the other; the string is then to be pulled off with force, and the top is set up.

WHIP-TOP.

This is an excellent amusement. The top is easily set up by twirling it with both hands on a smooth surface, and applying the whip with gentleness at first, increasing the vigour of the blows, as the top gets firm on its peg.

There is a local variety of the whip-top, which is too singular for us to pass unnoticed. We allude to the Colchester top, of which an engraving is presented in the margin. Its construction is most simple, and, for spinning, it is said considerably to excel the tops made in the common form. The only games we have ever seen with whip-tops, are "races", and "encounters;" in the former, the object is to flog the top to a certain distance first; in the latter, the tops are whipped against each other until one is knocked down. The best material for a whip, at this capital sport, is an eel-skin; it far surpasses cord, or leathern thongs.

PEG-TOP.

In this favourite game considerable dexterity may be acquired by practice. About London, peg-tops are, in general, only used for the purpose of being spun, and taken up to "sleep," as it is called, in wooden spoons, which are sold at the toy-shops for that purpose; but elsewhere, regular games at peg-top are played, in which the victors carry off capital steel pegs as trophies of their prowess at the sport. A circle, whose diameter is about a yard, is first drawn on a smooth piece of ground, (pavement is objectional for this game,) and several players surround it. One volunteers to commence; he throws his top inside the circle, and the others are at liberty to cast theirs at it, so long as it remains within the ring; the moment it rolls out, he may take it up, and peg at those which still remain inside. The object of each player being to split the tops of his companions, if he succeed in any case, he keeps the peg of the split top as the spoil of his victory. If either of the players do not cast his top within the ring, or if he attempt to take it out, or if he fail to set it spinning when he throws, or if it do not spin out, or after it ceases spinning, roll out of the circle, it is called "a dead top," and must be placed in the centre of the ring for the others to peg at. When it is knocked out again without being split, the player to whom it belongs, takes it up, and plays away as before. Sometimes half-a-dozen dead tops are driven out of the ring by one cast, without any of them being damaged, and indeed, if they be made of good box, it is but rarely that they split. A top with a long peg is best at this game, as it is more calculated to swerve out of the ring after it is spun; a top that sleeps after it is cast, runs the greatest danger, and those that sleep most, are heavy bodied tops with short blunt pegs. It is advisable to wind the cord round nearly three parts of the peg, as well as the top, and to use a button at the end instead of a loop. The Spanish peg-top, of which we give a cut in the margin, is made of fine mahogany, and tapered off less abruptly toward the peg than the English tops. The peg is very short, of an uniform thickness, and rounded, not pointed, at the end. These tops spin nearly upright, and for thrice the usual time; it is unnecessary to throw them with any degree of force; in fact, they spin best when set up under-handed; so that, for playing on flooring or pavement, they are much superior to those made in the English fashion, although, for the same reason, totally unfit for "Peg in the ring." The forms of English peg-tops, as well as those of humming-tops, and the common whip-tops, are so well known, that it would be useless for us to offer engravings of them.

GAMES WITH BALLS.

THE games with Balis are numerous and excellent; Cricket is a sport of such importance, as to claim a separate place in our work, but nearly all the other games with Balls, our young reader will find under the present head.

FIVES.

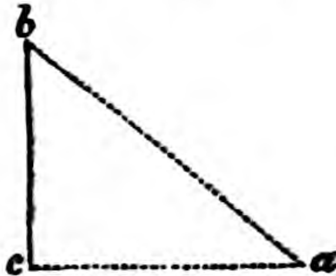
Fives may be played either single-handed or with partners. A good wall must be selected, with a sound flat piece of ground in front of it; a line must be drawn, about three feet from the ground, on the wall; another, on the ground, about two yards from the wall; and a third, describing three sides of a square, of which the wall itself will be a fourth, on the ground from the wall, to mark the bounds. The players toss up for innings; the winner begins by dapping his ball on the ground, and striking it against the wall, above the line, and so that it may rebound far enough to fall outside the line on the ground; the other player then strikes it, in the same manner, either before it has touched the ground, or dapped, (i. e. hopped from the ground,) more than once; the first player then prepares to receive and strike it at its rebound; and thus the game goes on, until one of the players fail to strike the ball in his turn, before it has hopped

more than once, strike it below the mark, or drive it out of bounds. If the party who is in do either of these, he loses his innings; if the other, then the in-player reckons one, on each occasion, towards the game, which is fifteen. When partners play, the rules are precisely the same; each side keeping up the ball alternately, and the partners taking turns for innings, as one of the other side gets out. After the ball is first played out, on each occasion, it is not necessary to make it rebound beyond the ground line, which is used only to make the player who is in, give out the ball fairly in the first instance: that is, when he first takes his innings, or when he plays out the ball again, after winning a point.

NINE-HOLES, OR HAT-BALL.

Near a wall where the ground is level, dig nine, or a lesser number of holes, according to the number of players, large enough for a ball to be bowled in without difficulty. Number them, and let each player be allotted a number, by chance or choice, as it may be agreed. A line is drawn about five yards from the holes, at which one of the players places himself, and bowls the ball into one of the holes. The player to whom the hole, into which the ball is bowled, belongs, picks it up as quickly as he can, and endeavours to strike one of the others with it; (the latter all run off as soon as they perceive that the ball is not for themselves;) if the thrower miss his aim, he loses a point, and is called "a fifer," and it is his turn to bowl: if, however, he strike another, he loses nothing; but the party so struck, in case he fail to hit another with the ball, becomes "a fifer," and it is his turn to bowl. Five or six may be struck in succession, and the ball may be kept up, no matter how long, until a miss be made, when the party so missing loses a point, and bowls. It is also allowed, for one player to accept the ball from another, and run the risk of striking a third: thus, if A stand close behind B, and C have the ball in front of B, A may signify by motions that he will take the ball, which is then thrown toward him by C; he catches it, and endeavours to strike B before he can run away; if he miss, he loses a point, and bowls. The second bowling is conducted precisely as the first; but he who bowls three times without passing the ball into a hole, loses a point, and if he have lost one before, becomes "a tenner;" he must still go on, until he succeed in putting the ball into a hole; it is his own fault if he bowl into that which belongs to himself. A party who misses his aim a second time becomes "a tenner;" he who loses a third point, "a fifteener;" and when four points are lost, the party stands out. The game goes on until all the players are out but one; the latter wins the game. One of the others then takes the ball in his left hand, places his face toward the wall, and throws the ball over the right shoulder as far as he can. The player who has won stands at the spot where the ball first touches the ground, or, if it be not immediately behind

the party who has thrown it, a line is drawn from the place where the ball daps, to a spot behind the thrower. Thus, suppose the thrower be at *a*, the ball falls at *b*, a line is drawn to *c*. The winner then throws the ball, from *c*, at the loser's back, three times, as hard as he pleases. The other losers throw in the same manner, one after another, and the winner has his three balls at each of their backs, from the spot where their balls respectively first touch the ground, or in a line with it, as above stated, and illustrated by the diagram in the margin.



In the vicinity of London, this game is called "Hat-ball," on account of the players using their hats, instead of digging holes, and the ball is tossed into the hats, instead of being bowled into the holes.

CATCH-BALL.

This is very similar to the preceding game. Instead of bowling the ball into holes, it is thrown in the air, and the name of the player, for whom it is intended, called out by the thrower. If it be caught, before it has twice touched the ground, by the player so called on, he loses no point, but throws it up again, and calls upon whom he pleases to catch it. If it be not caught in due time, he whose name is called must endeavour to strike one of the others with it; if he miss, he loses a point, and has his throw up. The remainder of the game, the number of points, and the losers' punishment, are all precisely as in Nine-holes; of the two, it is the better game.

FOOT-BALL.

A match is made between two sets of players of equal numbers; a large ball made of light materials,—a blown bladder, cased with leather, is the best,—is placed between them, and the object of each party is to kick the ball across the goal of the other, and to prevent it from passing their own. The party, across whose goal the ball is kicked, loses the game. The game is commenced between the two goals, which are about a hundred yards asunder.

Foot-ball was formerly much in vogue in England, though, of late years, it seems to have fallen into disrepute, and is but little practised. At what period the game of Foot-ball originated, is uncertain; it does not, however, appear among the popular exercises before the reign of Edward the Third, and then it was prohibited by a public edict; not, perhaps, from any particular objection to the sport itself, but because it co-operated, with other favourite amusements, to impede the progress of Archery.

The rustic boys use a blown bladder, without the covering of leather, for a Foot-ball, putting peas and horse-beans inside, which occasion a rattling as it is kicked about.

GOFF, OR BANDY-BALL.

In the northern parts of the kingdom, Goff is much practised. It answers to a rustic pastime of the Romans, which they played with a ball of leather, stuffed with feathers, and the Goff-ball is composed of the same materials to this day. In the reign of Edward the Third, the Latin name "Cambuca," was applied to this pastime, and it derived the denomination, no doubt, from the crooked club, or bat, with which it was played; the bat was called a "Bandy," from its being bent, and hence is frequently called, in English, "Bandy-ball."

Goff, according to the present modification of the game, is performed with a bat, the handle of which is straight, and usually made of ash, about four feet and a half in length; the curvature is affixed to the bottom, faced with horn, and backed with lead. The ball is a little one, but exceedingly hard, being made with leather, and stuffed with feathers. There are, generally, two players, who have each of them his bat and ball. The game consists in driving the ball into certain holes made in the ground; he who achieves which the soonest, or in the fewest number of strokes, obtains the victory. The Goff-lengths, or the spaces between the first and last holes, are sometimes extended to the distance of two or three miles; the number of intervening holes is optional, but the balls must be struck into the holes, and not beyond them. When four persons play, two of them are sometimes partners, and have but one ball, which they strike alternately, but every one has his own bandy. Goff was a fashionable game among the nobility at the commencement of the seventeenth century, and it was one of the exercises with which Prince Henry, eldest son to James the First, occasionally amused himself.

STOOL-BALL.

Stool-ball is frequently mentioned by the writers of the three last centuries, but without any proper definition of the game. Doctor Johnson tells us, it is a play where balls are driven from stool to stool, but does not say in what manner, or to what purpose. It consists in simply setting a stool upon the ground, and one of the players taking his place before it, while his antagonist, standing at a distance, tosses a ball with the intention of striking the stool; it is the business of the former to prevent this by beating it away with the hand, reckoning one to the game for every stroke of the ball; if, on the contrary, it should be missed by the hand, and touch the stool, the players change places; the conqueror at this game is he who

strikes the ball most times before it touches the stool. In some parts of the country, a certain number of stools are set up in a circular form, at a distance from each other, and every one of them is occupied by a single player; when the ball is struck, which is done as before, with the hand, they are every one of them obliged to alter his situation, running in succession from stool to stool, and if he who threw the ball can regain it in time to strike any one of the players before he reaches the stool to which he is running, he takes his place, and the person touched must throw the ball, until he can, in like manner, return to the circle.

TRAP, BAT, AND BALL.

With the form of the trap, our young readers are, doubtless, acquainted, it will be only necessary for us to give the laws of the game. Two boundaries are equally placed, at a great distance from the trap, between which, it is necessary for the ball to pass, when struck by the batsman; if it fall outside either of them, he loses his innings. Innings are tossed up for, and the player who wins, places the ball in the spoon of the trap, touches the trigger with the bat, and, as the ball hops from the trap, strikes it as far as he can. One of the other players (who may be from two to half-a-dozen) endeavours to catch it. If he do so before it reaches the ground, or hops more than once, or if the striker miss the ball when he aims at it, or hits the trigger more than twice without striking the ball, he loses his innings, and the next in order, which must previously be agreed on, takes his place. Should the ball be fairly struck, and not caught, as we have stated, the out-player, into whose hands it comes, bowls it from the place where he picks it up, at the trap; which, if he hit, the striker is out. If he miss it, the striker counts one toward the game, which may be any number decided on. There is also a practice in some places, when the bowler has sent in the ball, of the striker's guessing the number of bat's lengths it is from the trap; if he guess within the real number, he reckons that number toward his game; but if he guess more than there really are, he loses his innings. It is not necessary to make the game in one inning.

NORTHERN-SPELL.

Northern-spell is played with a trap, and the ball is stricken with a bat, or stout stick, at the pleasure of the players, but the latter is most commonly used. The performance of this pastime does not require the attendance of either of the parties in the field to catch or stop the ball, for the contest between them is, simply, who shall strike it to the greatest distance in a given number of strokes; the length of each stroke is measured, before the ball is returned, by means of a cord made fast at one end, near the trap, the other end being stretched into the field by a person stationed there for that purpose, who adjusts it to the ball, wherever it may be; the cord is divided into yards, which are properly numbered in succession, so that the person at the bottom of the ground can easily ascertain the distance of each stroke by the number of the yards, which he calls to the players, who place it to their account, and the ball is thrown back. This pastime possesses but little variety, and is by no means so amusing to the bystanders as Trap-ball.

ROUNDERS.

In the west of England this is one of the most favourite sports with the bat and ball. In the metropolis, boys play a game very similar to it, called Feeder. In Rounders, the players divide into two equal parties, and chance decides which shall have first innings. Four stones or posts are placed from twelve to twenty yards asunder, as *a, b, c, d*, in the margin; another is put at *e;* one of the party which is out, who is called the pecker or feeder, places himself at *e.* He tosses the ball gently toward *a*, on the right of which one of the in party places himself, and strikes the ball, if possible, with his bat. If he miss three times, or if the ball, when struck, fall b hind *a*, or be caught by any of the out players, who are all scattered about the field except one who stands behind *a*, he is out, and another takes his place. If none of these events take place, on striking the ball he drops the bat, and runs toward *b*, or, if he can, to *c, d*, or even to *a* again. If, however, the feeder, or any of the out players who may happen to have the ball, strike him with it in his progress from *a* to *b*, *b* to *c*, *c* to *d*, or *d* to *a*, he is out. Supposing he can only get to *b*, one of his partners takes the bat, and strikes at the ball in turn; while the ball is passing from the feeder to *a*, if it be missed, or after it is struck, the first player gets to the next or a further goal, if possible, without being struck. If he can only get to *c*, or *d*, the second runs to *b* only, or *c*, as the case may be, and a third player begins; as they get home, that is, to *a*, they play at the ball in rotation, until they all get out; then, of course, the out players take their places.

SPORTS OF AGILITY AND SPEED.

MANY of the previous sports with balls and tops, are in part games of agility and speed, and so also are several of those which will be found among the Miscellaneous Minor Sports; but the following pastimes are exclusively games either of speed or agility, for which no implements are necessary.

LEAP-FROG.

This is a most excellent pastime. It should be played in a spacious place, out of doors if possible, and the more there are engaged in it, provided they be of the same height and agility, the better is the sport. We will suppose a dozen at play:—Let eleven of them stand in a row, about six yards apart, with all their faces in one direction, arms folded, or their hands resting on their thighs, their elbows in, and their heads bent forward, so that the chin of each rests on his breast, the right foot advanced, the back a little bent, the shoulders rounded, and the body firm. The last begins the sport by taking a short run, placing his hands on the shoulders of the nearest player, and leaping with their assistance (of course, springing with his feet at the same time) over his head, as represented in the cut. Having cleared the first, he goes on to the second, third, fourth, fifth, &c. in succession, and as speedily as possible. When he has gone over the last, he goes to the proper distance, and places himself in position for all the players to leap over him in their turn. The first over whom he passed, follows him over the second, third, fourth, &c.; and when he has gone over the one who begun the game places himself in like manner for the others to jump over him. The third follows the second, and so on until the parties are tired.

The manner of playing Leap-Frog about London is different, and as we think, much inferior in safety, appearance, and amusement:—A lad places himself with his hands on his knees, his body nearly doubled, and his side, instead of his back, turned toward the leapers, who, with a short run, take their leap at some distance from the lad who is to be vaulted over; he who takes his leap the farthest off, is reckoned the best player. This, it may be readily imagined, is by no means so lively as the real game of Leap-Frog, which we have above described. The boy, who is to be leaped over, receives a greater shock from the jumpers; and he is in more danger of being thrown down by, or having a blow on his head from, their knees.

PRISONERS' BASE.

Prisoners' Base is truly a capital game for cold weather. The best number to play at it is six or eight on each side, but there is no objection to more or fewer players. The choice of partners is decided by chance; a line, ten or twelve yards in length, is drawn about a dozen yards from a wall; other lines are drawn at each end of the first, reaching thence to the wall, and the third from the middle of the first line to the wall; one party takes possession of the bounds on one side of this middle, and the other set of players takes the bounds on the other side of it. Two prisons are also marked in a line with each other, at from one to two hundred yards (as convenience will permit) from the front of the bounds; the prison belonging to one party must be opposite the bounds of the other. The game is now commenced by a player from one side running out mid-way between the bounds and prisons; a player from the other side immediately follows, and he may be pursued by one of his adversaries, who in like manner may be followed by a player from the side which began the game, and so on; both parties being at liberty to send out as many as they think fit. The object of each player is to come up with, or intercept and touch any player of the opposite side, who has left the bounds before him; he is not at liberty to touch any that have started after him, it being their privilege, on the contrary, if they can, to touch him before he can get back within his bounds again. A player is allowed to touch one of the opposite party only each time he quits bounds, and after having touched an adversary, he is exempt from being touched on his return to bounds. Every player who is touched, goes to the prison belonging to his party, where he must remain until one of his own side (who must start from bounds after the prisoner has been within the line of the prison) be able to reach him, without being touched in his run from bounds to prison, by any of the opposite party who may have left their bounds after him. When thus released, neither he nor the player who has relieved him is to touch or be touched in their return to bounds again. The game is won by that side which has all the players of the other in prison at the same time.

SADDLE MY NAG.

Two players toss up for choice of partners; six or eight on each side is the best number; after choosing, the two leaders toss up for innings, he who loses then ranges himself and his associates in the following manner:—One player places himself almost upright, with his hands resting against a wall or tree, a second puts his head against the skirt of the first, the third against the skirt of the second, and so on until they are all ranged. They must either hold by the trousers of the player who is before them, cross their arms on their breasts, or lean them on their knees. One of the winning party now begins by taking a run, placing his hands upon the back of the outer player on the other side, and leaping as far forward on the range as he possibly can, in order to afford room for his partners behind him, who follow in succession, until all are on the backs of the other party. If they can all remain on without touching the ground with the hand or any other part, while the leader counts twenty, or if any of the other party sink beneath the weight, or touch the ground with their hands or knees to support themselves, the riders keep their innings, and go on again. If on the contrary, or in case there be not room enough for them to leap on, or they cannot keep on the backs of those who are on before them, they lose, and the other party become riders, and they nags.

PUSS IN THE CORNER.

This is a very simple, but, at the same time, a very lively and amusing game. It is played by five only; and the place chosen for the sport should be a square court or yard with four corners, or any place where there are four trees or posts, about equi-distant from each other, and forming the four points of a square. Each of these points or corners is occupied by a player; the fifth, who is called Puss, stands in the centre. The game now commences; the players exchange corners in all directions: it is the object of the one who stands out, to occupy any of the corners which may remain vacant for an instant during the exchanges. When he succeeds in so doing, that player who is left without a corner becomes the Puss. It is to be observed, that if A and B attempt to exchange corners, and A gets to B's corner, but B fails to reach A's before the player who stands out gets there, it is B and not A who becomes Puss.

WARNING.

This may be played by any number, from ten to a hundred. One begins the game by standing within a line, running parallel for a considerable length with, and about three feet from, a wall, and repeating the following words,—"Warning once, warning twice, warning three times over; a bushel of wheat, a bushel of rye, when the cock crows, out jump I!—

Cock a-doodle-doo!—Warning!" He then runs out, and touches the first he can overtake, who must return to bounds with him. These two then (first crying "Warning" only) join hands, and each of them endeavours to touch another; he also returns to bounds, and at the next sally joins hands with the other two. Every player who is afterward touched by either of the outside ones, does the like, until the whole be thus touched and taken. It is not lawful to touch an out-player after the line is broken, either accidentally, or by the out-players attacking it, which they are permitted to do. Immediately a player is touched, the line separates, and the out-players endeavour to catch those belonging to it, who are compelled to carry those who capture them, on their backs, to bounds. When three are touched, he who begins the game is entitled to join the out-players.

FOLLOW MY LEADER.

Without a bold and active leader this sport is dull and monotonous; with one possessing the necessary qualifications it is quite the contrary. Any number may play at it. A leader is fixed on, and the other players range themselves in a line behind him. He commences the sport, by some feat of agility, such as leaping, hopping, or climbing, and his followers then attempt to perform it in succession. He then goes on to another trial of skill; the others, or so many of them as are able to do so, follow his example, and thus the sport proceeds until the parties think fit to cease. The most nimble and active should, of course, be chosen for a leader; he should perform feats of such difficulty as to render the sport interesting, at the same time avoiding such as he knows can only be undertaken by himself, or by one or two of his followers. If one boy can perform a feat, which those who are placed before him in the rank fail in attempting, he takes precedence of them until he is, in like manner, excelled by any of those who are behind him.

TOUCH.

This is a sport of speed. Six or eight is the best number to play at it. One volunteers to be the player, who is called Touch; it is the object of the other players to run from and avoid him. He pursues them all; or, if he think fit, singles out an individual, and follows until he comes up with and touches him. The player so overtaken becomes Touch, and then endeavours to get near enough to lay his hand upon one of the rest. This is an active and amusing game for boys in cold weather. It is sometimes called Touch-iron or Touch-wood; in these cases, the players are safe only while they touch iron or wood, as may be previously agreed. They are liable to be *touched* only when running from one piece of wood or iron to another.

SPORTS WITH TOYS.

The Sports with Toys are very numerous; those which are most usua in the playground are with the kite, the hoop, the sucker, the pea-shooter, and two or three others; of each of which we offer our readers a description.

THE POP-GUN.

The Pop-gun is made of a piece of wood, from which the pith has been taken; a rammer must be made, with a handle of a proper length, which should have a shoulder to prevent the slender or ram-rod point going the entire length of the gun; the pellets are made of moistened tow, or brown paper. Put one into one end of the gun, push it with the rod to the other, and then placing a second pellet at the end where the first was inserted, push that toward the opposite end, and it will drive the first pellet out with great force. Pop-guns are also made with quills, the pellets for which are cut by the quills out of slices of raw potato.

THE SLING.

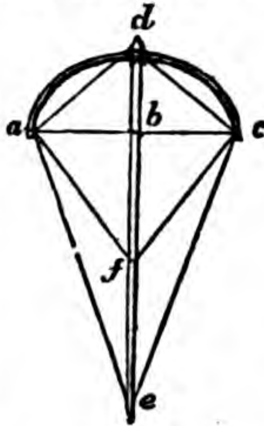
Cut out an oval piece of leather, about two inches wide at the broadest part; at each of the ends, fasten a leathern thong, or piece of cord,—one of these cords, or thongs, should be longer than the other; place a stone in the broadest part of the leather, twist the longest thong twice or thrice round your hand, hold the other lightly between your thumb and fore-finger, whirl it round several times, let go the shorter thong, and he stone will be shot to a great distance. Small lumps of clay kneaded o the point of a pliant switch, may be jerked to a height scarcely credible.

THE PEA-SHOOTER.

By means of a tube of tin or copper, a pea may be propelled from the mouth, by the mere force of the breath, to a very considerable distance. The natives of Macouslie, with a cane tube, about twelve feet long, propel arrows with their breath, with such force and dexterity, as to bring down different sorts of feathered game.

THE KITE

To construct the Kite, you must, in the first place, procure a straight lath of deal for the upright or straighter, and a thin hoop, or a pliant piece of hazel for the bow or bender. Fasten the bender by its centre, with string, to the upright, within a little distance of its top; then notch the two ends of the bow, and fasten them to the upright by a string, which is made fast at each of the ends, and turned once round the upright, as *a*, *b*, *c*; the string must then be carried up to the junction of the bow and straighter, and made fast at *d*, and thence to *a*; from *a*, it must pass through a notch at *e*, up to *c*; then down to *f*, where it must be tied in a notch cut for that purpose, and up to *a* again. Your skeleton being now complete, your next task is to paste a sufficient quantity of paper together to cover it, and afford a hem to be pasted over the outer edges.



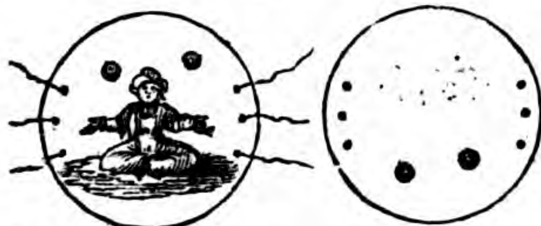
Next, bore two holes in the straighter, one about a fifth of the whole length from the top, and the other rather less from the bottom; run through these, and fasten, by a knot at the two ends, your belly-band string, to which the ball of string, by which the kite is flown, is afterward fixed. The wings are made of several sheets of writing paper, half cut in slips, rolled up, and fastened at *a* and *c*. The tail, which should be from ten to fifteen times the length of the kite, is made by tying bobs of writing paper, four times folded, about an inch and a half broad, and three inches long, at intervals of three inches and a quarter, on a string, with a larger bob, similar to the wings, at the bottom of it. Your kite is now complete, and fit to be flown in the usual manner.

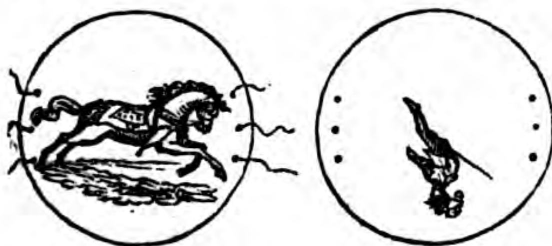
It is well known that the celebrated Doctor Franklin used to let up a kite previously to his entering the water to bathe, and then, lying on his back, suffer himself to be drawn across a stream by its power. The master of a respectable academy at Bristol, among whose pupils we have enjoyed many pleasant hours in the pastime of flying kites, has lately succeeded in travelling along the public roads, (we believe, from Bristol to London,)

with amazing speed, in a carriage drawn by kites, in the most safe and accurate manner possible, notwithstanding the variations of the wind and the crookedness of the roads.

THE THAUMATROPE.

This very amusing toy is made and exhibited in the following manner: Cut out a circular piece of card, to which fasten six bits of string, as in the cut. Draw on one side of it a figure with balls, and on the other, two balls only, as represented in the margin; then taking one of the strings between the fore-finger and thumb of each hand, close to the card, twist or whirl it rapidly round, and, according to which pair of strings you use, the figure will seem to be tossing two, three, or four balls, in different directions. Various cards and devices may be used: for instance, you may draw a bird on one side, and a cage on the other; by only using the centre pieces of string, the bird will seem to be in the cage or aviary; a horse on one side, and a jockey on the other, as in the cut, (taking care to reverse the figures, or draw them upside down to each other,) and by using the different pairs of strings, you may cause the rider to appear upon, leaping under, or by the side of the horse, as you please. For other designs, we suggest a tight rope and a dancer; a body and a head; a candle and a flame; a picture and its frame, &c.





BATTLEDORE AND SHUTTLECOCK.

Battledores and Shuttlecocks are to be obtained cheap at all the toy-shops. The game is played by two persons, who, with the battledores, strike the shuttlecock to and fro between them.

Shuttlecock is a boyish sport of long standing. It appears to have been a fashionable game among grown persons in the reign of James the First, and is mentioned as such in an old comedy of that time. Among the anecdotes related of Prince Henry, son to James the First, is the following: "His Highness playing at shuttlecock with one far taller than himself, and hitting him, by chance, with the shuttlecock upon the forehead, 'This is,' quoth he, 'the encounter of David with Goliah.'"

THE SUCKER.

Cut a circular piece out of stout leather; bore a hole through its centre, and pass a string, with a knot to prevent the end escaping, through this hole. Soak the leather well in water before you use it; when thoroughly soaked, place the leather on a stone, press it well down with your foot, and then taking the string, you may, by your sucker, raise a considerable weight.

THE HOOP.

Every boy knows how to trundle the Hoop in the usual way; several pairs of tin squares are sometimes nailed to the inner part of the hoop, which produce, in the opinion of some lads, an agreeable jingle. In some parts of England, boys drive their hoops one against the other, and the player whose hoop falls in these encounters, is conquered.

THE WATCH-SPRING GUN.

Neatly cut a bit of wood, about four inches long, into the form of the stock of a pistol or gun; scoop a groove in the upper part of it; in this groove place a large quill, open at both ends, fasten it on with waxed thread, and let it project beyond the point of the stock and reach as far as the middle of it; next, procure an old watch-spring, which may be bought cheap at a watch-maker's, cut off a piece of it about as long as the quill, bend it backward, and tie one end of it firmly to the upper part or butt end of the stock. Then bore a small hole through the middle of the stock, about half an inch from the mouth of the quill; cut a pin in two, fasten one half of it, by its head, to a bit of thread, the other end of which fasten to the thread that binds on the spring; this is the trigger, and your gun is complete. To use it, place a little arrow, or a shot, in the groove between the mouth of the quill and the hole in the stock; put the pin through this hole, and bend back the spring so that the pin may catch it; take the toy in your right hand, pull the trigger out with the fore-finger, and the spring being thus released, will drive the shot, or arrow, through the quill to a considerable distance. If you use arrows, you may shoot at a little butt or target.

CAT AND MOUSE.

This is a French sport. The toy with which it is played consists of two flat bits of hard wood, the edges of one of which are notched. The game is played by two only; they are both blindfolded, and tied to the ends of a long string, which is fastened in the centre to a post, by a loose knot, so as to play easily in the evolutions made by the players. The party who plays the mouse occasionally scrapes the toys together, and the other, who plays the cat, attracted by the sound, endeavours to catch him.

MISCELLANEOUS SPORTS.

Under this head we intend to describe a variety of amusing sports and recreations, which could not, in strictness, be inserted among any of the preceding classes.

BASTE THE BEAR.

Lots are drawn for the first bear, who takes his seat on a stone, with one end of a rope, about three yards long, in his hand, the other end of which is held by the bear's master. The other players attack the bear with twisted handkerchiefs, and the master endeavours to touch one of them; if he can do so without letting the rope go, or pulling the bear from his seat, the player so touched takes the place of the bear. Each bear has the privilege of choosing his own master; being bear once, or even oftener, does not exonerate a player, if fairly touched, from becoming so again.

DICK, DUCK, AND DRAKE.

From this game comes the proverb which is frequently applied to a spendthrift, "He is making ducks and drakes of his money." It is played by skimming, or what boys call shying, bits of slate or flat stones along the surface of a river or pond. If the thing thrown touches the water and rebounds once, it is a dick; if twice, a duck; if thrice, a drake. He who makes his slate or pebble rebound the greatest number of times, wins the game.

BLIND-MAN'S BUFF.

This popular, old-fashioned, and delightful pastime, is so well known, as to render any description of it unnecessary. There is, however, a variation of it, called Shadow Buff, which is less known, but equally amusing. A large piece of white linen is suspended smoothly at one end of a room; at a little distance from it, Buffy, with his face toward the linen, is seated on a low stool. Directly in a line, and about a yard behind him, a table is placed with a candle on it; all the other lights must be extinguished.

the players then walk one by one, between the table and Buffy, (who must not turn his head,) limping, hopping, and grimacing as they please, so as to distort their shadows on the linen. If Buffy can tell correctly to whom any shadow belongs, (guessing once only for each person,) the player, whom he so discovers, takes his place.

SLIDING.

Sliding is one of the diversions ascribed to young men of London by Fitzstephen, and, as far as one can judge from his description of the sport, it differed not in the performance from the method used by the boys of our own time. He mentions another kind of pastime upon the ice, which is even now practised by boys in several parts of England; his words are to this effect: "Others make a seat of ice, as large as a millstone, and having placed one of their companions upon it, they draw him along, when it sometimes happens, that moving on slippery places, they all fall down headlong." Sledges are, now-a-days, also used, which being extended from a centre by means of a strong rope, those who are seated in them are moved round with great velocity, and form an extensive circle. Sledges of this kind were set upon the Thames in the time of a hard frost at the commencement of the last century, as the following couplet, taken from a song written upon that occasion, plainly proves

> "While the rabble in sledges run giddily round,
> And nought but a circle of folly is found"

SKATING.

Skating is by no means a modern pastime, and probably the invention proceeded rather from necessity than the desire of amusement. It is a boast of a northern chieftain, that he could traverse the snow upon skates of wood. Strutt states that he cannot by any means ascertain at what time skating made its first appearance in England, but that some traces of such an exercise are found in the thirteenth century; at which period, according to Fitzstephen, it was customary in the winter, when the ice would bear them, for the young citizens of London to fasten the leg bones of animals under the soles of their feet, by tying them round their ankles, and then taking a pole shod with iron into their hands, they pushed themselves forward by striking it against the ice, and moved with celerity, equal, says the author, to a bird flying through the air, or an arrow from a cross-bow; but some allowance, we presume, must be made for the poetical figure: he then adds, "at times, two of them thus furnished agree to set opposite one to another at a great distance; they meet, elevate their poles, attack and strike each other, when one or both of them fall, and not without some bodily hurt, and even after their fall are carried a great distance from each other by the rapidity of the motion, and whatever part of the head comes upon the ice it is sure to be laid bare."

The wooden skates shod with iron or steel, which are bound about the feet andankles like the talares of the Greeks and Romans, were, most probably, brought into England from the low countries, where they are said to have originated, and where, it is well known, they are almost universally used by persons of both sexes when the season permits. Some modern writers have asserted that "the metropolis of Scotland has produced more instances of elegant skaters than, perhaps, any other country whatever; and the institution of a skating club has contributed not a little to the improvement of this amusement." Strutt, in noticing this, observes that when the Serpentine river in Hyde Park was frozen over, he saw four gentlemen there dance, if the expression may be allowed, a double inuet, in skates, with as much ease and, perhaps, more elegance, than in

a ball room; others again, by turning and winding with much adroitness, have readily in succession described upon the ice the form of all the letters in the alphabet.

SWINGING.

The construction of the swing is simple: two ropes, of equal lengths, are to be suspended from any branch or cross piece of timber, of adequate strength; at the bottom of these ropes a seat is to be securely fastened, and the party who takes the seat must be propelled by another on the ground; a rope for this purpose must be fastened to the back part of the seat.

FRENCH AND ENGLISH.

This game is played by two parties, whose numbers are equal; they all take hold of a rope, and the object of each party is to pull those belonging to the other across a chalk line on the ground, by means of the rope. When al. the players on one side are thus pulled over or made prisoners, the other party wins the game. This is a very lively sport, any number may join in it, and it affords capital exercise and much amusement.

TIP-CAT.

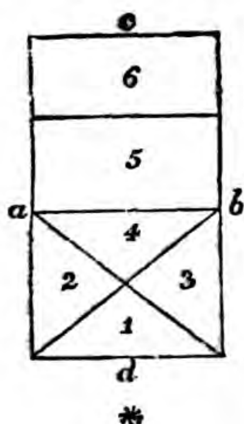
Tip-cat, or, perhaps, more properly, the game of cat, is a rustic pastime well known in many parts of the kingdom. Its denomination is derived from a piece of wood, called a cat, with which it is played; the cat is about six inches in length, and an inch and a half or two inches in diameter, and diminished from the middle to both the ends, in the shape of a double cone; by this curious contrivance, the places of the trap and ball are at once supplied, for when the cat is laid upon the ground, the player, with his cudgel, strikes it smartly, it matters not at which end, and it will rise with a rotatory motion, high enough for him to beat it away as it falls, in the same manner as he would a ball.

There are various methods of playing the game of cat, but we shall only notice the two that follow. The first is exceedingly simple, and consists in making a large ring upon the ground, in the middle of which the striker

takes his station; his business is to beat the cat over the ring. If he fail in so doing he is out, and another player takes his place; if he be successful, he judges with his eye the distance the cat is driven from the centre of the ring, and calls for a number, at pleasure, to be scored toward his game; if the number demanded be found, upon measurement, to exceed the same number of lengths of the cudgel, he is out; on the contrary, if he do not, he obtains his call. The second method is to make four, six, or eight holes in the ground, in a circular direction, and as nearly as possible, at equal distances from each other, and at every hole is placed a player with his cudgel; one of the opposite party, who stand in the field, tosses the cat to the batsman who is nearest him, and every time the cat is struck, the players are obliged to change their situations, and run once from one hole to another in succession; if the cat be driven to any great distance, they continue to run in the same order, and claim a score toward their game, every time they quit one hole and run to another; but if the cat be stopped by their opponents, and thrown across between any two of the holes before the player who has quitted one of them can reach the other, he is out.

HOP-SCOTCH.

In some parts of England this game is called Pottle. It is played with an oyster-shell, in the following manner:—Draw, with chalk, on the ground, a figure similar to the cut in the margin. Toss up for innings. He who wins stands at the * and throws the shell into No. 1, which is called the first bed; he then steps with his right foot into that bed, and "scuffles," that is, jerks, with his right foot, the shell out towards the *. He now throws the shell into No. 2; steps, with his left foot into No. 1, and then, placing his right foot in No. 2, scuffles the shell out as before, and steps with one foot back to No. 1, and thence out. He must now throw the shell into No. 3, and step into 1, 2, and 3, scuffle the shell out, and step back through the bed, alternately. He must then go to 4, 5, and 6, in succession, and, at each throw, step into every previous bed, with one foot only, and the like when coming back, reversing the numbers. After this, the player puts the shell into No. 1, hops into that bed, scuffles the shell into 2, and so on to 6, and back again in the same manner, bed by bed, to the *. Lastly, he places the shell into No. 1, puts his right foot in the bed, and scuffles the shell through all the beds, beyond the further line of 6, at one jerk. If the player who gets the innings do all this correctly, he



wins the game. If, however, he put himself out, as hereafter described, the second player takes the innings; if the latter put himself out, without going through the game, the first takes up his own game, where it was when he went out; the second also does the like with his, if the first get out a second time. When there are more than one innings, the first who goes through the game, as above stated, wins. A player loses his innings, in either of the following cases:—If he throw the shell into the wrong bed, or on the line, or put two feet into one bed, or a foot upon the lines, or do not scuffle the shell out of the bed in which it lies at the first attempt, or put his hands to the ground, or throw or scuffle the shell beyond line *c*, (except in the last, or what is called "the long scuffle,") or outside the line *a b*; or if, in going forward, he put his leg into 3 before 2, or the contrary when coming back; or if, when scuffling the shell through on the hop, he drive it beyond the next bed in which it lies; or if, in any part of the game, when he has stepped into a bed, he take more than one hop in order to get near the shell; or if he hop after he has scuffled it; or, lastly, if, in the long scufle, he do not, at one effort, send it with his foot from 1 beyond the line of *c*. But observe, that when he has cast the shell into No. 2, or any bed beyond it, he is not compelled to scuffle it out, that is, beyond the line *d*, at one effort.

KING OF THE CASTLE.

This is a very unexceptionable and simple, but, nevertheless, lively sport. One player places himself on the top of a little mound or hillock; he is the King of the Castle, and he endeavours to retain possession of his post, as long as possible, against the attacks of his playmates, who endeavour, one at a time, to push him off. If he be driven off the mound or hillock, the player who dethrones him takes his place.

SEE-SAW.

A plank is placed across a felled tree, a low wall, or anything similar, and a player seats himself at each end; by a slight exertion, if the plank be properly balanced, each end rises and sinks alternately. It must be observed, that if the players be of unequal weight, he who is the heaviest must, to preserve the equilibrium, make his end of the plank shorter.

WHOOP.

This game is played as follows:—All the players 'out one, collect at a place called "home," while one goes off to hide himself. When ready, he shouts "Whoop oh!" the others then sally out to find him; he who discovers the hidden player, calls out "Whoop oh!" the hidden player then breaks from his concealment, and if he can catch one of the others, the one so caught must carry him on his back to "home." It is then the boy's turn who has made the discovery to go and hide himself, and the others endeavour to discover his lurking place, as before.

HIDE AND SEEK.

This is very like the preceding game; a handkerchief, or some other trifle, is concealed by one player, and the rest attempt to find it; the discoverer takes the next turn to hide the article. It is a custom, in this game, for the boy who has hid the article to encourage those who approach it, by telling them that they burn, and to warn them of their departure from it by saying they freeze.

HIPPAS.

The Greeks had a pastime called hippas, which, we are told, was one person riding upon the shoulders of another, as upon a horse: a sport of this kind was in practice with us at the commencement of the fourteenth century, and is still occasionally seen in some parts of the country; it is performed by two competitors, who struggle one with the other, and he who pulls his opponent from the shoulders of his carrier is the victor. A soft piece of turf is usually chosen for this sport.

THREAD THE NEEDLE.

Thread the needle may be played by a considerable number of boys, who all join hands, and the game commences with the following dialogue between the two outside players at each end of the line: "How many miles to Babylon?" "Threescore and ten." "Can I get there by candlelight?" "Yes, and back again." "Then open the gates without more

ado, and let the king and his men pass through." In obedience to this mandate, the player who stands at the opposite end of the line and the one next him, lift their joined hands as high as possible; the other outside player then approaches, runs under the hands thus elevated, and the whole line follows him, if possible, without disuniting. This is threading the needle. The same dialogue is repeated, the respondent now becoming the inquirer, and running between the two players at the other end, with the whole line after him. The first then has his turn again.

DUCK.

Duck should be played by a number exceeding three, but not more than six or eight. A large stone with a smooth top is placed on or fixed into the ground, and an offing marked at eight or ten yards distance. Each of the players being previously provided with a large pebble, or stone, double the size of a cricket ball, or thereabout, one of them, by chance or choice, becomes duck; that is, he places the pebble or stone with which he is going to play, on the large stone, and stands a little on one side. The others then cast their pebbles or ducks at it, in turn, from the offing, each endeavouring to knock it off its place. Each player, as soon as he has ast his duck, watches for an opportunity of carrying it back to the offing, so as to cast again. If the player who is duck, can touch him after he has taken up his pebble, and before he reaches the offing, provided his own pebble remain on the large stone, then the player so touched becomes duck. It sometimes happens that three or four of the out-players' ducks lie so close together, that the player who is duck can stand in a situation to be within reach of all of them; in this case, they cannot, without running the risk of being touched, pick up, until one of those who are at the offing is lucky enough to strike the duck off the large stone; then, before its owner can replace it, which he must do before he can touch a player, they all take up their ducks and run to the offing, where, of course, they are safe.

HUNT THE SLIPPER.

This is usually an in-door game, although there is no other objection to its being played on a dry piece of turf than that the slipper cannot be heard, when struck by its momentary possessor, when passing round the joyous ring. Several young persons sit on the ground in a circle, a slipper is given to them, and one, who generally volunteers to accept the office in order to begin the game, stands in the centre, and whose business it is to "chase the slipper by its sound." The parties who are seated, pass it round so as to prevent, if possible, its being found in the possession of any individual. In order that the player in the centre may know where the slipper is, it is occasionally tapped on the ground, and then suddenly

handed on to the right or left. When the slipper is found in the possession of any one in the circle, by the player who is hunting it, the party on whom it is so found takes the latter player's place.

PALL MALL.

Pall-mall is a game wherein a round piece of box is struck, with a mallet, through a high arch of iron, which he that can do at the fewest blows, or at the number agreed upon, wins. It is to be observed, that there are two of these arches, that is, one at either end of the alley. The game of Mall was a fashionable amusement in the reign of Charles II., and the walk in St. James's Park, now called the Mall, received its name from having been appropriated to the purpose of playing at Mall, where Charles himself, and his courtiers, frequently exercised themselves in the practice of this pastime. The denomination "Mall," given to this game, is evidently derived from the mallet or wooden hammer used by the players to strike the ball. It will be perceived that this game is rather similar to Goff; we have been told that it still exists in some parts of England; but we must confess that it never fell under our personal observation.

HOP, STEP, AND JUMP.

This is a sport of emulation; the object is to ascertain which of the players concerned can, eventually, go over the greatest portion of ground in a hop, a step, and a jump, performed in succession, and which may be taken either standing or with a run, as may be agreed, at the outset, between the players.

DRAWING THE OVEN.

Several players seat themselves on the ground, in a line, and in such a manner that each may be clasped round the body by the player who is seated behind him. When all are thus united, two others take the one who is at the extremity of the line by the two hands, and pull until they separate him from the grasp of the one who is behind him. They then take the second in the same manner, and so on until they have thus drawn the whole line.

THE LAME LAMPLIGHTERS.

Two boys kneel, each on one knee only, holding the other leg off the ground, one opposite the other; a lighted candle is given to one, and another candle, not lighted, to the other; they then attempt to illumine the latter; but, being in equilibrium on one knee, and liable to be thrown off their balance by the least motion, they will find this so difficult a matter as to cause great diversion to the spectators.

THE WOODEN BOTTLE.

This is a sport similar to the preceding one, frequently played by the parlour fire-side, in holiday time:—an individual seats himself on a wooden bottle which is placed sideways upon the floor, and endeavours, with a burning candle, which he holds in his right hand, to light another in his left.

THE JUMPING ROPE.

A long rope is swung round by a player at each end of it; when it moves tolerably regular, one, two, or even more boys, step in between those who hold the rope, suffering it to pass over their heads as it rises, and leaping up so that it goes under their feet when it touches the ground, precisely as in the case of a common skipping-rope. The principal difficulty in this sport is, to run between the players at the proper moment of time, that is, just as the rope is at its highest elevation, so as to be ready to jump over when, in its circuit, it comes toward the feet. Care must be taken that due time be kept in the leaps, so that they may perfectly accord with the motion of the rope.

There is another mode of playing with the long skipping-rope, namely, by the player at one end of it, advancing a step or two toward the other, keeping the hand which holds the rope on the outside, and then, with the assistance of the player at the other end, turning the rope round, and skipping over it in its circuit.

DROPPING THE 'KERCHIEF.

A number of players join hands so as to make a circle; one only stands out; he walks round the outside of the circle, and drops a handkerchief behind which player in the circle he thinks fit. The party behind whom the handkerchief is thus dropped immediately follows the one who dropped it: those who stood on each side complete the circle by joining hands, and the chace commences. The pursuer is bound to follow precisely the course of the pursued, who winds in and out under the arms of the other players, who elevate them for his accommodation, and endeavours, by all the means in his power, to puzzle and elude him. If he succeed in so doing, that is, if the pursuer make a blunder in his course, he returns to his place in the circle, and the first player prepares to drop the handkerchief behind one of the players again. When he is fairly overtaken by the player behind whom he has last dropped the handkerchief, the latter takes his place, and he joins hands in the circle.

BUCK.

This is a miniature resemblance of "Saddle my Nag;" but it neither requires speed, or even agility. It is a sport for two boys only, who should be nearly equal in size and strength. A third, who does not join in the

game, stands by as an umpire. The game commences by one of the players giving a back; that is, placing his arms across his breast, or resting them on his knees, stooping forward so as to bring his back nearly horizontal with his head, which he supports against a post, wall, tree, or whatever may be convenient for the purpose. It is usual, but, we think, quite unnecessary, for the player who gives the back to be blindfolded; we say unnecessary, because the only object for doing this is to prevent him seeing what is going on behind, or, rather, above his back, which he cannot possibly do, if he keep his head in a fair and proper position; and the umpire should see that he does so. The first player having thus taken his position, the second leaps, or vaults, astride on his back, holds up as many of the fingers of one hand as he pleases, and says, "Buck, Buck, how many horns do I hold up?" The player who gives the back makes a guess; if he name the right number, the other player becomes Buck, and gives him a back. If, however, his guess be an incorrect one, the rider gets off, vaults on again, holds up the same or a different number of fingers, and asks the same question as before; this is repeated until the Buck name the true number. It is the business of the umpire to see that there is no foul play on the part of the rider. We should suggest that it would be an improvement on this quiet, simple game, for the umpire to be made a third player; so that when the Buck's guess is correct, the rider should give a back, the umpire become rider, and the Buck umpire: thus, instead of the place of umpire being a mere idle vocation, the game would be productive of amusement and exercise to all three of the boys engaged in it.

THE SNOW STATUE.

In those days, when winter clothes the surface of the earth with a mantle of snow, and many of the amusements of the playground are thereby suspended, it is a custom with boys, as some of our young readers, doubtless, very well know, to make that which is an impediment to their old recreations, a material for new ones. Then do snow-balls, harmless if lightly compressed, but otherwise if strongly kneaded, fly about in abundance. Caves, and even pigmy fortresses, are constructed; the rolling ball, which is first rounded by the little hands of a child, becomes, in a few hours, by driving it over the snow, too big for a man to move. When the joyous tenants of the playground have become fatigued with rolling the ball, or it has acquired a size and weight superior to their united powers it is a common practice with them to cut a rude resemblance of a man ou of the mass, adding to its height and diminishing its breadth. This called the Snow Statue; and when complete, the young sculptors retire to a convenient distance, and, with the aid of snow-balls, each tries his utmost to demolish that which they have just taken such pains to construct.

We are well aware that there are other Minor Sports and Pastimes practised in playgrounds in different parts of the country, besides those we have described; it would be impossible for us "to press the endless throng" within our limits. We have given a selection of the best, and of those which most required explanation. We are also aware, that the rules of some of the Sports vary in different places;—where this is the case, we have given those which are most generally adopted. Many games and amusements which might have been inserted in this part of the work, will be found placed with greater propriety, under other heads.

We shall conclude this article with repeating, in other words, a wholesome piece of advice to the Minors: we beg to remind them, that they should not have recourse to toys, in the hours allotted for study, lest the grave preceptor come upon them in the midst of their mis-timed sport, and join with them in an unpleasant game of

Tops and Bottoms.

CRICKET.

This truly English pastime, although long a favourite with the people of this country, never reached to a greater degree of popularity than it possesses at this time. It is a favourite with the peer and the peasant—the Socius Societis Artium and the school-boy. Royalty has, heretofore, stood bat in hand at the popping-crease, surrounded by those youthful buds of nobility of which our nation has since been proud; and, strange though it may seem, yet it is no less strange than true—young matrons have played matches of Cricket against maidens, without impeachment to their usual reputation, and having husbands, brothers, and sweethearts for their spectators. In many counties, Cricket is the universal pastime of the people; in others, it is rarely played, and in many, scarcely mentioned. The man of Devon, who deems all sports inferior to wrestling, and the inhabitant of Somerset, who doats upon the manly game of back-sword, seldom bestow a thought upon Cricket; it is, nevertheless, esteemed and enjoyed by the people of other counties, especially those about the

metropolis, as a sport paramount, and practised in so great a degree, as nearly to exclude all other manly field recreations of a similar nature.

Cricket is usually played by eleven persons on each side, though a less number is sufficient. Two umpires are to be appointed in order to settle all disputes that may arise; they are to take their stations at each wicket, and should be well acquainted with the laws of the game. The umpire at the striker's wicket should be rather behind it, so as not to be in the way of the players; and the umpire at the bowler's wicket, directly behind it, to see that the striker does not strike the ball with his leg.

BATS, BALLS, WICKETS, &c.

The bat should not be higher than twenty-one inches in the pod, and four inches and a quarter in the widest part; this is the size for men; boys must, of course, have bats in proportion to their size and strength.

The ball, for the use of men, should weigh about five ounces; for youth, however, it should be lighter.

Full-sized wickets are three stumps, which are sufficiently long to leave twenty-four inches out of the ground, with a bail, seven inches long, to fit the top. These, like the bat and ball, must be decreased in size for the young cricketer. They should be placed directly opposite to each other, at the distance of twenty-two yards for men, but varying according to the size of the player.

The bowling crease should be in a line with the wicket, and have a return crease.

The popping crease should be three or four feet from the wicket, and exactly parallel with it.

THE BOWLER.

Bowling is a very important part of the game, and requires great steadiness. Bad bowling is often the cause of losing a game. A bowler should not be too systematic, but vary his balls faster or slower, according to the peculiarities of the striker. The bowler and his partner at the opposite wicket should have a secret sign, by which they may hint to each other the propriety of varying the direction or swiftness of the balls. The mode of bowling most generally approved of, is to hold the ball with the seam across, so that the tips of the fingers may touch; it should be held with just a sufficient grasp to keep it steady; by a turn of the wrist, it may be made to cut or twist after it is grounded, which will frequently perplex expert players.

THE STRIKER, OR BATSMAN.

The striker should always be ready for running; when his partner is about to strike, he should stand before the popping crease, but he must be

cautious not to leave the ground before the ball is out of the bowler's hand; for if he do, the bowler may put down his wicket, and he will, of course, be out. As soon as the ball is delivered, the striker may follow it, but should not run too far, so that, if no runs be obtained, he may return in time to save his wicket. The bat should be kept on the outside of the opposite partner, and care taken not to run against him.

THE WICKET-KEEPER.

The wicket-keeper should not suffer the striker to move from his ground without knocking down his wicket, which is called "stumping out."

THE FIRST SHORT-SLIP.

The first short-slip should stand so as to reach within two feet of the wicket-keeper; if the latter should go from the wicket after the ball, the first short-slip should take his place until his return; but no player should take the ball before the wicket-keeper, provided it be coming straight to him.

THE POINT.

The point should place himself in the popping crease, about seven yards from the striker. In backing up, he should take care to give the slip sufficient room.

LEG, OR HIP.

Leg, or hip, should stand a little back from the straight line of the popping crease.

LONG-STOP.

Long-stop should stand a proper distance behind the wicket, to save a run, if the ball should not be stopped by the striker or wicket-keeper. The person, who is placed in this situation, should not be afraid of the ball when bowled swift. He should also be able to throw in well, as it is not only to the balls that pass the wicket-keeper, but to such as are just tipped with the edge of the bat, that he will have to attend. He must also be attentive in backing up.

THE LONG-SLIP TO COVER THE SHORT-SLIP.

This player must stand about the same distance from the wicket as the long-stop, in a line with the striker, between the point and the short-slip.

TO COVER THE POINT AND MIDDLE-WICKET.

This player's place is on the off side, so that if the ball should be hit to the point and middle-wicket man, and missed, he will be in readiness to receive it.

THE LONG-FIELD OFF SIDE.

He should be placed on the off side, between the middle wicket-man and the bowler, at a considerable distance in the field, so as to cover them. It is desirable to appoint a person to this situation, who can throw well and judiciously.

LONG-FIELD ON SIDE.

Long-field on side is at some distance wide of the bowler's wicket, so as to prevent a second run.

If there be more players, they may be placed to back up, or save runs in different situations about the field.

LAWS OF CRICKET.

The bowler should deliver the ball with one foot behind the bowling crease, and within the return crease. He should bowl four balls before a change of wickets, which he is to do but once in the same innings. He must be careful to toss the ball in such a way that the striker can play at it; for if he should toss it above the striker's head, or out of the bounds of the bowling crease, the party which is in shall be allowed one notch, to be put down to the byes; and such ball is not to be considered as one of the four balls. When the umpire calls "In ball," the hitter may strike at it, and get all the runs he can. When an exchange of bowler takes place, no more than two balls can be allowed for practice. If the arm be extended straight from the body, or the back part of the hand be uppermost when the ball is delivered, the umpire shall immediately call "No ball."

The striker, or batsman, is always out when the bail is knocked off the stump; when a stump is bowled out of the ground; or, if the ball should, from a stroke over or under his bat, or upon his hands, (but not his wrists,) be held before it touches the ground, even if it should be pressed to the body of the catcher; or if, while he is striking, or at any other time when the ball is in play, both his feet are over the popping crease, and his wicket put down, except when his bat be on the ground within it. Likewise, if he hit down his own wicket; or, if either of the strikers prevent a ball from being caught, the striker shall be out; or, if the ball be struck up, and the hitter wilfully strike it again; or if, in attempting to run a notch, the wicket be struck down by a throw, or with the ball in hand, before his foot, hand, or bat is grounded over the popping crease. If the striker remove or take up his ball while in play, without being requested by the opposite party; or if, with his leg or foot, he stop a ball which has been pitched in a straight line to the striker's wicket. If "A lost ball" be called, the striker shall be allowed four notches. If the players have crossed each

other in running, he that runs for the wicket which is put down, shall be out; but if they have not crossed each other, he that has left the wicket which is put down, shall be out.

When a ball is caught, no notch shall be reckoned. When a striker is run out, the notch they were running for shall not be reckoned. While the ball is kept in the bowler's or wicket-keeper's hand, it is considered no longer in play, nor are the strikers bound to keep within their bounds till the umpire has called "Play;" but if a player should go out of his ground, with intent to run, before the ball is delivered, the bowler may put him out. If a striker be hurt by a ball, or otherwise, during his play, he may retire from his wicket and continue his innings; and another person may be permitted to stand out for him, but not go in. If any player should stop the ball intentionally with his bat, it shall then be considered dead, and the opposite party may add five notches to the score.

If the ball be struck up, the striker may guard his wicket either with his bat or his body. If the striker hit the ball against the wicket of his partner when he is off his ground, he is out, if it have previously touched the bowler's or any of the field-men's hands, but not otherwise.

Two minutes are allowed for each man to come in, and fifteen minutes between each innings; when upon the umpires calling "Play," the party refusing to play, shall lose the match.

The umpire should observe the situation of the bowler's foot when he delivers the ball, and if it be not behind the bowling crease, and within the return crease, he shall call "No ball." If the striker should run a notch, the umpire shall call "No notch." The umpire at the bowler's wicket has a right to be first applied to for his decision on the catches.

SINGLE WICKET.

The game of Single Wicket is not so interesting as that of Double Wicket; but it may be played by almost any number of persons, though it is seldom played with more than four or six on a side. The business of a bowler and striker is nearly the same as in Double Wicket.

When the striker runs to the bowler's wicket, and knocks the bail from off two stumps placed there, with his bat, and returns to his own wicket without having it knocked down by the ball, he is entitled to count one notch. After he has run one notch, if he start for another, he must touch the bowling stump, and turn again, before the ball crosses the play, to entitle him to another notch. He is entitled to three notches for a lost ball.

If four, or a less number are at play, then they should make all hits before the wicket, with bounds, &c. and not move off the ground, except by agreement. Where there are more than four players on a side, there should be no bounds; and all hits, byes, and overthrows, should be

allowed. It is, of course, to be understood, that the bowler must bowl at the usual distance from the wicket. No more than one minute is to be allowed between each ball. When the striker hits the ball, one of his feet must be on the ground, and behind the popping-crease; otherwise the umpire shall call "No hit." The field's-man must return the ball, so that it shall cross the play between the wicket and the bowling-stump; or between the wicket and the bounds; the striker may run till the ball shall be so returned. These are the principal rules and regulations adopted by the most experienced Cricket-players, at the game of Single Wicket. The distance between the wickets is precisely the same as at Double Wicket, consequently, the runner has twice the ground to run, in obtaining each notch; but we would suggest, that this evil might be remedied by running only a little more than half the usual distance: by this method, Single Wicket will be rendered much less fatiguing, and far more lively and amusing, at least to

The Batsman.

THE ANGLER.

Embower'd upon the pleasant banks of Thames;
Or, by the silver stream of Isis, Cam,
Or yellow Avon, roaming, the Angler,
Joyous, pursues from morn till eve his sport.

ANGLING has long held a high rank among the sports of the people of England; poets have written in its praise, and philosophers have delighted in its practice; it is not confined to particular places, ages, or grades of society; wherever the brook wanders "through hazy shaw or broomy glen,"—wherever the willow-branch laves in the streamlet,—wherever the Trout leaps at the May-fly, or the Pike lurks in the bulrushes, or the Salmon springs up the waterfall,—there also are Anglers To enjoy this fine pastime, the mountaineer descends to the valley-stream, the Magister Artium quits his learned halls and collegiate ease for the banks of the deeps, the weirs, and the tumbling bays of Cam; the citizen his shop and beloved ledger for a hickory rod and a creek in the Roding; and the courtier his rich Turkey carpet, ottoman and lustre, for "nature's grassy foot-cloth," the rough bark of a felled river-side tree, and the sparkling surface of a rippled stream. The boy, who was but "breeched a Wednesday," often spends his holiday hour on the bank of a brook, with a crooked pin for his hook, a needleful of thread for his line, and an alder switch for his rod

and the grey-headed statesman,—nay, even Royalty itself,—occasionally relaxes from the grave duties attendant on such superior station, from weighing the balance of power, and determining the fate of nations, "to wield the rod, and cast the mimic fly."

GEORGE THE FOURTH'S FISHING APPARATUS.

His late Majesty had, for many years, been very partial, during his leisure hours, to the amusement of fishing. Virginia Water, which covers nearly one thousand acres, had, for some seasons past, afforded ample scope for this recreation, and a magnificent fishing apparatus was manufactured by command of His Majesty, by Ustonson of Temple Bar. When presented, the King was pleased to express his admiration at the great ingenuity and taste displayed in the manufacture of it, and appeared surprised that the whole could have been made so uniquely perfect. We have been favoured with a sight of the apparatus, which had been inaccurately described in the public prints, but of which the following particulars may be relied on as correct. The case is three feet long, nine inches broad, and three inches in depth; it is covered with the richest crimson Morocco leather; the edges are sloped with double borders of gold ornaments, representing alternately the salmon and basket; the outer border forms a rich gold wreath of the rose, thistle, and shamrock, intertwined with oak leaves and acorns. The centre of the lid presents a splendid gold impression of the Royal arms of Great Britain and Ireland. The case is fastened with one of Bramah's patent locks; and the handles, eyes, &c. are all double gilt. The interior is lined throughout with Genoa sky-blue velvet, the inner part of the lid tufted. On either end of the case are partitions for the books or cases for angling and fly-fishing, which are the most chaste and beautiful that can possibly be imagined; the angling book is covered with the richest Genoese crimson velvet, the lock surmounted by a diadem of solid gold, the top ornamented with the Royal arms, richly worked and emblazoned: beneath the shield appear the rose, thistle, and shamrock. Within the book is a beautiful emblematic ivory carved reel, studded with silver, which contains the lines, floats, &c. for bottom-fishing, and likewise partitions, with an infinite variety of artificial baits of superior imitation. The outside of the fly-book very much resembles that of the other, with this difference, that the lid is surmounted by a double G. R. enclosed in a semicircle of a richly embroidered wreath, representing the rose, shamrock, and thistle. This book is full of choice flies, suitable to the different seasons, &c. and all of the most admirable manufacture. The books are lined with rich blue watered tabby silk, corresponding with the case, &c. In the centre of the box, on a raised cushion of Genoese sky-blue velvet, are the landing ring and net; the former is beautifully worked, and the latter made of gold-coloured silk; on each side are the winches,

clearing ring, &c. (in separate partitions) engraved with the maker's name and the crown of England. The rods have extra joints, tops, &c. and may be so altered as to be adapted to any sort of fishing. The rods, and also the landing-stick, are richly carved and engraved with royal emblematical devices, and the entire apparatus is acknowledged to be the most beautiful specimen of the art, which has ever been manufactured.

RODS.

The first care of the Angler should be to procure good rods, lines, hooks, and floats. A great variety of rods may be had at the shops, of bamboo, vine, hazel, and hickory: for general fishing, those made of bamboo, having several tops of various strengths, are best; but cane rods are much superior for fine fishing. The rod should be perfectly straight when put together, and gradually taper from the butt to the top. If you be desirous of making the rods yourself, the following directions must be observed:—The stocks should be cut in the winter; hazel and yew switches are the best for tops, and crab-tree for stocks. Do not use them till fully seasoned, which will be in about sixteen months after they are cut; but the longer they are kept the better. The rod should consist of five or six pieces, fitted so nicely, that the whole rod may appear as if it consisted of one piece only. The best rods are those that are brass ferruled; but if they are bound together, it must be with thread, strongly waxed, the pieces being cut with a slope or slant, that they may join with the greater exactness. Six or eight inches must be taken from the top, and in its place a smooth round taper piece of whalebone substituted, on which a strong loop of horse-hair must be previously whipt. Fly-rods are made more taper than others. Rods for trolling must be furnished with brass rings, whipt all the way up, at about ten or twelve inches distance, for the trolling lines to go through; the tops for trolls must be strong, and have rings whipt on, with pieces of quill, to prevent the lines being cut. The tops of rods for Carp, Tench, Dace, and Roach fishing, should be finer, and more elastic.

The rod must neither be kept too dry, nor too moist; for the one will make it brittle, the other rotten. In very warm weather, always wet the joints, to make them adhere better; if, however, by being too wet, they should stick, so that you cannot easily get them asunder, never use force, lest you should strain your rod, but rather wait till it be dry, or turn the ferrule of the joint which is fast, a few times over the flame of a candle, and it will separate.

LINES.

For the line, horse-hair is to be preferred; it should be round, twisted even, and of equal thickness. The best colours are white and grey for

clear waters, and sorrel for muddy rivers. The most easy method of making lines, is by a little machine, which may be bought at most of the shops, where also, you may purchase your lines, if you think fit.

HOOKS.

Hooks are numbered, and made suitable in size to the fish they are intended to take. For Barbel-fishing, Nos. 5, 6, 7, 8, and 9, are used; for Gudgeon, Nos. 10 and 11; for Roach, Dace, and Bleak, Nos. 10, 11 or 12; for Tench, Carp, and Perch, Nos. 7, 8, and 9; for Trout, No. 6; for Chub, Nos. 8 or 9; for Eels, No. 8; for Grayling, No. 10; for Ruff, No. 9; for Minnows, &c. No. 13, &c. The above sizes are such as the best Anglers of the present day prefer, and are much smaller than those used formerly; but he who expects success at this sport must adopt the modern tackle, or he will be disappointed. For arming the hook, use fine, small, strong silk, well waxed, and lay the hair on the inside of the hook, otherwise the silk will fret and cut it asunder.

FLOATS.

Floats made of Muscovy-duck quills, are best for slow waters; sound cork, without flaws or holes, bored through with a hot iron, into which is put a quill of fit proportion, is preferable for strong streams: the cork should be pared to a pyramidical form, ground small with a pumice-stone, and coloured according to fancy. Floats must be so poised with shot, when on the line, as to make them stand perpendicularly in the water, that the least nibbie may be apparent.

BAITS.

The lob-worm, garden-worm, and dew-worm, or trechet, are found in gardens and church-yards at night; those with red heads, broad tails, and streaked down the back, are the best. These worms are excellent bait for Barbel, or Eels, and are found towards the latter end of the summer.

Gilt-tails, brandlings, and red worms are found in old dung-hills, hog's dung, cow's dung, and tanner's bark. The brandling and gilt-tail are excellent bait for Perch, Tench, Bream and Gudgeon. The red worms, well scoured, are taken by Tench, Perch, and Bream, in muddy waters.

The meadow, or marsh-worm, is of a lightish blue colour, and a good bait for Perch; it is found in marshy ground, or in the banks of rivers in the months of August and September.

The tag-tail is found in meadows, or chalky ground after rain, in March and April; and esteemed a good bait for Trout, in cloudy weather.

The palmer-worm, woolbed, or canker, is found on herbs, plants, and trees; and takes the name of woolbed, from its rough and woolly coat. This is an excellent bait for Trout, Chub, Grayling, Roach, or Dace.

The oak-worm, caterpillar, cabbage-worm, crab-tree-worm, colewort-worm or grub, may be gathered on the leaves of colewort and cabbage, or on the hawthorn, oak, or crab-tree; and may be long preserved with the leaves of those trees or plants, in boxes bored with holes to admit the air. They are good baits for Chub, Dace, Roach, or Trout.

The bark-worm, or ash-grub, is found under the bark of a felled oak, ash, elder, or beach, or in the hollow of those trees where rotten. This bait may be used all the year for Grayling, Dace, Roach, or Chub. They are kept well in wheat-bran.

The cod-bait, caddis-worm, or case-worm, of which there are three sorts, is found in pits, ponds, or ditches; they are excellent baits for Bream, Tench, Bleaks, Chub, Trout, Grayling, and Dace.

Gentles, or maggots, are easily bred by putrefaction; they may be kept with flesh, and scoured with wheat-bran. They are good baits for Tench, Bream, Barbel, Dace, Gudgeon, Chub, Bleak, and Carp.

Cow-dung-bob, is found under cow-dung, and somewhat resembles a gentle. It is best kept in earth; and is a good bait for Trout, Chub, Carp, Tench, Bream, Dace, and Roach.

The white-grub, or white-bait, is much larger than a maggot; it is found in sandy and mellow ground; and is an excellent bait from the middle of April till November, for Tench, Roach, Bream, Trout, Chub, Dace, and Carp. These baits should be kept in an earthen vessel, with the earth about them, and covered very close.

Flag or dock-worms are found among the small fibres of flag roots, and in old pits or ponds. They may be kept in bran; and are good baits for Bream, Tench, Roach, Carp, Bleak, Dace, and Perch.

Boiled salmon-spawn is a very good bait for Chub, and in some rivers, for Trout.

Dace, minnows, roach, smelt, gudgeon, bleak, and miller's-thumb, are proper bait for Pike.

Grasshoppers, in June, July, and August, their legs and wings taken off, are good for Roach, Chub, Trout, and Grayling.

Cheese, or oat-cake, is reckoned killing for Chub, Barbel, Roach, and Dace; the cheese you may moisten with honey and water.

The water-cricket, water-louse or creeper, which is found in stony rivers, will often take Trout in March, April, and May.

White snails are good bait for Chub, early in the morning, and for Trout and Eels on night hooks.

House-crickets are also good, to dib with, for Chub.

PASTE-BAITS.

Paste-baits are not to be angled with in rapid streams: but in pits, ponds, and slow running rivers, on small hooks. In this sort of angling, your eye must be quick, and your hand nimble to strike, or the bait and fish will give you the slip. A quill float is better than cork, as it sooner shows the nibble or bite.

For a Chub, take some old cheese, the suet of mutton kidney, and a little strong rennet; mix them finely together, with as much turmeric as will give them a fine yellow colour.

For Roach and Dace, grate fine bread into a little clear water, wherein some gum-ivy has been soaked, add a little butter, and colour it with saffron.

For Barbel, in August, make a paste of new cheese, and mutton suet.

For Carp or Tench, mix crumbs of bread with honey; or, for Carp, take equal portions of bean or wheat flour, the inside of a leg of a young rabbit, white bees' wax, and sheep's suet; beat them in a mortar; then moisten the mass with clarified honey, and work it into balls before a gentle fire.

Sheep's blood and saffron make a good paste for Roach, Dace, Bleak, Chub, Trout, and Perch; for the Chub only, put a little rusty bacon in it.

GROUND-BAITS.

The most simple ground-bait for Roach, Dace, and Bleak, is made by moulding or working some clay and bran together, into balls or pieces, about the size of a pigeon's egg, with a little bread crumbled among it.

Another ground-bait for Chub, Carp, Roach, and Dace, is made as follows:—Take the crumb of half a quartern-loaf, and cut it in slices about two inches thick, and put it into a pan covered with water; when soaked, squeeze it nearly dry; add equal quantities of bran and pollard, by handfuls, and knead them together, until the whole is nearly as stiff as clay. For Barbel, first break about a quarter of a pound of greaves to dust, soak it well in water, and then work it up with the bread, bran, and pollard. Barley-meal may be substituted for the bran and pollard, in still waters only; as, from its lightness, it would be carried away in a rapid stream.

A ground-bait may be made with clay, bran, and gentles, for Chub, Roach, and Carp, thus:—Mix the bran and clay together, in lumps about the size of an apple: put a dozen or more gentles in the middle, and close the clay over them. This is well calculated for a pond, a still hole, or gentle eddy.

To make ground-bait, with *clay* and greaves, for Barbel:—Chop or break a pound of greaves into small pieces, and cover them with hot

water; let them remain until softened, then pour the water off; pick out a sufficient quantity of the white pieces, to bait your hook, and work up the remainder with clay and bran, into lumps or balls. This is the best ground-bait for Barbel that is used. It is also an excellent ground-bait for Chub, large Dace, and heavy Roach.

Gentles and worms may be used as ground-bait for Carp, Tench. Roach, Dace, &c. In ponds and deep still holes, gentles may be thrown in by handfuls; but this does not answer in a current or stream, as they then float, and are carried from the spot you intend to angle in; a few mixed with bran and clay, will answer better.

Grains are good ground-bait for Carp, Tench, and Eels, in ponds or still waters; but they must be quite fresh, for, if they be the least sour, the fish will not come near them. They should be thrown in the night before you intend to fish; the same method ought to be observed when you ground-bait with worms. Some Anglers prefer coarse ground-bait made with clay, soaked greaves, and oat-chaff, for Barbel and Chub.

THE MONTHLY GUIDE.

January.—Jack, (or Pike,) Chub, and Roach, are the only fish that will take a bait this month; you may angle a few hours in the middle of the day for them, provided the water be clear.

February.—Carp, Perch, Roach, Chub, and Jack, will feed, if the weather be mild; at this season, fish in the middle of the day, in eddies near banks.

March.—Jack, Carp, Perch, Roach, Dace, Chub, Gudgeon, and Minnow, will take a bait, during this month, about the middle of the day, in the shallows and eddies.

April.—All fish mentioned under March, as well as Trout, and sometimes Tench, in rivers, and Barbel, Bleak, Flounders, and Eels, in shallows, sharps, &c. may be taken this month.

May.—Eels will take a bait, night and day, during this month; all fresh-water fish now feed; in ponds you may have sport, but still angle, for choice, in shallows and eddies.

June.—This is a bad month for the Angler; most fish (except Trout,) having recently spawned, and being out of condition.

July.—All fresh-water fish will now take a variety of baits, but not very freely. Do not quit the streams and scowers.

August.—Fish will bite more freely, especially in the morning and evening, during this month.

September.—Barbel, Roach, Chub, and Dace, now go into deep water and there remain till spring.

October.—For trolling and bottom-fishing for Roach and Chub, this month is good; but not for fly-fishing, or angling in ponds or still waters.

November.—Roach, Chub, and Jack, will still feed, sometimes freely, in the middle of the day

MINOR RIVERS, CANALS, AND PONDS.

The New River.—The fish in the New River are not so large as those in the Thames and Lea, but being perfectly free for all persons, the New River is well calculated for practice. Chub, Roach, Dace, Perch, Gudgeon, Bleak, Eels, and Minnows, may be taken from within a mile of the Metropolis, to the source of the river, near Ware.

The Mole.—For Jack, Perch, Chub, and other fish, the river Mole is very famous; in the neighbourhood of Esher and Cobham the Angler will find good sport.

The Roding produces Chub, Jack, Tench, Roach, and Perch, and abundance of Eels. It contains many deep holes, and some fine fish about Aibridge, Loughton, Woodford Bridge, Ilford, Barking, and the back of Wanstead.

Paddington Canal contains Roach, Chub, Perch, Gudgeon, Eels, and Jack.

Camberwell Canal is well stored with Jack, Perch, Roach, Eels, and some Carp and Tench, from Camberwell to Deptford.

Croydon Canal contains fine Perch, Roach, Gudgeon, Eels, &c. and is free for any one to angle in, all the way to Croydon. At Sydenham, there are some pieces of water well stored with fine Carp, in which an annual subscription entitles the Angler to fish.

Wellington Water is a subscription pond, well stocked with fish, situated between Bethnal-Green and the Hackney Roads.

In some free ponds on Clapham Common, and Hampstead Heath, Perch, Carp, and some other fish may be taken.

Hornsey-Wood-House Pond contains Tench, Perch, Roach, &c. Persons taking refreshment at the tavern are allowed to angle in this water.

Dagenham Breach, in Essex, which is kept purposely for angling, at two pounds a year subscription, is stored with Carp, Jack, Perch, Bream, Eels, &c.

On Chiselhurst Common, in Kent, between eleven and twelve miles from London, are several ponds stored with Carp, Tench, &c. particularly the large pond adjoining the Queen's-Head-Inn Gardens.

About a mile east of Shooter's Hill, in the same county, the Angler will find some ponds on a common near the road-side, which contain Carp, Perch, &c. These ponds are perfectly free.

At Stanmore, in Middlesex, ten miles from London, on the common, near the Vine public-house, are two or three ponds, in which Perch, Tench, &c. may be taken. Between this pond and the Priory, about a mile distant, is a fine piece of water called the Long Pond, which contains some fine Jack.

A few small Tench may be taken in some pits, called "The Tench Pits," on Bushy Heath.

Just on the entrance of Epping Forest, by the Green Man, is a pond abounding with large Carp and Eels. Near this spot are several other ponds, in which are Carp, Tench, Roach, &c.

ARTICLES NECESSARY FOR ANGLERS.

Hooks for trolling; the gorge, snap, &c. tied on gimp; winches for running tackle; disgorger; split shot; hooks tied on gut of various sizes, to No. 12; hooks, tied on hair, from No. 11 to 13; bags for worms; gentle boxes; floats of various sizes; plummets for taking the depth; baiting needles; caps for floats, kettle for carrying live bait; rods for trolling and bottom-fishing; drag to clear the line, when entangled in heavy weeds; landing-net; clearing-ring; lines of gut, hair, &c.; those of four yards long, will be found most useful.

LAWS OF ANGLING.

By an Act of Parliament, passed in the 7th and 8th George IV. for consolidating and amending the Laws in England relative to Larceny and other offences connected therewith, it is provided that, if any person shall wilfully take or destroy, any fish in the water which may run through or being the land adjoining or belonging to the dwelling house of the person being the owner of the water, or having a right of fishery therein, the offender shall be guilty of a misdemeanor. If any person shall wilfully take or destroy, or attempt to take or destroy, any fish in water adjoining a dwelling-house, but which shall be private property, or in which there shall be a private right of fishery, the offender, being convicted thereof before a justice of the peace, shall forfeit, over and above the value of the fish taken or destroyed, (if any) any sum not exceeding five pounds. Nothing therein contained to extend to a person angling in the day-time: but if a person shall, by angling in the day-time, wilfully take or destroy, or attempt to take or destroy, any fish in the water first mentioned, he shall, on conviction before a justice of the peace, forfeit any sum not exceeding five pounds; and if in the water last-mentioned,

he shall forfeit not exceeding two pounds. If the boundary of a parish, township, or vill, should happen to be in or by the side of such water, it shall be sufficient to prove that the offence was committed in the parish, township, or vill named in the indictment or information, or in any parish, township, or vill adjoining. *s.* 34.

And further, if any person shall, at any time, be found fishing against the provisions of this Act, the owner of the ground or fishery, or any person authorized by him, may demand from the offender all his rods, lines, or other implements for taking or destroying fish, and if he should not immediately deliver up the same, may seize the same for the use of such owner. If the implements used by Anglers (in the day-time) should be taken, or delivered up, the offender to be exempt from the payment of any damages or penalty for angling. *s.* 35.

By another Act of Parliament passed in the 7th and 8th George IV. for consolidating and amending the Laws in England, relative to malicious Injuries to Property, it is provided that, if any person shall maliciously, in any way, destroy the dam of a fish-pond, or other water, being private property, with intent to take or destroy any of the fish in the same; or shall maliciously put any noxious material in any such pond or water, with intent to destroy the fish therein, the offender shall be guilty of a misdemeanor, and be punished accordingly.

The provisions contained in these Acts do not extend to Scotland or Ireland.

SALT-WATER ANGLING.

Several sorts of fish may be taken at the mouths of rivers, when the tide is flowing up from the sea. From piers, or projecting rocks, large Plaice, Whiting, and even small Cod-fish and Turbot, Haddock and other fish, will take a bait. Mackerel may also be taken from similar places, on the coasts which they frequent, during their season.

For this sort of angling, a strong rod, a stout well-leaded line, a large hook, and a good-sized cork float, must be used. When fishing at the mouths of rivers, where you may take Flat-fish, Eels, Coal-fish, Bass, small Whitings, and the fry of Cod and Haddock, bait with gentles, shrimps, or red worms very well scoured. For the larger fish, when angling from a pier, rock, or boat, a small distance from land, bait with a small raw crab, a bit of whiting, a raw muscle, or two or three large red worms. For Mackerel, you may bait with a bit of bright scarlet cloth, and let your bait swim about mid water, or even lower, if your tackle will allow it. When using a crab or muscle bait, you should fish at the bottom. Salt-water angling is by no means so pleasant, nor does it require such skill and nicety in the choice and management of baits, floats, and tackle, as angling in rivers, ponds, or streams.

THE VARIOUS FISH.

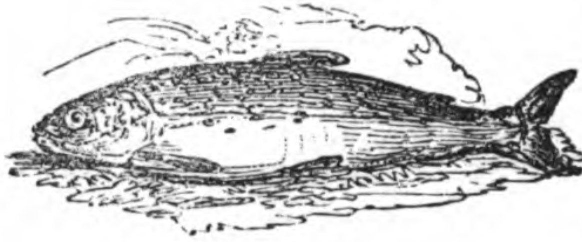
We shall now proceed to acquaint our young "brothers of the rod," with the haunts and habits of the various Fish, which, if they improve in the pastime of Angling, are most likely to fall victims to their skill; and, in addition to the preceding information on the subject, we purpose briefly stating what hooks and baits are most commonly used for each Fish, &c.

TROUT.

In angling for Trout at the bottom, in the early part of the morning, and late at night, also during the day, if the water be much coloured, use a strong rod, running tackle, and No. 6 hook. Angle with a float, putting sufficient shot on the line, placed about nine inches above the hook, to sink the bait, which should be one large lob-worm, or two marsh or dew-worms, well scoured, and very lively. Let your bait drag the bottom; do not strike the first time you feel a tug, but rather slacken your line, and when you feel two or three sharp pulls, strike smartly; if a heavy fish, give him line, and land him at leisure, as a Trout is very strong, and struggles most violently, leaping out of the water, and flying in all directions, as soon as he feels the hook.

The Minnow is a good killing bait for Trout. In fishing with a Minnow, hook it by the lips, or beneath the back fin; use a small cork float, No. 6 hook, and let your bait swim below mid-water in deep dark holes, which are free from eddies. Trout begin to feed in March, and continue

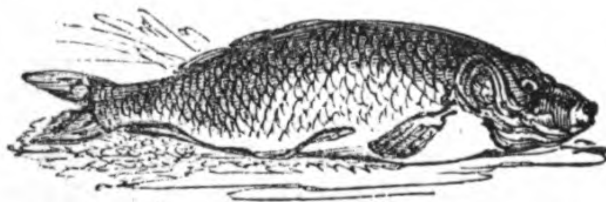
in season till Michaelmas. The first two or three months are best for bottom-fishing, they are then found in shallows; in summer time, the large Trout lie in deep holes, or eddies. As they seldom feed in the day, unless in dark weather, you must fish for Trout betimes in the morning, and late in the evening, or you will not be likely to be successful in your sport.



The Thames and Lea at present contain but few Trout; but you may fish for them successfully in the Wandle, at Carshalton, Merton Mills, &c. till you arrive at Wandsworth; in the Ravensbourne, from or by Sydenham, Lewisham, &c. to the Kent Road, Greenwich; the Darent, at Crayford, Bexley, Foot's Cray, Paul's Cray &c, and near the Powder Mills, through and near Darent and Horton, to Farningham. In the neighbourhood of Rickmansworth, and from thence to Uxbridge, there are several good Trout streams; at the latter place, the Angler is advised to put up at the White Horse, or Crown and Cushion, the landlords of either of which will put him in the way of killing a good dish of Trout.

CARP.

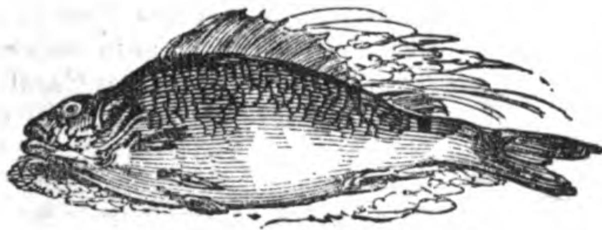
In angling for this shy and crafty fish, use running tackle, a small quill float, fine clear gut line, and No. 8 hook. You may fish for them from the end of February, if the weather be mild, until the middle of October. Bait with well scoured red worms in the beginning of the season; and in the summer, with gentles, and paste made with honey and the crumb of new-baked bread, worked well together. Keep as far from the water as you can; ground-bait the place as for Roach, and plumb the depth the night before. The best time to angle for Carp is very early and late.



When you have hooked a Carp, give him line, and be very wary and patient, or he will get away. In rivers, strike the instant he bites, but in ponds, wait for a few moments. Look sharp after your bait, when you use paste, or this fish will suck it completely off your hook without biting. In still water, your bait should swim about an inch from the bottom, but it must not touch the ground in a river or stream. Carp are found in deep holes, near flood-gates, in eddies, and near large beds of weeds.

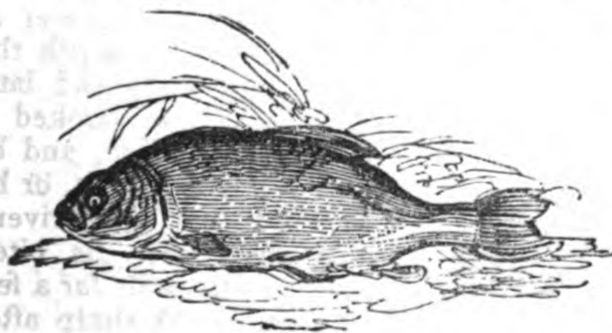
PERCH.

The Perch generally takes a bait immediately it is offered. Perch angling continues from February to October. Strong tackle must be used in angling for them, a cork float, gut line, or a twisted hair, and hook No. 7. Bait with two red worms, well scoured, or a live Minnow hooked by the lips or back fin, shrimps, or large grey maggots taken from potatoe or turnip plants give them a few minutes to pouch the bait; use running tackle, or you will certainly lose your fish. During the hot months, Perch feed very little; dark, windy weather, if not too cold, is best; they lie about bridges, mill-pools, near locks in rivers and canals, in deep, dark, still holes and eddies, ponds about flood gates, on the gravel or sandy parts, and near rushes. If there be any Perch about, and they are inclined to feed, they will soon take the bait, so that you need not delay long in one place



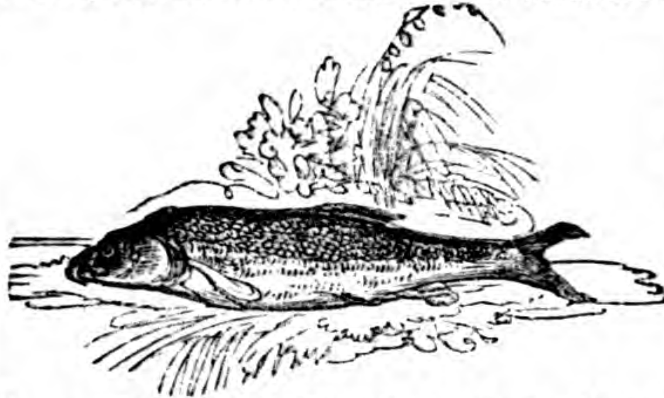
TENCH.

The Tench bites freely in dark, warm, heavy weather, during the summer. They are found in small numbers in the rivers Thames and Lea, the Camberwell and Croydon Canals, the Roding near Red Bridge, at Wanstead, and in the ponds of Wanstead Park. For bait, use red worms, gentles, or sweet paste. Fish with a fine gut line, quill float, and hook No. 9. The Tench delights in foul rather than clear water; their haunts are principally among weeds, and under shrubs and bushes. Tench are more numerous in pits and ponds than in rivers. They bite more freely late and early, than in the middle of the day, from the latter end of April until their spawning time, in June; and again during the month of August and the early part of September. When taken in very muddy places, they should be put into a tub of clear water, alive, and they will soon cleanse themselves, so as to improve their flavour.



BARBEL.

The Barbel, which only breeds in rivers, is a handsome fish, but coarse, and considered but of little value for the table: it, however, affords



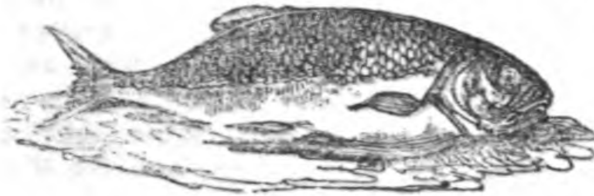
excellent sport to the Angler. They are angled for, in the river Thames, in boats, with a stout rod, running tackle, gut line, cork float, and No. 7 or 8 hook, baited with lob or marsh worms, or greaves. In the river Lea, you may use either a bamboo or cane rod with a stiff top, running tackle, fine gut line, quill float, No. 9 hook, and bait with red worms, gentles, or greaves. The bait must always touch the ground. In baiting with worms, enter the point of the hook a little below its head, and pass it through to within a quarter of an inch of its tail, which part, by its moving about, will entice the fish to bite; cover the shank of the hook with the body of the worm, as much as you can. Strike smartly, the instant you see a bite; raise the top of your rod, and let him run some considerable distance before you attempt to turn him; take him by degrees into deep and still water, and play with him, till he is quite weak, before you land him. Before you begin, throw in plenty of ground-bait, and continue to do so frequently while fishing; make it with soaked greaves and clay, or malt grains, broken lob-worms, bran and clay, mixed together in balls the size of an egg. Boiled salmon's roe is said to be an excellent bait for this fish.

The Barbel may be caught from May to October, all day, but best in the morning and evening. They lie in deep eddies, at the end of scowers, under beds of weeds and banks; and in the middle of summer, under bridges, about piles, old trees, and other retired or shady places, where there happens to be a strong current of water. Fine Barbel are found in the White Horse Water, in the Horse and Groom Subscription Water, at Lea Bridge, as far up this river as Waltham Abbey, and in the Subscription Water, Bleak Hall, at Edmonton; in the river Thames, at Chertsey Bridge, Shepperton, Walton, and Hampstead Deeps, at Thames Ditton, Kingston, Twickenham, and Richmond.

The Barbel is scarcely worth cooking when it is caught; but it is, nevertheless, considered an important fish by the Angler, on account of the sport which it affords. Its flavour is said to be somewhat improved toward the latter end of the summer.

ROACH.

The Roach likes a sandy bottom, and is very plentiful in the rivers Thames and Lea. Although not very delicious, it is by no means a bad fish, when in season, if it be of a tolerable size, and caught in a river. When fishing for Roach, your line above the float must not exceed fourteen inches: the float should not be more than an eighth of an inch above water, for Roach bite so finely, that without great nicety in your tackle, you will lose two bites out of three. Keep the top of your rod over the float, and when you see the least movement of it, strike quickly, but lightly, from your wrist, not from the arm; if you hook your fish, keep him as much under the top of your rod as you can, and by playing him carefully, he will soon be your own: when fishing for Roach, it is best to take a landing net with you. Paste made of white bread, two days old, slightly dipped in water, which must be immediately squeezed out again, is the best bait for Roach, nearly all the year round; when squeezed, knead it with the thumb and finger of your right hand, in your other palm, till of a proper consistence, and put a piece on the hook, about the size of a pea. Gentles may also be used in the summer; and blood or red worms, in the spring and autumn. Plumb the depth, and let your bait gently touch the bottom; before you begin, and while angling, cast ground bait in frequently, such as is used for Chub and Barbel fishing, close to the float. Chewed bread is also very good for this purpose. Use a light rod, a thin line, and No. 10 or 11 hook.

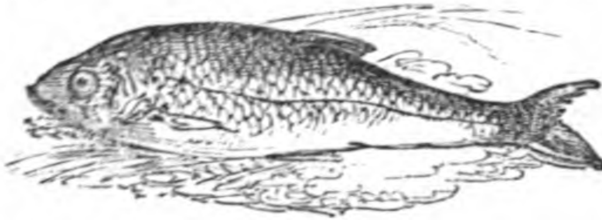


Roach are found in rivers, on the shallows, in eddies, and in deep holes; also about bridges, piles, and locks; in ponds, near flood-gates, and where the bottom is sandy. They bite only during the summer months in ponds, but all the year in rivers. They will take a bait all day in mild cloudy weather; when it is very hot, mornings and evenings are the best times to angle for them; if it be cold, the only chance the Angler has of taking them, is by fishing in the middle of the day. There are many heavy Roach in the holes and eddies between Chertsey Bridge and Shepperton, from thence by Holford, Walton, and Sunbury to Hampton, in the meadows at Teddington, and on the opposite side from Kingston to Richmond.

Roach are much better in some rivers than in others; those which are taken in ponds seldom turn out to be good for much; in many places Roach have been found nearly two pounds in weight; but they are never so fine-flavoured as when weighing about half a pound. The roe of the Roach is reckoned to be particularly good.

DACE.

The Dace affords the Angler much sport, as it generally bites boldly. Angle for them with the same sort of tackle, and in the same way, as for Roach, not forgetting your ground-bait; which, for Dace, you may make of bran and clay only. They are likely to take your bait, when angling for Barbel with greaves and red worms. Use a hook, one size larger than for a Roach; bait with a red worm in spring; in summer, use two gentles, or a small piece of greaves and a gentle on the point of the hook. You may begin to fish for them in March, and they will bite until October, but not after, unless the weather be very mild.



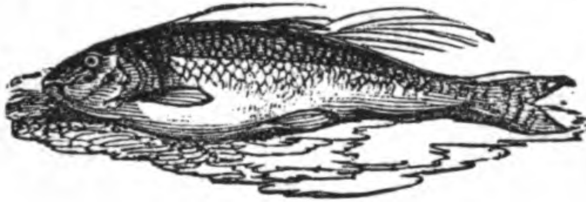
The haunts of the Dace are, for the most part, similar to those of the Roach; but they may more frequently be found in the stronger parts of the stream, among weeds, &c. In the warm summer months, if the water be clear, shoals of them may be often seen basking in the shallows.

CHUB.

The Chub is a bold biter, either at the bottom or top of the water. Where you have reason to expect a heavy Chub, use running tackle, gut line, quill float, and hook No. 8 or 9. Strike the moment you perceive a bite, and let him run; give plenty of line, otherwise your fish will break away. Soon after his first run and a few plunges, you may bring him to the shore or landing net. The baits for Chub, in spring, are gentles, greaves, red worms, bullock's brains, or a live minnow; in summer, gentles and greaves; in winter, (for they may be taken all the year round,) bullock's brains, pith from the backbone, or a bit of old Cheshire cheese. Throw in plenty of ground-bait, of soaked bread, pollard, and bran, worked together, before you begin, and often while angling. Chub bite best in the morning and evening. Fish near the middle of the stream, in the spring months, and let the bait drag two or three inches on the ground; in the autumn, Chub lie close in dark shaded holes, and under banks.

GUDGEON.

The Gudgeon, of which there are numbers in the Thames and Lea, bites well, and may be taken all the day, from April to October. The Gudgeon frequents gentle streams, which have gravelly or sandy bottoms. They seek shallows about the latter end of spring, and remain among them during the summer; in autumn, they delight in deeper water, with a muddy bottom. In the Thames, fish for them with a red worm, a gentle, or a blood worm, gut or hair line, light cork float, and No. 9 or 10 hook. In the Lea or New River, you may use finer tackle, and bait with blood worms. Strike instantly, when you perceive a bite, and fish at the bottom of the water on shallows, which are free from weeds. Stir the bottom frequently with a rake or pole, while fishing, in order to work up the sand and gravel, so as to discolour the water, which will attract them in considerable numbers, particularly if you throw in a few broken worms occasionally. Except in the cool days of autumn, and about the latter end of April, there are few fish that bite more freely at a proper bait than a Gudgeon.



BLEAK AND MINNOW.

In the Thames, Lea, and the New River, numbers of Bleak and Minnows are found; Bleak are easily taken with paste or gentles at mid-water, or at the bottom. Angle for them with a light rod, single hair line, small quill float, three or four No. 12 or 13 hooks, and bait with a few gentles; or use three or four different baits, such as a blood-worm, a gentle, a caddis, a common house-fly, or a bit of red paste. Bait for Minnows with a blood worm, a small piece of red worm, gentles, or paste; use light tackle, and a No. 13 hook. Strike as soon as you feel a bite. Occasionally throw in a few grains, or a little chewed bread, to keep them about your baits. You may take both these fish from April till October, at any time of the day.

BREAM.

This very bony fish abounds in the rivers Weybridge, Byfleet, and the Moie: also in Dagenham Breach. Bream are taken in the spring and early part of summer with a red worm; with a grasshopper in June and July, and, in general, with gentles and red paste. Use a small hook, a light rod, and quill float. Plumb the bottom, and let your bait rest about an inch above it. The Bream may most frequently be found in the wide deep parts of gentle streams, and also near weeds, &c., where the bottom is sandy or clayey, and in the deepest and most quiet places in ponds. The Bream runs hard for a short time when first hooked, but will soon turn on his side, and may then be easily landed; they bite best a little after sunrise, and an hour or two before sunset, and when the water is muddy after a fall of rain.

POPE, OR RUFF.

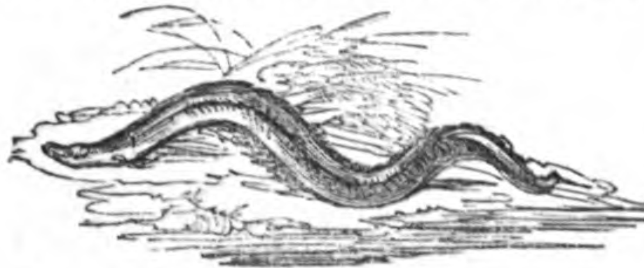
The Pope, or Ruff, is somewhat thicker and more bulky in its shape than the Perch. It is to be found in places where the water is quiet and deep, with a muddy bottom. In angling for these fish, use No. 8 or 9 hook, with a quill float, and bait with a clean red worm. Do not give them much line after they bite. Plumb the bottom, and let your bait just drag on the ground. Throw in some balls of clay, in which worms are mixed; or even worms alone, unless the water be clear, when, by all means, use clay and worm balls, or, in case of need, clay balls alone, so as to make the water a little muddy. It is said that they will sometimes bite freely in cold weather, but the best time to angle for them is in the spring or summer, especially when a warm wind blows. You may angle for Pope or Ruff at any time of the day.

GRAYLING.

This fish is plentiful in many rivers from April until the end of October. Grayling very much resemble the Salmon fry, and are to be angled for in streams with sandy or stony bottoms. They haunt the sides of swift streams in May. When struck, they must be handled rather gently, as their mouths are very tender, and if you treat them roughly, the hook will break away from its hold. Use a light rod, a cork float, a fine hook, and a running line. The best time to fish for them is in spring or autumn, from seven till eleven or twelve in the morning, and from four or five until sunset in the afternoon: in a cool cloudy day in summer they will bite all day. The best bait for them is a worm or a gentle.

EELS.

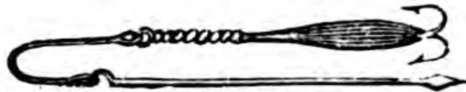
Eels are taken with the rod and line, night lines, dead lines, and by bobbing and sniggling. When fishing with a rod, use gut, or twisted hair lines, with a float, and No. 8 hook; bait with a worm, fish at the bottom, and let the float remain a moment under water before you strike. The dead line should be made of whipcord; on which you may put five or six hooks, about nine inches apart. The night line must be strong, and baited with small fish, or lob-worms. Bobbing is practised from a boat; you must procure a large quantity of worms for this, pass a needle through them, from head to tail, and string them on worsted, until you have as many strung as will form a bunch as large as a good-sized turnip; then fasten them on the line, so that all the ends may hang level. Place a piece of lead of a conical form in the middle, cast the baits into the water, sink them to the bottom, raise them a few inches, and then drop them again until you have a bite; be as expert and steady in raising your line as possible, so that your fish may drop off into the boat. Immense numbers may be taken by this method.

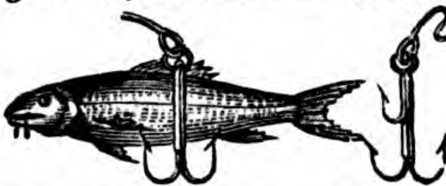


JACK, OR PIKE.

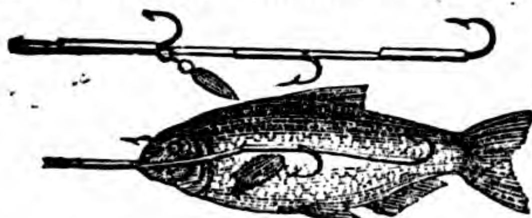
Trolling for Jack (or Pike) affords great sport and excellent exercise. Roach, Dace, Gudgeon, small Trout, Bleak, Minnows, and Chub, are the natural baits for this fish; artificial baits should never be used while there is a possibility of getting natural ones; when they are used, it must be with the snap. Baits of about four or five inches in length will be found to be the best size, the Jack (or Pike) being sometimes shy of pouching a larger bait. You may also take a Trout or Chub with small bait when trolling for Jack, (or Pike,) particularly if you happen to have a live Gudgeon on your hook. At the shops of the fishing-tackle makers, artificial baits of fish and frogs may be purchased, made of wood, pearl, and also of leather stuffed and painted for trolling. These sort of baits are very convenient for use, on occasions when natural baits cannot be easily procured.

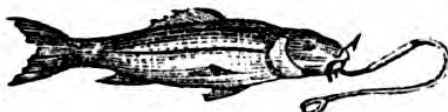
Trolling lines are made of silk, and silk twisted with hair or gut; plaited silk is the best; from thirty to forty yards, at least, should be kept on the winch. The rod must be very strong, with a stiff whalebone or good hickory top. The following are the methods generally used for trolling: namely, with the gorge, the snap, the live bait, and the head-hook. The gorge-hook is introduced into the body of the bait, loaded on the shank with lead; the snap-hook consists of three hooks fastened together, and put on the bait without entering the body; the hooks used for live bait are single or double. To bait the gorge-hook, take a baiting-needle, hook the curved end of it to the loop of the gimp, (to which the hook is tied,) then introduce the point of the needle into the bait's mouth, and bring it out at the tail; the lead will then be hid in the bait's belly, and the points and barbs lie in its mouth, the points turning upward; to keep the bait steady on the hook, tie the tail part to the gimp with some white thread. It is to be observed that the Jack (or Pike) always swallows the bait head foremost. The snap-hook is baited by introducing the point of the upper or small





hook, under the skin of the bait, on the side, and bringing it up to the back of the fin. Another snap is baited by the loop of the gimp being passed inside the gill of the bait, and brought out at the mouth; the lead lies in the throat, the first hook outside the gill, and the others on its side, with the points just entered under the skin; this bait's mouth should be sewed up, to keep the lead and hooks in their places. A live bait should have a No. 3 or 4 hook passed through its lips, or the flesh beneath the back fin, taking care not to wound the back-bone. The bead-hook is formed of two single hooks tied back to back, or made of one piece of wire tied to gimp, with a piece of lead of a conical form linked to it; the lead is put into the live bait's mouth, which is afterward sewed up for the purpose above mentioned.





A great many parts of the river Lea, which abound with Jack, are preserved for angling, and may be used by paying annually a certain sum. The river Stort, which runs into the Lea, near the Rye-house, Hoddesdon, contains many Jack; as also the river Roding, in Essex. Dagenham Breach, in Essex, which is preserved, has very large and numerous Jack. The Camberwell Canal, particularly that part which is broad and deep, near the bridge or arch, on the Kent Road, on the east side, all the way to Deptford Lower Road, contains some Jack; also the Croydon Canal, which may be trolled for, from Deptford to Croydon, particularly in the still waters between New Cross, Kent Road, (to the east of Nun-head-hill,) and Sydenham. Jack are also to be met with, it is said, near the first bridge of the Paddington Canal, and in several other waters near London.

Jack (or Pike) will feed all day; they bite most freely during a breeze of wind. When you use live baits, take at least six in your kettle, and give them fresh water occasionally: if you use the gorge, bait three hooks before you begin, and keep them in bran, in a gentle-box large enough for the baits to lie at their length, and take care that your baits are fresh and lively.

The trolling season continues from July to the end of February. The most likely places to find fish are near the end of scowers, in deep eddies, tumbling bays, deep still water in a river, and near beds of weeds at the mouths of ditches or streams that empty themselves into rivers or ponds;

near flood-gates, and bull-rushes, in lakes, canals, &c. When the weather is boisterous and cold, you may take Jack while other fish refuse every enticement. When the water is somewhat thick, troll close in shore; for, at such times, Jack, as well as other fish, are found near the sides. When the rivers and other waters are much choked with weeds, in the summer, you may sometimes find a Jack lie dosing near the surface in an opening; in this case drop a baited snap-hook, let it sink a few inches, and it is very probable he will take it: you must strike, and lift the fish out instantly, or you lose both Jack and hook among the weeds; your tackle must, therefore, be strong.

We shall now suppose the young Angler at the river side, with a gorge-hook baited. First, let him fasten the winch to the butt of the rod, draw the line through the rings to the length of eight or ten yards, and fasten the hook on the line with a small swivel; place the bottom of the butt against the side of his stomach, if the water be broad, but hold it in his right hand if narrow; draw some of the line back with his left hand, and lower the top of the rod near the ground, then, with a jerk from his right arm, cast the bait into the water. By a little practice he may be able to cast his bait any distance. Let the bait fall as lightly as you can; when sent to the bottom, gradually raise it to the surface, and so continue to troll till you perceive a bite; keep the line free, that nothing may impede the Jack in running away with the bait; let him remain quiet about ten minutes, then wind up the slack line and strike. If there be any very strong weeds or piles near the place, keep your fish from running to such places by weighing him out as soon as possible.

When fishing with two baits, put a barrel-shaped cork-float on your line, and a few swan-shot to sink it three parts under water; cast your bait in the same way as with the gorge-hook; the bait should swim rather below mid-water, and let it continue in some minutes. The fish takes live bait with much violence, and the float disappears instantly; therefore, be sure always to keep your winch unlocked and line free; give him ten minutes to pouch, and then strike. In fishing with a snap hook, (either the spring or plain,) you cast in search exactly as with the gorge; but when you feel a bite, strike quickly and hard, that your hook may get a firm hold.

In trolling with the bead-hook, cast in the bait as before directed; the lead in its mouth will cause it to sink gradually, but will not prevent its swimming about for some time; you must raise it near to the surface again when at the bottom, and occasionally take it out and cast in a fresh place, taking care to fish every yard of water where you are likely to find a Pike. When you feel a bite, let the fish run, and allow him about ten minutes' time for pouching. You must not pull him too roughly, but wind up your line by degrees, until he is exhausted.

NATURAL FLY-FISHING.

For Natural Fly-fishing, the rods should be long and slender, the lines fine, but not so long as those used for Artificial Fly-fishing; the tackle running; and the hooks short in their shanks, and well proportioned in size to the baits. Mr. Ustonson, of Temple-Bar, has lately invented a most excellent line for Natural Fly-fishing, which, from its peculiar construction, is admirably adapted for carrying the light natural fly across a stream. By fishing with the wind at one's back, the line is wafted through the air just above the surface of the water. In streams, begin by fishing just under the banks or near the shore, and proceed by degrees, until at length you may throw your line the whole breadth of the water. In rivers, which, during the summer months, produce an abundance of weeds, you should fish between those places where the current is strongest, taking care so to manage your line as not to get it entangled. When fishing with natural flies, all the other haunts of the different fish which we have elsewhere mentioned should be frequented. Let the fly just reach the surface of the water, and go gently down the stream; the top of your rod should be a little raised, and the bait kept in motion upon the surface, by gently raising, lowering, and drawing it to and fro. When a fish takes your bait, after a moment strike smartly; and, if he be not so large as to break your tackle, lift him out immediately; for by playing with him you may, probably, scare away others. There is an immense variety of Natural Fly-fishing baits: we shall describe those only which are in most general use.

Hornets, wasps, and humble-bees, are good baits for Roach, Dace, Eels, Flounders, Bream and Chub; some boil them, but it is best to dry them in an oven, or over a fire; and, if not over done, they will keep a long time. The stone-fly is found at the sides of rivers, under hollow stones; it is of a curious brown colour, the body is pretty thick, and streaked with yellow on the back and belly.

The green drake is taken from May to July; it is a long, slender fly, with wings like those of a butterfly; its body is yellow ribbed with green; it turns its tail on its back. These are good baits for Roach, Dace, Perch, Bleak, and Flounders. The grey drake, in size and shape, resembles the green drake, but has black shining wings, and its body is a pale yellow, striped with black and green. The time for taking this fly immediately succeeds that of taking the green drake, and it is used for the same fish.

Ant-flies are found in their hills from June till September; two or three of them fixed on a small hook are certain baits for Roach, Dace, and Chub, if you do not angle above six inches from the bottom. They may be kept in glass bottles, with some of the earth, from which they have been taken, about them. The fern-fly, or fern bob, is found among fern, from May to the end of August. It has a short, thick body, and two pair of wings, the uppermost reddish and hard, which may be taken off. The Chub never refuses it, and the Trout will take it very freely at the latter end of May.

The hawthorn-fly is found on hawthorn-trees, when the leaves are just shooting; it is of a black colour, and is used to dib in a river for Trout.

The great moth is to be found, in the summer evenings, in gardens, trees, or plants; is used as a bait in dibbing for Roach; it has a very large head and whitish wings.

The bonnet-fly is an excellent bait for Dace, Chub, &c.; it is to be found, in the summer months, among standing grass.

The ash-fly, woodcock-fly, or oak-fly, is usually found, from May till September, in the body of an oak or ash-tree, with its head downward, toward the root; it is of a brownish colour. This fly is a good bait for Trout. The red copper-coloured beetle is a good bait for Trout, if the hard wings be clipped off, and the fly hung with its feet toward the water.

The best mode of keeping natural flies is as follows:—Procure a horn bottle made in the shape of a cone, with a wooden bottom, in which several holes must be pierced; these should be sufficiently numerous to afford the flies air, but none of them large enough to suffer your smallest bait to escape; a cork must be obtained to fit the upper or smaller end, so that you may take your baits out, one by one, without losing any. If the flies be kept in a common box, there is a great chance of half a dozen flying out every time you lift the cover.

ARTIFICIAL FLY-FISHING.

THE most elegant, clean, gentlemanly, and pleasant mode of fishing is, unquestionably, with the Artificial Fly. It has many advantages over bottom-fishing; —the Artificial Fly-fisher is never under the necessity of making ground-bait, digging clay, &c.—he has not even the trouble of baiting his hook; he may ramble along the banks of a pleasant stream, with no burthen (excepting a little book of flies and a light rod) but the fish which he may have the good fortune to take;—enjoying his sport, and luxuriating in gentle exercise, without scarcely soiling his fingers.

But though Artificial Fly-fishing possesses these advantages, it must be confessed that, in some points, the superiority is to be given to bottom-fishing. There are many fishes that will never rise at a fly; while all the "tenants of the stream" may be taken, at some time or other, by a bottom-bait; and, during the cold or wet weather, when the Fly-fisher cannot follow his sport, the staunch Angler, who uses bottom-baits, may still resort to the "grassy margin of the stream," and indulge in his piscatory pastime; for there are few days in the year when fish will not take a proper bait. At Christmas, when a Trout can never be induced to rise by the best-made fly, many capital Pike are frequently taken.

Artificial Fly-fishing is, by far, the most difficult part of Angling; much time and practice are required to make the tyro an adept in it; by theory it can never be attained; a few months' instruction, under an experienced person, will be more beneficial toward its acquirement than the perusal of all the works extant on the subject. With the preliminary part, or rudiments of the science, (for so it may with propriety be called,) the young Angler may, however, make himself acquainted, by reading the following pages; and if he will carefully attend to the hints and instructions

hereinafter given on the subject, he may, with good practice, even attain considerable proficiency in Artificial Fly-fishing; but it cannot be learnt so soon, or so well, from any book as from an experienced instructor.

THE FLY-FACTOR.

Although we strongly recommend our young friends to purchase their flies (as well as their rods, lines, &c.) at the fishing-tackle shops, where they may be had in greater perfection, and at a much cheaper rate, than an individual can possibly make them; yet, as some of our readers may feel an inclination to exercise their ingenuity by making them, we think it right to give them sufficient instructions on this head, to enable them, after a little experience, to imitate almost any of the numerous flies in use, or even such natural flies as they may discover are taken in the waters where they are in the habit of following this pleasant recreation. In the latter case, they must carefully notice what sort of flies are in fashion with the fish, if we may use the phrase, during each month in the year; and it is necessary to notice, that some flies are in season in some places earlier than in others.

The following articles will be necessary for making your artificial flies: —Bear's and camel's hair of different colours; badger's and spaniel's hair; sheep's wool, hog's down, as combed from the roots and bristles of a hog; camlets and mohairs of different colours; cow's hair, abortive calves' and colt's hair; furs of squirrel's tails; tails of black, yellow, and dun cats; of hare's neck; the fern-coloured ferret's fur; martin's yellow fur; filmer's fur; tails of white weasels, moles, and black rabbits; down of a fox's cub; fur that comes off the otter and otter cub; blackish and brown badger's hair, that has lain in a skinner's lime pit; hackles from a cock's neck, and such as hang loosely on each side of the tail, of various colours; feathers of all sorts of fowls; and those which cannot be got of the required colours in a natural state, you must get dyed.—First wet your materials, in order to know how they will hold their colour; for, although, when dry, they may appear of the right colour, yet they may alter when wetted; take the hook in your left hand, betwixt your fore-finger and thumb, the shank back upward, and a strong silk of that colour the fly requires, which draw to the head of the shank, and whip about the bare hook two or three times; draw your line between your finger and thumb, hold the hook so fast, that it may only have a space to pass by; then joining the hook and line, put on the wings, and fashion the body and head, by twisting the dubbing on your waxed silk, and lapping it on; work by degrees toward the head, and part the wings of an even length, or the fly will not swim upright; then turn it into a proper shape, by nipping off the superfluous dubbing, and fasten the fly to your hook. Having proportioned the fly, you are to

consider the size of the fish you intend it for, and be sure the belly is of the exact colour, because that will be the most obvious to the fish.

The painted fly, or plain hackle, must have a rough black body, which may be made with black spaniel's hair, or the whirl of an ostrich feather, and the red hackle of a cock. The prince dun must be made of the down of a fox cub, with ash-coloured silk, and the feathers of a stare's wing.—The green-tail fly may be made of the brown hair of a spaniel, taken from the outside of the ear, and a little from the extremity of the tail. The thorn-tree fly is to be made with a good black, mixed with a little Isabella-coloured mohair; it must have a small body, and the wings made of a mallard's brightest feathers.—The early bright brown fly is made of the hair of a brown spaniel, that of the flank of a red cow, and winged with the grey feather of a wild duck. If you think proper to try your fortune at Fly-fishing in February or March, the two first flies are the best for the former month, and the others for the latter. The season for Artificial Fly-fishing cannot, however, be said to commence before April. Some Anglers fish with a fly in winter, but little sport is to be had, unless the weather be unusually mild, before April, or much later than Michaelmas.

The violet-fly is made of bear's hair of a light dun colour, mixed with violet stuff, and winged with the grey feather of a mallard.—The horse-flesh-fly is dubbed with pink colours, blue mohair, and tammy; the head to be of a dark brown, and the wings of a light colour.—The small bright brown fly, particularly calculated for a clear day and water, is to be made of spaniel's fur, with a light grey wing. These flies are used in April.

The green drake is to be dubbed on a large hook, with camel's hair, bright bear's hair, soft down combed from the bristles of a hog, mixed with yellow camlet; the body to be long, and ribbed with green and yellow silk; the wisks of the tail made of the long hair of sables, and the wing of the light grey feathers of a mallard, dyed yellow.—The stone-fly, to be made of a dun bear's hair, mixed with a little brown and yellow camlet, more yellow on the belly and tail than any other part; place two or three hairs of the beard of a black cat on the top of the hook, in the whipping or arming, and in warping on your dubbing; rib the body with yellow silk, and make the wings long and large, of the dark grey feather of a mallard.—The grey drake's body must be black, with black shining wings, very thin, and made of the feathers of a mallard, the down under a hog's bristles, the black hair of a spaniel, and the beard of a black cat. These flies are fit for May.

The ant-fly is dubbed with brown and red camlet, and the wings made of the feathers of a light grey pigeon.—The purple fly, made with purple wool, mixed with light brown bear's hair, and dubbed with purple silk. These may be used in June and in July.

The orange fly, which is made with orange-coloured crewel or wool, and

the feather of a blackbird's wing.—The wasp-fly, made with brown dubbing, or with the hair of a black cat's tail, ribbed with yellow silk, and the wings formed of the grey feather of a mallard's wing;—and the blue dun, made with the down of a water-mouse, and the blueish down found on an old fox, mixed well together, and dubbed with ash-coloured silk; the feathers of a stare's quill will furnish you with wings. The foregoing are fit for July.

For August, the following are rather popular:—The late ant-fly, formed of hair of a blackish brown, with some red in the tail, and the wings made of a dark feather.—The fern-fly, which is dubbed with the wool taken from a hare's neck, being of the colour of fern, when dry, and the wings made of the darkish grey feather of a mallard;—and the hearth-fly, which is to be made of the wool of an aged ewe, mixed with some grey hair, and dubbed with black silk; the light feathers of a starling are proper for the wings.—The little blue dun, made of the fur of a water-mouse, dubbed with ash-coloured silk, and winged with the feather of a blue pigeon.—The late badger is to be formed with black badger's hair, whipped with red silk, and winged with a darkish grey mallard's feather. To make the camel broom-fly, pull out, for the body, the hair in the mortar of old walls, and whip it with red silk; make the wings of a starling's lightest feather. The last three flies are used in September. If you be able to make these flies, you will find but little difficulty in imitating any others that may be necessary; it would, therefore, be useless for us to enlarge our instructions on this head. Were we to give directions for making every fly that may be used, our labour would be considerable; as we should, in that case, have to describe the mode of imitating nearly all the flies that haunt the various waters at the different seasons of the year

THE MONTHLY BILL OF FARE.

The following bill of fare of Artificial Flies, for each month during the season, will be found of considerable utility. Notwithstanding it is comparatively select, the young Angler will, for general purposes, find it sufficiently ample; although, of course, it is not applicable in every instance for all waters, experience and observation will perfect him in the knowledge of what baits are best for the different streams to which ne resorts during the several months of the year. The following, however, may be looked upon as a good general guide:—

April.—During all this month, the cow-dung fly, the horse-dung fly, and the dun or brown drake, are killing; the second is best in the evening, and the latter, during gloomy weather, in the middle of the day.

May.—The stone-fly may be used all May with much success, but more particularly in the morning. The yellow May-fly is very good in the

evening. The black caterpillar fly is good in small rivers and Trout streams; especially after very hot mornings. The camlet may be used with success all day, for small fish, but the green drake is the most killing.

June.—The lady-fly is a good fly in June, particularly when the water begins to brighten, after a flood. The black gnat is killing in an evening, especially if the weather has been warm and showery during the day; late in the evening, still prefer the green drake. The blue gnat is only used when the water is very fine and low. The red spinner will kill best when the water is dark.

July.—In this month the orange-fly is an excellent bait, particularly if it be close, hot, and gloomy weather. The large red ant-fly is a killing fly for some hours in the middle of the day. The badger-fly is a good fly in the cool days, and in the early part of this month.

August.—The small red and black ant-flies are good killers in August, for three or four hours in the afternoon. The hazel-fly, by some called the button-fly, is a valuable fly all this month. The small fly, called the light-blue fly, is a killing bait, from morning till afternoon, if the weather be favourable.

September.—The willow-fly is most to be depended on during September, and for the remainder of the season; any of the flies noticed for July or August may also be used occasionally; all those enumerated are for killing Trout; but you may also take Chub and Dace with them. They may be purchased at the fishing-tackle shops in very great perfection; but if the young Angler wishes to make them himself, he may do so by first catching a natural fly for a pattern, and using such of the materials, before enumerated, as are best adapted to imitate the natural colours in constructing it.

CASTING THE LINE, &c.

Your rod for fly-fishing must be light and flexible, and of a length proportioned to your power of casting; when you have properly fixed the winch, and brought your line from it through the links, fix your fly on, and let out your line about the length of the rod, or something less; take the rod in your right hand, and the line, near the fly, in your left; when you move the rod backward to cast the line, let the latter go from your left hand. Practise several throws at this length, and increase it occasionally, as you improve, until you are able to throw almost any moderate length, with ease, to within an inch of any spot you desire. Draw the fly lightly toward the shore, and look sharply at it, so as to be able to strike instantly if a fish should rise at it; if you do not, you will most probably lose him, for he quickly discovers the nature of your bait. In

raising your line for the second and subsequent throws, wave your rod round your head, instead of bringing it directly backward. You should not return the line before it has gone its full length behind you, lest you whip off your fly. In order to shew your flies naturally to the fish, when you have thrown, raise your hand by degrees, with a slight quivering motion; and, as you thus draw the bait toward you, let it go down the stream, (for you must never bring your fly against it,) and before it comes too near you, prepare to cast again. If you see a fish rise at a natural fly, throw your line a little above him, so that the bait may come gently and naturally down toward him; fish every yard of water likely to afford sport, and never despair of success; for, sometimes it so happens, that after many fruitless hours spent without a fish ever rising at your fly, you will fill your bag or basket during the last hour. The lighter your fly descends on the water, the greater chance you have of a bite; the way to throw with the requisite perfection in this respect, is only to be acquired by practice and love for the art. Use only one hook at a time, till you can throw to any given distance with certainty. You may acquire such a mastery, by dint of observation and practice, as to be able to cast your fly under banks, into holes, among bushes, &c., where the best fish are frequently found. Endeavour to keep the wind at your back, and when fishing in a small stream, where the middle is shallow, and the water ripples, cast your bait to the opposite side, slowly draw it to the rippling, and let it float down some distance. You must recollect to keep yourself out of sight, and your fly in motion, that it may appear to the fish as it alive. If you do not find the fish rise toward the top, sink your fly, by degrees, even to middle water. Before flies are naturally in season, the fish very rarely rise at them; therefore, in order that you may not be mistaken in your baiting, observe what flies are about the water, or on the bushes or trees near the ponds or rivers; and that fly which swarms there most, being chiefly in season, is to be used.

If the wind be pretty high, the fish will rise in the plain deep; but when little wind is stirring, it is best to angle in the stream. We need scarcely remind you of the propriety of taking your basket, landing-net, book of flies, and, if you are able to construct an artificial fly yourself, a few materials for fly-making; so that, if the fish, which are often whimsical, will not take any of the baits with which you are provided, and you observe them rising at natural flies, (and they will sometimes feed on such insignificant ones as, at other times, they will scarcely look at,) catch one of such flies, and make one for your bait as nearly like it as possible. This, certainly, is a great advantage, and every Angler ought, therefore, perhaps, to acquire sufficient knowledge in fly-making to be able to produce such a tolerable imitation, that the fish may not easily detect the difference between the natural and the artificial fly.

GENERAL RULES FOR ALL ANGLERS.

In bottom-fishing, plumb the depth truly, and with as little disturbance as may be; let your line, with the plummet to it, remain in the water while you cast in the ground-bait, by which time the line will be softened and stretched; keep as far from the water as you can. Use fine tackle, and you will the sooner become skilful: if you break your tackle, do not lose your temper, but sit down, and diligently repair it. If hail fall, or the day be cold, and the wind blow strong, the Angler must not expect much sport. In soft rain, or foggy, close weather, most fish will bite. Never drink water out of rivers or ponds while in a perspiration; keep your feet dry, by wearing strong boots and shoes. It is supposed that the best winds for Angling are the south, west, and south-east. In hot weather, the cooler the wind blows the better; but in the early part of the season, and also in autumn, a warm wind is more advantageous. When the wind comes from a cold quarter, such places as are most protected from its influence should be resorted to. A cloudy day, with light showers. after a bright night, in general proves most favourable to the Angler, who may also expect good sport even on those days when heavy rains descend during the intervals between the showers. When a calm bright morning is succeeded by a gloomy day with a brisk wind, without any fall of rain, the fish,—at least, the larger sorts,—are almost sure to feed. Weather-wisdom is of the greatest benefit to the Angler:—our young friends should therefore pay attention to, and remember the state of the wind, the clouds, &c., on those days when they find the fish bite, and when they refuse tc take a bait. They may thus not only be enabled to say when there is a prospect of sport, but also save themselves much trouble and disappointment, by staying at home to improve their tackle, or amusing themselves in some other manner, instead of following " the devious windings of the stream," when the weather is unpromising. When the wind blows right across the water, fish with your back toward it; not merely because you can throw your line with more facility, but because the fish will certainly be on that side, watching for the flies, &c. that may be blown from the bank into the water. Throw as near the bank on which you stand as the wind, if it be high, will suffer you. In the summer time, when the sun is out in all his splendour, and there is scarcely a breath of wind stirring, you may often see the fish basking in clear low water, with their fins and a part of their backs above the surface. On these occasions, they will rise greedily at a hackle, if your foot length be fine, and you fish at a sufficient distance to be unperceived, under banks, or straight down the sides of streams. Your line, for this purpose, must be long; and if, when you hook a fish, the others should become alarmed and shoot off, retire for a short time, and in all probability they will return again; if not, you must

try elsewhere. Scrupulously avoid all piscatory poaching, or what is called "foxing of fish;" use none of the oils, or chemical preparations, which are recommended by some persons to attract or stupify fish. These are practices dishonourable to the fair Angler. Before you fish in strange waters, ascertain that they are free to the public; and, if not, by no means venture to cast your line over them without first obtaining permission to do so from the proprietors. It would not only be improper but highly dangerous to neglect this caution, as our readers may perceive by referring to the Laws of Angling, in a preceding page of this treatise. Molest not any one whom you may find in previous possession of a spot which you had intended to be the scene of your own recreation; but, on the contrary, b. civil and obliging to all those whom you may meet on your excursions, intent upôn enjoying the same sport as yourself. If two or more persons angle in company, there should be a distance of thirty yards, at least, between each. Many prefer solitude when enjoying this sport, and alway fish alone, like that natural Angler,

The Stork.

SINGING BIRDS.

What are they, who thus, at early dawn,
Where the rank thistle and the plantain grow,
Set their fine nets, lime-twigs, and little traps,
Among a jocund choir of caged songsters ?—
These are the Bird-catchers.

At the present day, there is scarcely a house, in which a singing-bird of some sort or other is not kept. The Linnet and the Lark may now be fairly said to enliven, with their merry melody, the inmates of the palace and the cottage; the little Goldfinch, in his narrow, square box, cheers the mechanic with "shrill piping;" the Canary, in his neat cage, placed among the mignionette and geraniums of the parlour window, amuses the delicate girl; the Blackbird, in his wicker house, hung under the thatch, gladdens the heart of the rustic; and every bird that flies affords such delight and amusement to youth, as youth alone can feel.

There are few men who do not remember with pleasure the day when they first made the house-sparrow prisoner in the common brick trap; or (if they have been greater adepts, when boys, in the art of bird-catching) the moment when they first saw the Finch leg-fast to their lime-twig, a few fine Larks safe in their net, a Thrush noosed in a springle of their own construction; or "Philomel, the darling of the grove," deluded into captivity by a tempting meal-worm. The lads of London know but little about bird-catching; but they are, neverthleess, in general, better fanciers than the juvenile rustics, who, though very skilful in the field,

are often awkward and inexperienced in the management of their little feathered prisoners; this being the case, we shall endeavour to afford, in the following pages, directions to the former for taking birds, if they ever have an opportunity of so doing; advice to the latter as to the most proper mode of feeding, &c.; and such general directions on the subject of singing birds as may be acceptable to all who keep them

BIRD-LIME.

Bird-lime is made from the bark of holly, peeled from the tree at midsummer, and boiled in water till the grey bark rises. In about sixteen hours the water is drained away, all the green bark separated from the grey, laid on a moist floor, and covered over with green weeds; in ten or twelve days it turns to a slimy matter; it is then beat in a mortar till it becomes thick and tough, afterward washed in a running stream, put in close earthen pots, and scummed as often as any foulness arises; in three or four days it becomes cleansed, and is put into another clean earthen vessel, and covered close for use. When wanted for use, a portion of the bird-lime is put into a pipkin, with a third part of goose-grease, over a gentle fire; it is stirred continually till well incorporated, and then taken from the fire, and stirred till cold. The rods are warmed a little over the fire, and the lime wound about their tops. They are smeared one upon another, until there is a sufficient proportion of the lime upon each.

Place one or more call-birds in a place which is frequented by the birds you wish to take, and plant your limed twigs in the ground, round the cage or cages. The wild birds will be attracted by the call of your decoys; and, in approaching toward them, perch upon the twigs. You must be at hand to take them as soon as they get limed.

NETS AND TRAPS.

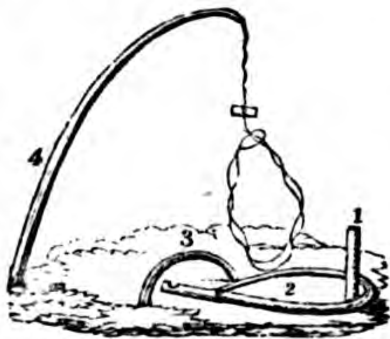
Larks and other small birds are taken by the clap-net. This mode of catching birds is called Daring or Doring. The apparatus being much too complicated for our young readers' construction, and the sport rather too difficult for their powers, it is useless for us to give any directions as to the manner of making or using the clap-net.

The following is the mode of taking Larks in horse-hair nooses:—when the ground is covered with snow, get a hundred yards of packthread, and at every six inches fasten a noose, made with horse-hair, (two hairs twisted together are sufficient;) at every twenty yards thrust a little stick into the ground, by which the packthread must be fastened, to keep the nooses about the height the Larks run; scatter white oats from one end to the other; the Larks will flock to it, and hang themselves in the nooses. Take them out as soon as caught.

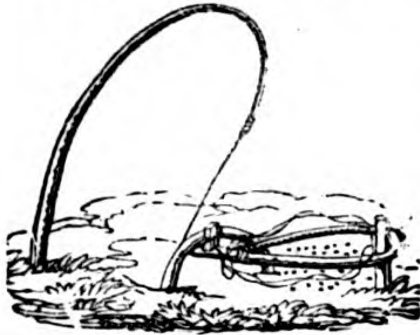
Trammels are usually made thirty-six yards in length, and about six yards over, with six ribs of packthread, which, at the ends, are put upon two poles of about sixteen feet long, and made lesser at each end. They are drawn over the ground, during dark nights, by two persons, who make the net touch the ground every five or six steps, otherwise it would pass over the birds. When they fly up against it, the net is dropped upon all that are under it. Larks, and all other birds that roost on the ground. may be taken with this net.

The best Nightingale traps are those which are of an oblong shape, about four inches deep, with a perch supporting the top, so as to fall and enclose the bird the moment he drops at the bait.

The springle, which is one of the most excellent traps in use, is made in the following manner: at the smaller end of a hazel switch, four feet long, which is called the spring, tie a piece of string, about fifteen inches in length; nearly at the other end of this string, the catch, which is a little bit of wood, half an inch long, about half as broad, and one quarter as thick, is fastened; a little bit of the wood must be shaved off on the flat side of one end of it, to adapt it for a notch, is another part of the springle; a loose slip-knot, made of a couple of long, stout horse-hairs, is then to be fastened to the end of the string below the catch, and thus one part of your springle is complete. Next procure a smaller switch, about a foot and a half in length, bend back the smaller end, and fasten it within an inch or so of the thicker end, in which a notch must be cut to receive the thin end of the catch; this is the spread: a stump, and a bender, which is another pliant bit of switch, each a foot and a half in length, will complete the springle. It is set in the following manner:—thrust the stump No. 1 into the ground. Place the bow of what is called the spreader, over it, as No. 2; then, about the length of the spreader from the stump, push the two ends of the bender securely into the ground, as No. 3; next, plant the thick end of the long switch or spring at a convenient distance from the bender, bend it down until you can put one end of the catch upward, on the inside of the bender; then lift the spreader an inch from the ground, place the smaller end of the catch in the notch, and thus the spreader will be supported, and the springer retained from springing up. Now lay the hair slip-knot round the spreader and stump, and scatter such grain or seeds, as are fit for the bird you wish to catch, inside it. Scatter also a small quantity of the same sort of grain or seeds with which your trap is baited, lightly and sparingly, for some distance around the

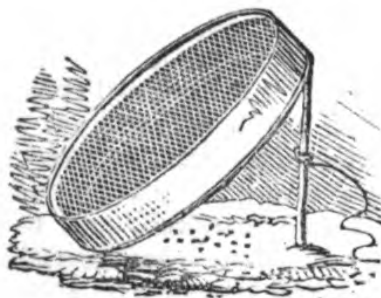


springle, so as to attract and lead the bird by degrees to the principal bait within the spreader of the trap. Your springle is now complete, and will appear as under. The bird, attracted by the bait, approaches by degrees, and at length perches upon the spreader, which falls with its weight; the catch is thus released, the springer flies up, and the bird is caught in the hair noose, by the neck, wing, body, or legs. If the springle be used for taking birds alive, you must remain within sight of it, and as soon as a bird is noosed, run and take him, otherwise he will either be strangled, or beat himself to pieces in attempting to escape.



The common brick trap is made of four bricks, two lengthways, one across their ends, and the fourth between, for a cover. A stump is driven into the ground, upon which the end of a forked sprig is placed, under a straight bit of stick which supports the cover. At the bottom of the trap, the bait is thrown, and also round the edges of it. The bird alights on the fork, which drops with its weight; thus the support of the upright is removed, against which the cover leans, the latter falls, and secures the bird in the trap.

The sieve trap is made thus:—in the winter season, when the ground is thickly covered with snow, sweep a round spot clean, the size of your sieve, sprinkle some ashes on the spot, and a few crumbs of bread or red berries; prop up the sieve over the spot with a bit of stick, as seen in the cut, with a thin twine fastened to the centre, and long enough to reach to a window at which you must be seated, and watch the birds getting under the sieve, when the string should be suddenly jerked; this, if dexterously done, will occasion the sieve to fall, and the birds to be caught. You then take a cloth or apron, and draw it under the sieve, taking care not to lift it so high that the bird can escape, and by drawing up the cloth to the centre, you will be able to carry the sieve, with the bird under it, into the house.



THE VARIOUS BIRDS.

THE young Fancier will find but little difficulty in London, or any large town, in procuring such birds as he may desire, from the dealers. In country places, he must exercise his talents and industry in catching old birds or branchers, either with traps or lime-twigs, or discovering and taking young ones from the nest. In the latter occupation he will find serious rivals in the weasel, the pole-cat, and the stoat, which frequently mar the hopes of the nest-finder, by devouring the young a day or so before they are sufficiently fledged to make it safe to take them. He must, however, leave them until they are in a proper state for removal from the fostering care of the parent birds; for if they are brought away when merely stubbed, or half naked, it is impossible to keep them alive by hand.

Canaries, the Fancier may breed to great perfection, if he be careful in laying in his first stock, and occasionally strengthen it by the introduction of a superior bird. If he think fit, he may also produce Mules between the Canary and Goldfinch, or the Canary and Linnet, which will often prove most excellent songsters. Goldfinches, Linnets, Larks, &c. may be bought about the streets, at a very cheap rate, from the Bird-men; and these, as well as Blackbirds, Thrushes, Canaries, Mules, Nightingales, &c. may be procured at the different shops, where it is much safer to deal than at the stalls in the streets; because, at the latter, there are scarcely ever any but old birds or branchers recently caught, and which have never been separated.

THE NIGHTINGALE.

This is universally admitted to be the king of singing-birds. Old Nightingales may be caught at the end of March, or beginning of April, and branchers in July or August. The Nightingale trap is baited with a meal-worm, and placed near where a bird sings or feeds. You may find Nightin gales beside sandy hills, in woods, coppices, or quickset hedges. When you have taken a bird, tie his wings together with a bit of thread. and cut the feathers from the vent, otherwise they will clog, and the bird will, in all probability, die. In two or three hours after taken, you must cram him with mashed sheep's heart and egg. Give him three or four pills of this every hour and a half. When you get him home, put him in a Nightingale's cage, or if you have only an open one, throw a cloth over one side of it. When you have crammed him for a day and a half, put a small piece of meat in his pan, sweep some ants upon it, and put ants' mould at the bottom of the cage; but do not trust him to feed himself too soon. When he begins to feed, you need not cram him, but supply him with ants for one day longer, or more, if you see occasion; keep his wings tied for a few days, and, if a kindly bird, he will sing in a week. During the summer, you may feed him with German paste, or sheep's heart and egg; the heart raw and chopped small, the egg hard and grated fine. In the winter, the same food will do, only that the heart must be parboiled. Give him fresh victuals every day, and put ants' mould at the bottom of the cage, which should be cleared out twice a week. If you find the dung a little looser than ordinary, take a little hemp seed, ground extremely well, pound, and mix it with the sheep's heart and egg. You may give him a fig, or a bit of fine loaf sugar, now and then; or, if ill, a spider, a few ants, or mealworms.

Nightingales build in close quickset hedges. The young ones are fit to take about the middle of May. Feed them with raw sheep's heart and egg; and, while young, put a little straw or dry mould in the bottom of the cage. If not kept clean, they seldom can be reared. As soon as they begin to feed well, put them in a cage, with a saucer of water, in which they will dabble and wash themselves. If they thrive, you may soon separate them, and after they have been in single cages two or three days, the cocks will record.

THE SKYLARK.

This is a very good bird, if he can be kept fron. hearing others; but he will mock any bird he hears, whether good or bad, especially if brought up from the nest. Skylarks are hardy, and sing eight or nine months in the year. They have young ones three or four times in a season; they breed in high grass, a wheat field, in peas or oats, and upon common heaths, and are fit to be taken at ten or twelve days old. When taken, put a little hay in a basket, and tie them close down in it; soak some rape seed three or four hours in water, then boil it up, and beat it in a mortar; mix it with about two-thirds its quantity of bread and milk, boiled thick; give five or six bits of this every two hours, to each bird; let the meat be fresh made every day; a little sheep's heart is a good change of food for them. When strong enough to be separated, put each in a cage about a foot square; keep them in hay till they feed themselves with dry meat: viz. with bread, egg, and hemp seed; they will do this in about three weeks or a month. When you first put them in a eage, shew them their victuals on the point of a stick. To make dry meat, boil an egg very hard, chop it, and mix about half the quantity of hemp-seed with the egg. At first, the seeds should be bruised, but as the birds grow strong, they may be given whole. The largest and longest birds in the nest are cocks, and, if put in separate cages, they will record when three weeks or a month old. The hens will make a shrill noise, but by no means resembles a song. About this time, you should strew a little gravel in the bottom of the cage, and give the bird a turf; and, note also, that even up to, and indeed after this period, you should still keep a little soft victuals in the cage, and bring him to hard meat by degrees.

If your Lark get out of order, or his dung become loose, grate a little Cheshire cheese in his victuals, and give him some wood-lice, three or four times in a day; put a little liquorice and a blade of saffron in his water, or give him a spider now and then.

The Skylark is caught with a clap-net, or with nooses, as described in a preceding page, or in dark nights, with a trammel. This bird soars to such a height that one may hear his music long after the songster himself has been lost sight of in the air.

THE WOODLARK.

This bird has a delightful variety of notes, and sings about nine months in the year. He may be taken with a clap-net, in June or July; branchers, or birds which are about two or three months old, you may catch with a net of about twelve or thirteen yards long, and three or four broad, with a line run through the middle of it. For this net, you must have a hawk, carried by another person. When you find a flock, (they lie, commonly, in pasture land, or by gravel pits,) get as near them as you can, shew your hawk, and make him flutter his wings: when the Larks perceive him, they will lie close to the ground; then let one take hold of one end of the line, and the other of the other, till you pass the net over them, holding your hawk up as you advance. They have been known to be so terrified at the sight of the hawk, as to suffer themselves to be taken up with the hand. When taken, bruise hemp-seed very fine, and mix it with bread; put some red gravel in the bottom of the cage, and throw some of the bread and hemp-seed upon the gravel, for two or three days, then put some in the trough; when you perceive them feed heartily out of the trough, there is no occasion to put any food at the bottom. After this, give them but very little hemp-seed; but boil an egg very hard, grate and mix it among the bread and hemp-seed. Feed them every other day; if they have any meat left, throw it away, and give them fresh. Sheep's heart, mutton, veal, lamb, or, in fact, any meat, boiled or roasted, if not salt, or too much done, is good for them occasionally. When ill, let them have two or three mealworms or hog-lice a day. If loose, grate chalk or cheese among their victuals, and, instead of gravel, put mould, full of ants, at the bottom of the cage. To clear their voice, and make them sing more free and stout, put a little stick-liquorice and a blade of saffron in their water. The only sure method to know a cock from a hen is by his greater length.

The Woodlark has a fine melodious song, and will take from no other bird, unless brought up from the nest. If you rear them, Nightingale's victuals, mixed with a little bruised hemp-seed, or a few sweet almonds, is their proper food. If they are not very well feathered when taken, it is very difficult to bring them up. These, with the exception of the Skylark, are said to be the only birds that sing as they fly.

THE TITLARK.

The Titlark is handsome and taper, and about the size of a Nightingale; he sings from March to July, is very hardy, but not worth bringing up from the nest. Titlarks are caught from the end of March to the middle of April. When the bird is first taken, put a little mould, with ants, at the bottom of the cage, throw in some grated bread and bruised hemp-seed, and, in most cases, when your bird sees the ants, he will not fail to feed. If, however, you find this will not attract him, cut two or three meal-worms in half, put them among the bread and hemp-seed, and set him in a light place, where he may not be disturbed. Continue this plan for two or three days, then feed him as a Skylark, (only always bruise the hemp-seed,) and he will, most probably, sing in a week or ten days' time.

You may catch Titlarks with clap-nets, as other small birds; if caught later than April, they will not sing much during the first summer. This bird may likewise be taken with lime twigs: to take them in this manner, carry another Titlark for a call-bird, and when you have found a Titlark, place your call-bird six or seven yards from where you hear him, and set three or four lime-twigs round your cage. Place yourself as private as you can, and he will in all probability approach your call-bird, and settle on one of the lime-twigs: as soon as he perches, run and catch him; for if you delay, he will very likely clear himself from the lime in a few seconds, and escape. When taken, tie their wings, and manage them in the same manner as above directed for those that are taken in the nets.

Titlarks build among grass, peas, or beans: if you are desirous of bringing them up from the nest, feed them in the same manner as Woodlarks.

The cock can scarcely be distinguished from the hen but by his recording. The Titlark, as well as the Woodlark and Skylark, are remarkable for the length of the claw of their hinder toe; in consequence of which, Larks never alight on trees, as they are unable to cling to a perch, like most other birds. There is another sort of Lark called the Grass-hopper Lark, from its making a noise somewhat resembling the chirp of that insect. It is very solitary and shy in its habits, and of no value as a singing bird.

This very pretty bird, which, from its fondness for the seeds of the tle, is sometimes called the Thistlefinch, builds in orchards or hedges, and has three or four nests in a summer. The Goldfinch's nest is very beautifully built of moss, and other light materials, and comfortably lined with down, feathers, and soft wool. If brought up from the nest, a Goldfinch will take his song from a Woodlark, Canary, or almost any other bird. They may be made to draw their water, open the box for their victuals, and perform several entertaining tricks; in fact, there are few singing birds which evince such tractability as the Goldfinch. You may feed them with white bread and milk, with a little of the flour of ground canary-seed, giving them only three or four bits at a time: keep them at this sort of victuals, until they are five or six weeks old; then give them a little canary-seed, and soft meat besides; but bring them to canary-seed alone, as soon as you can. Give them groundsel every day, and a blade of saffron in their water; if loose, stick a little chalk in the side of the cage, and always keep red sand or gravel at the bottom, to qualify the oil of the seeds. Goldfinches are very merry birds, and, if not so plentiful, would be esteemed as much as the Canary. When alone, they are fond of viewing themselves in a glass. They are most commonly taken with clap-nets, in thistle fields, where they are generally found in flocks in cold weather. They are tender in the summer; but hardy, and will soon sing, if caught in the winter.

You may know a cock, either old or young, by the blackness of his wings; he is also black over the bill, and red under it; and all his colours are brighter than those of the hen. Many persons consider the Goldfinch to be the prettiest, and the most agreeable, of all singing birds; his beautiful colours please the eye no less than his song charms the ear; his vivacity is amusing, and his tameness and docility endearing; while the hardihood of his constitution renders it unnecessary to devote one half of the time to the care of him which many other birds require. For singing, he certainly has many superiors among his feathered brethren; and those Canary Fanciers, who hold the song of a bird in light estimation in comparison with fine shape, and the plumage most approved of by fashion, would set but little value upon the handsome and varied feathers of the Goldfinch; but "take him for all in all," as a bird for the cage, he is scarcely excelled by any.

THE BULFINCH.

Though this very fine bird's natural note is most indifferent, he may be taught to pipe several tunes at command; and when he has once acquired a piece of music, he will never forget it, although kept among other birds. If well trained, Bulfinches are considered very valuable, and many of them have been sold for ten or a dozen guineas each.

They build in orchards, or woods, and commence breeding about the latter end of May; their nests are badly made; they have usually four or five young ones at a time, and breed twice, or sometimes thrice, during the summer season. They may be taken when about a fortnight old, and ought to be fed as Linnets; with this difference only, that it is better to give them a little more canary-seed. If they get ill, some fine hemp-seed, and a little saffron in their water, or some Woodlark's food, will, in most cases, restore them.

There are various opinions as to the marks by which a cock may be distinguished from a hen: some think, by the whiteness of the rump; others, by the blueness of the back; and many, by a dash of red under the wing. They are remarkably docile, and apt to learn whatever is attempted to be taught them. About a week or ten days after they are taken, you should begin to pipe or whistle to them such tunes as you would have them acquire. There are many foreign bird-dealers, who annually bring over quantities of Bulfinches from Germany, and advertise them, on their arrival, as being capable of piping "God save the King," the "Hunter's Chorus" in "Der Freyschutze," and other popular pieces of music. In a state of nature, this bird has but three notes, neither of which is melodious, but he may be taught to perform a variety of airs with great precision, and even to articulate words and short sentences, according to the statement of some authors.

Bulfinches are not very plentiful in England: by devouring large quantities of wall-fruit, they have made the gardeners their most bitter enemies; and we are told that in many parishes in England, the churchwardens give twopence reward for every Bulfinch's head that is brought to them.

THE CHAFFINCH.

The Chaffinch is a very stout bird, lavish in his song, and possessing a variety of notes. Those which are caught in Essex are generally supposed to be the best. If brought up from the nest, they will sing six or seven months in the year; but if caught old, they seldom continue to sing above half that time. They breed in hedge-rows, and have young ones in the beginning of May. They may be taken at twelve or fourteen days old, and should be fed and brought up as Linnets. Branchers may be taken with clap-nets, about June or July, in broad lanes, or watering places.

The bird that has the brightest white in the wing, and looks brownest on the back, is a cock. The female is without any red upon the breast, her plumage is altogether less brilliant, and inclines rather to a greenish hue; in other particulars the male and female very much resemble each other. The Chaffinch's song is short but frequently repeated; it begins to sing early in the spring, and ceases about the middle of summer. As soon as they are well fledged, you may pull five or six feathers off their breasts; and, if they are cocks, in ten or twelve days they will come out red; if hens, they will come much the same colour as they were before: if you have branchers, and do not know the cocks from the hens, you may do the same; the cocks are of a purple red, and the hens grey on the breast.

The female generally lays five or six eggs of a pale reddish colour, sprinkled with dark spots, principally at the larger end. During the time of hatching, the male is very assiduous in his attendance, seldom straying far from the nest, and then only to procure food. Chaffinches subsist chiefly on small seeds of various kinds; they likewise eat caterpillars and insects, with which they also feed their young. They are seldom kept in cages, as their song possesses no variety, and they do not readily learn the notes of other birds. The males frequently maintain obstinate combats, and fight till one of them is vanquished, and compelled to give way. In Sweden these birds perform a partial migration; the females collect in large flocks in the latter end of September, and, leaving their mates, spread themselves through various parts of Europe; the males continue in Sweden, and are again joined by their females, who return in great numbers, about the beginning of April, to their wonted haunts.

THE LINNET.

This fine bird will learn either to pipe or whistle any other bird's note. Linnets build upon heaths or commons, in pasture ground, and among furzes; and commonly breed three or four times in a year. Their young ones are fit to be taken about the latter end of April.

Feed them with a little white bread, soaked in milk, previously boiled; let it be very stiff, like a hasty pudding; make but little at a time, as it very soon grows sour. When they feed themselves, give them a little scalded rape seed; and, after about a week, some of the Woodlark's victuals, for the sooner you can break them of bread and milk, the better.

Those that are the brownest upon the back, and have the second, third, or fourth feathers of the wings white up to the quill, never fail of being cocks. In spring, the breast of the cock is crimson: the hens have a little cast of white, and are a little brownish upon their backs, but not so much as the cock; if you observe them well together, you will easily see the difference.

They may be caught with clap-nets. When taken, plaçe them in a store cage, and get some of the seeds you find they feed upon, which put into the cage with a little hemp-seed, ground or bruised; set them in a place where they may not be disturbed, and feed them with this, for three or four days; then cage them up separately: feed them with rape, and a small quantity of canary-seed amongst it, with some few corns of hemp. If dull, give them lettuce-seed, beet leaf, or a little seeded chick-weed now and then; and, if troubled with a looseness, some chalk and bruised hemp-seed, a stalk of plantain-seed, and put saffron in their water.

Whether our great English poet, Dryden, kept caged Linnets or not, we cannot say; but it appears that this bird was a favourite of his. In the following lines he pays the Linnet a high compliment, by making him the rival of the Lark:—

"Mark how the lark and linnet sing,
With rival notes
They strain their warbling throats,
To welcome in the spring."

The Linnet will acquire the song of the Canary or the Woodlark sooner than that of any other bird.

THE BLACKBIRD.

This bird breeds very early in the year: you may take young Blackbirds at ten or twelve days old; feed them once in two hours with cheese-curd, white bread and milk, with sheep's or ox's heart, or any other sort of lean meat, cut very small, mixed up with a little bread, and made very moist. Be sure to keep them clean, remove their dung every time you feed them, and whenever their nest gets dirty, take them out and put them in clean straw. You must part them as soon as you can. When grown up, you may feed them with flesh meat boiled, raw, or roasted; and you may bring them up to Woodlark's victuals; but flesh meat, mixed with a little bread, is best. The blackest bird in the nest is sure to be a cock.

This bird is stout, strong, and has a very pleasing note of his own; he will whistle about four or five months in the year. If you find him out of order, give him a large spider, and some wood-lice; you may likewise put a little cochineal in his water; this will, in general, make him gay and cheerful. Hog-lice are also good for a Blackbird when ill, but he must not have many of them in one day, lest they should give him a distaste for his other food, and thus do him harm instead of good.

Blackbirds, it is said, may be taught to whistle a tune from a pipe, in the same manner as Bulfinches. Some persons may conceive, that the pleasure of hearing this brilliant songster following the notes of an instrument, would amply repay the toil of teaching him: for our own part, we are of a very different opinion; we are convinced that the tutor would only spoil a good bird by making him a middling musician. It would be pleasant to speculate on the consequences of some three or four well-taught Blackbirds escaping to the woods, and carrying back the accomplishments which they had acquired, while in cages among men. A revolution might be produced in the language of the birds. The loyal groves would echo with "God save the king!" the nestlings be hushed into slumber by "Rest thee, babe, rest thee!" and the gardener's fruit devoured by the Bulfinches to the tune of "Cherry ripe!" But it is a mere waste of time to teach any bird, that has a good note of its own, the compositions of a musician; for the principal pleasure to be derived from a good singing bird is, to hear him "warble his native wood-notes wild."

THE THRUSH, OR THROSTLE.

There are three other sorts of Thrush, beside the cage-bird, or song Thrush; one has a red wing, a second is small and dark-coloured, and the third is called the misletoe Thrush, a large handsome bird, but more calculated for the spit than the cage. The song Thrush builds in woods, and sings nine or ten months in a year. They are fed with the same food, and, if sick, used in the same manner as Blackbirds. Both cocks and hens will record as soon as they begin to feed themselves; the cocks will get upon the perch, and sing their notes low for some time, while the hens will do it by jerks, and make only an attempt at singing. If you are not satisfied which are the cocks, keep them till after moulting, when the cocks will break out in song.

THE CANARY.

These birds, which were formerly brought from the Canary Islands, are remarkably lean, particularly the cocks, whose lavish singing, and great mettle, prevent them from being fat. The French-coloured, so called from the breed that were, a few years ago, brought from France, are of a beautiful bright yellow, with an intermixture of jet-black spots, and but little or no white in them. The mealy birds have no perfect colours, yet in breeding they often throw as fine a feather to the young ones as the best. The mottled ones are mostly white, with black and brownish spots; the last are accounted the worst in colour, but they are generally as good in nature as any. Choose a young sprightly bird, sleek and straight, standing like the sparrow-hawk, and not fearful, but one that, after flinging himself, two or three times, from the perch to the top of the cage, boldly struts and shakes himself. Take notice of the dung, which ought to dry quickly, and be thick, hard, round, of a fine white on the outside, and darkish in the middle. If the bird dung only a white slime, with no black in it, it is a certain sign of speedy death. If possible, hear him sing before you buy him; the song is accounted good, if begun something like a Skylark's, and run on like the Nightingale's. The hens never sing, although many have, by a sort of jabbering noise, deceived unskilful persons. The way to distinguish between the cock's song, and this jabbering is, that let him sing ever so indifferently, almost every time he strikes a note, his throat heaves while he warbles; but let a hen make what noise she will, this motion is never observed in her.

The hen is always smaller and shorter, especially from the legs to the vent; the cock appears, in that part, taper and thin, and if you blow the feathers up, you will find his vent longer, and the orifice less than the hen's. The colour above the bill of the cock, and likewise under his throat, and on the pinion of his wing, is a brighter yellow.

The Canary breeds four or five times a year, and lays four, five, or even six eggs at a time; they set fourteen days. You should not match them till the middle of March. You must have a proper cage, or else prepare a room for the purpose. If convenient, let it be toward the east, because the birds love warmth, and sunshine in the room in the morning makes it warm all day. If your room be large, you may turn in ten or twelve pair. Throw red sand at the bottom of it, and nail up nest boxes and back cages in every corner, as some of the birds love to breed in the dark, and others in the light. If you breed them in a cage, let it be twice as large as the common breeding cages, so that they may have room to fly. Give them two boxes to build in, as they like to have their choice, and are apt to go to nest again before the young ones fly.

If you bring them up by hand, feed them as Linnets, and take them away at fourteen days old; for if you let them remain longer with the old ones, they grow sullen, and will not feed; but if you let the old ones bring them up, leave them till the latter hatch again: you must then remove them, or they will pull the other young ones out of their nest, or pick them as they lie. When taken away, feed them thus: boil an egg hard, take a little of the yolk, a like quantity of the best bread, and a little scalded rape-seed: boil it soft, and grind it in a mill; or, if you have but few birds, bruise it on a trencher, with the blade of a knife, the finer the better: mix it with a little maw-seed, and give them a pan full of it every day. This is the best food for young Canary birds that are brought up by the old ones, till they have moulted off. Take particular care that the rape-seed be not sour, for it will give them a looseness, and kill them. You must make your soft victuals fresh every day.

A very old fancier of Canary birds makes the following remarks on feeding:—" To feed Canary birds brought up by the hand, it is requisite to know when to give and when to refuse them their food. Sometimes they are starved by the long intervals between the times of feeding, and

sometimes they are surfeited by being fed too often, and indiscreetly: young birds, so irregularly reared, fall into sickness, which is supposed to be occasioned by want of food, and then their keepers try all ways to make them open their beaks to swallow something, but in vain, their stomachs being so full that they are choked up, for nothing digests with them, and, after pining a few days, they die. I have observed that Canary birds, reared by hand, without observing any certain rule in feeding them, are usually so thin, poor, and weak, that they are more likely to die than to live; and the first illness that seizes them, which is commonly their moulting, they have such an ill constitution, and so infirm a body, that they cannot withstand it, and most of them die. Then the owners lay all the fault on their moulting, and not on the irregular feeding which they suffered when rearing. The times for feeding young Canary birds ought to be as follows; viz.—the first time at half after six in the morning, at the latest: the second time at eight; the third, at half after nine; the fourth, at half after eleven; the fifth, at half after twelve; the sixth, at two; the seventh, at half after three; the eighth, at five; the ninth, at half after six; the tenth, at eight; the eleventh, at three quarters after eight, for the last time. This last feeding is not always necessary, for very often the young birds are gone to rest at that time; and they must not then be disturbed; if any food be given them at the last time, it must be much less than at others, there being but three quarters of an hour between the two last feedings. You must make a small stick very smooth and thin at the end to feed them with; it must be as broad as your little finger. Those who make use of a quill cut for that purpose, have more trouble in feeding than those who use a stick; because the quill bends, and is not stiff enough to take up the bird's food. You must, every time of feeding, give them their beak full about four times, that their craw may not be too full, which might choke them. After twenty-three or twenty-four days, you are to forbear feeding them by hand, especially when you observe them pick up the food themselves. When they first begin to feed alone put them into a cage without perches, with a little very fine small hay or moss, well dried, in the bottom of the cage. The first month they feed alone, give them bruised hemp-seed, yolk of egg boiled hard, very dry grated biscuit, water with a little fresh liquorice in it, a little very ripe chickweed, each of them apart, in the middle of the cage, and some dry rape-seed in their trough. When you find them strong enough, take away all these things by degrees, and leave them nothing but their common food."

To feed and pair Canaries for breeding, put the cock and hen together in a small cage. When paired, turn them into the cage or room which you design for their breeding: feed them very well with the soft meat, and, before they have young ones, give them groundsel with seed upon it,

and afterwards chickweed with seed upon it. Toward June, give them some shepherd's purse; and in July and August, plantain: for want of these things, you may supply them with a cabbage lettuce; but this is not to be used constantly. Be sure you do not fail to give them fresh greens and soft victuals every day, when they have young ones, especially in the morning; for, if neglected when young, it will be a hard matter to rear them.

Nothing is so good for their nests as a little fine hay and elk's hair; they will use the dry chickweed, or any thing they find at the bottom of their cage, and afterward line it with hair.

Among the diseases to which they are subject is the surfeit, which proceeds either from their being fed by the old ones with too much greens, or from their own over-gorging when they feed themselves on the same food. In this disease they swell under their bellies, their bowels sinking down to the extreme part of their bodies, and sometimes turning black. The same distemper proceeds from cold, and is then called a swelling, which at first is white, but, if not prevented, it turns red, as in the surfeit: there are few who survive the last degree of this distemper; therefore, the greatest care should be taken to prevent its progress. To cure this surfeit or swelling, give your bird a great deal of whole oatmeal among his seed for three or four days, in order to cleanse him; put, at the same time, some liquorice in his water; but if you perceive him too loose, instead of oatmeal, give him maw-seed and bruised hemp-seed, and put a little groundsel and saffron in his water Boiled milk and bread, with maw seed in it, is also very good; or boil a small quantity of millet, hemp, maw, rape, and canary seeds; then brin the white and yolk of an egg together, boiled hard; take about a uarter of the egg, mince it very small, put it to the seeds, and add as much more lettuce-seed as any of the others. Give this to your sick bird, and it will, in all probability, answer the desired effect. In the morning early, before you give this, let him drink two or three times of water in which you have put some treacle.

When the birds are in moult, warmth and good nourishing food are of the greatest service; give them Naples biscuit, bread and egg, bruised hemp, lettuce, and maw-seed; and, in their water, a little saffron. If the weather be very hot during the time of their moulting, instead of the saffron, use a small piece of liquorice, and give them plantain and lettuce-seed together. When your bird is very much troubled with a small pimple on his rump, called the pip, with a fine needle let out the matter with as much gentleness as you can; a bit of sugar moistened in your mouth, and put on the sore, will heal it; or, instead of letting out the matter, or when the matter is not ripe, put three or four drops of the best oil upon it. Yellow scabs on the head must be softened with oil of sweet almonds, sweet lard, fresh butter, or capon's grease; give the same

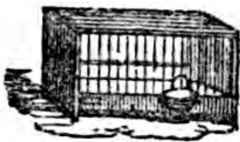
food in this case, as is prescribed for moulting. When they require something cooling, or cleansing, let it be chick-weed, (but be not over lavish of this,) plaintain, or lettuce, and some scalded rape-seed; a small quantity of whole oatmeal in their common hard seeds, and water with a small piece of stick liquorice in it. These must only be given when the spring is pretty forward, just before breeding time, or in extremely hot weather; but do not continue them above two or three days, lest you make them scour too much; which if you do, draw some of their tail feathers, put saffron in their water, maw-seed in the pan, and turning the drawer upside down, put the food on, and cover all the top of it with bruised hemp-seed. During the winter season, let them have a sufficiency of such warm, nourishing food, as we have before advised to be given them when moulting, and occasionally put a little saffron in their water.

CAGES.

A few remarks on the proper cages to be used for the different birds will, we doubt not, in this place, prove somewhat acceptable. The house should be adapted to its tenant; it would be ridiculous to put a Blackbird in a Canary's cage, and improper to place a Nightingale in a Linnet's; every caged bird should have an abode suitable to its size, habits, and disposition.

THE LINNET'S CAGE.

The first cage that occurs to our recollection is the little common oblong box, in which Goldfinches and Linnets are frequently seen at the bird shops. We should be inclined to pronounce these cages as too small for Linnets and Goldfinches, had we not so often heard them sing so gaily, and seem so happy and healthy in them. Still, we think the birds would thrive better, and be more at their ease, if they were afforded a greater space. These cages are wired at the top, the two sides, and one end; the other is made of wood. They are fitted up with a drawer, and a glass for water, and may be purchased at one shilling, or one shilling and sixpence each.



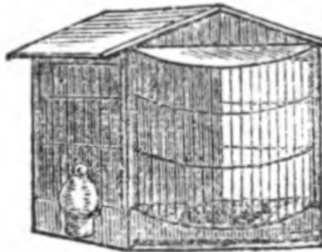
THE CANARY'S CAGE.

Canary cages, which are also used for Linnets, Goldfinches, Bulfinches, and Chaffinches, are made in a great variety of forms, the Gothic, Chinese, arched, cottage, &c. &c.; and may be purchased, according to their materials and workmanship, at every intermediate price from two shillings

up to as many guineas. They have, in general, three perches; one near the floor, running across the side in which the aperture for the bird to reach the water-bottle is made, another in the centre, and the third nearer the top of the cage. They have a drawer at the bottom, in order that they may be more convenientlv cleaned; a water-bottle, and a drawer for food, which runs into a case, in the top of which are cut several round holes, through which the bird gets his seed. It is not unusual, in splendid cages, for another bottle similar to the water-ottle, to be used, instead of a drawer, for the seeds.

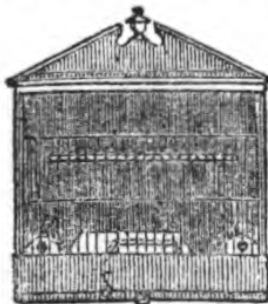
THE LARK'S CAGE.

The Lark's cage should have a slide or drawer to run in over the bottom, for convenience in cleaning, a water-bottle, and a drawer for food; a boarded barn roof, a board back, wires on each side, and a projecting bow, raised an inch or so from the bottom, with a circular wire front; in this bow the turf is generally placed, and here the Lark pours out his brilliant song. The Lark's cage requires no perch; it is almost invariably plain in its appearance and materials, and painted green, or green and white. The door is made in the back or side. The price of a common Lark's cage is five or six shillings.



THE NIGHTINGALE'S CAGE.

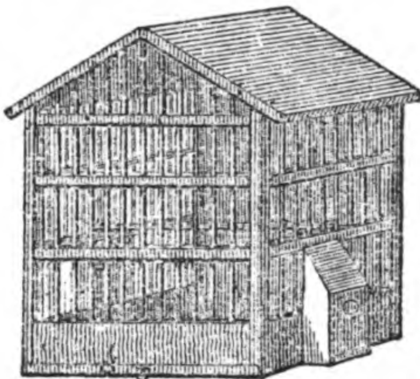
The Nightingale's cage is in shape similar to the Lark's, except that there is no bow in front; the sides, roof, and back are made of wood, and the front of the cage only is wired. It has one perch, which is padded with green baize, going from side to side, and another little one which is supported by two stems in the centre of the front, just below the bottom of the wires. An inch or two lower than the roof, a false top of baize, or other soft material, is strained, so that if the bird, as is its custom, darts upward in its song, it may not hurt itself; it is for this reason also that the perch is padded. In each of the front corners a little shelf is fixed, in which a round hole is cut, for the reception of the cups containing the food. They are also furnished with a slide or drawer for cleaning, and the door is made in the back or side. Night-



ingales' cages are made rather superior in appearance to those of Larks; the wood being generally mahogany, and the wires more shewy. They may be had, at different prices, from ten shillings to a guinea and a half.

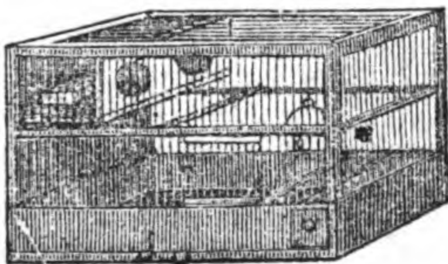
THE BLACKBIRD'S CAGE.

The common cage for Blackbirds and Thrushes is made entirely of wicker, and cups for food and water are fastened to the rails. This sort of cage is, however, inconvenient; we recommend, for a Blackbird or a Thrush, the cage of mahogany or other wood, in the form of the cut in the margin, with wicker rails running through mahogany cross-bars in front and at the two sides; the back is of wood; there is a drawer in the bottom for cleaning, and the food and water are placed in the two little cases which projects from the sides. A moment's glance at this cut, which is taken from a cage made by Manfield, of Red Lion street, Holborn, will convince our readers of the superiority of this fashion to that of the old peak-topped basket. The difference of price is not very material, as a very good cage of this sort may be had for fifteen shillings.



THE BREEDING CAGE.

The breeding cage, may be made double or single, with different drawers for food, and glasses for water, a drawer at the bottom for cleaning, and doors where it may be deemed most convenient for placing them. They should be provided with perches according to their sizes, at different heights, and in the most fit and proper places for the birds. The top, front, and sides should be wired, and the back of wood, or both ends of wood, if the cage be double. A shelf should project from the back a few inches from the top, and a partition be run up from the edge of the shelf to the upper wires. On this shelf, two square boxes, about two inches deep, of course without tops, are to be placed, for the birds to build in, and two holes are to be made in the partition by which they may enter. A net bag filled with moss, hair, down, and feathers, suspended from the roof near the perches,



completes the fittings up of a breeding cage, which may be purchased from ten shillings up to two guineas, according to its size and materials.

In addition to the instructions which we have given the young Fancier for the management and improvement of his stock, we here beg to impress upon his mind the necessity of keeping the cages clean, especially the breeding cage. Much of his success will depend upon the attention paid in this particular. If the cages be neglected, they become offensive in every respect; and the birds not only suffer in appearance but in health. The slide, or false bottom of the cage should be taken out, cleaned, and fresh gravel strewed upon it, at least once a week, and the perches occasionally scraped clean. Some Fanciers lime-wash the inside of the breeding-cage once or twice in the summer season, to prevent the birds being annoyed by insects during that time; but our young friends may save themselves this trouble by being punctual in cleaning out the cage. Regularity in supplying each bird with water and its proper food, is a matter of still greater importance; he who is at all negligent on this point, cannot reasonably expect to have the pleasure of seeing his bird lively and brilliant in plumage, or hearing him daily

Strong in Song.

RABBITS.

See where a motley litter sports around
The captive doe, whose native symmetry
Has so improv'd 'neath man's dominion,
That her grandsire's progeny, sporting wide
O'er hill and dale, in their plain russet coats,
Seem of no kin to her

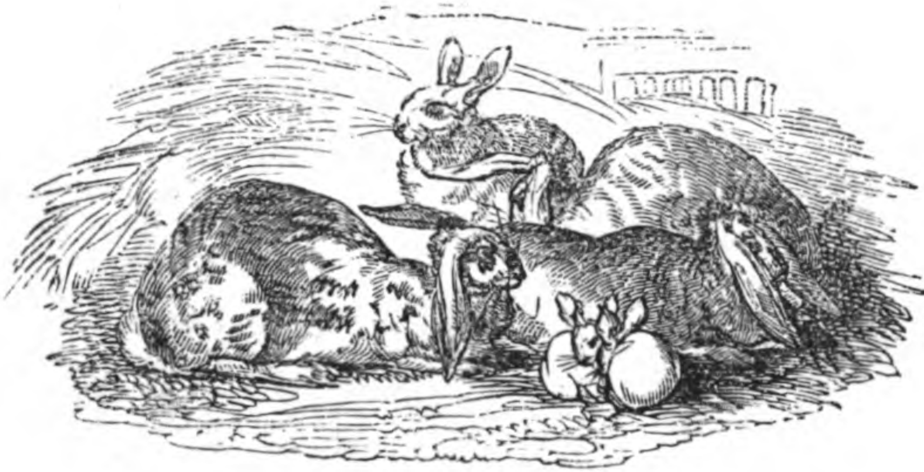
RABBIT-KEEPING was never, perhaps, so much practised in England as it is at the present day. Not only do a multitude of young persons keep common rabbits for their amusement, and poulterers and others for the table, but of late, many gentlemen have become rabbit-breeders to a considerable extent; and though the varieties are so much less numerous, it promises to become, ere long, as popular a fancy as that in pigeons. A writer on this subject states, that there are, or were, two great feeders in the counties of Oxford and Bucks, the former of whom kept a sufficient number to produce three dozen rabbits for the market per week; the latter, it is said, kept white rabbits only, on account of the superior value of their skins for the purpose of trimming. These persons, however, must be considered rabbit feeders rather than fanciers.

Fancy rabbits are rarely to be met with in the hands of the common dealers, good ones being of too high a price to come within their means.

There are, however, several private individuals of great respectability in town, from whom excellent specimens may be obtained, by those who wish to lay the foundation for a fancy stock. A rabbit, of whatever colour it may be, is certainly a beautiful little animal; but the common breed are very inferior in beauty of appearance to the fine lopped-eared creatures, of which several sketches from life will be found in the course of this article. We feel convinced that any person who sees a well-ordered rabbitry, containing some good specimens of fancy rabbits, will be so struck with their superior beauty of appearance, that he will not think of keeping merely common rabbits. The first is the only extra expense; for fine lopped-eared animals do not require more or superior food than what ought to be afforded to the common ones. They are, we confess, rather more delicate in constitution; but their fine appearance will certainly compensate their keeper for the care he may take in keeping them in order; there is also a greater pleasure in breeding valuable animals, than rabbits that, at best, will never be worth, when reared, above half a dozen shillings. And here let us impress upon our young readers the propriety of feeding their rabbits regularly. Poor creatures! they are caged, confined, and wholly dependent upon us—it would be the extreme of barbarity to neglect them. If we keep any living creatures in a confined state, we enjoin a duty on ourselves of providing for their wants. Depend upon it, that the boy will rue the day, unless he have decidedly a bad heart, who sits down to a comfortable meal, while his rabbit or his bird—heretofore his idol and his toy, but now, in caprice, neglected—pines, in its prison, for his appearance with its usual daily food. If he be tired of that, which, when it was a novelty, he took so much delight in, he had better sell, give, or even humanely kill it, than suffer it to languish its solitary hours away in hunger and in thirst. It is a creature dependent on his care,—it is helpless and imprisoned—is he not cruel in the extreme, if he omit to furnish it with its daily pittance?

LAWS RELATING TO RABBITS.

Though rabbits are not, strictly speaking, game, yet they are included in many acts of parliament relating to game. By the common law, if rabbits come on a man's ground, and eat his corn or herbage, he may kill them. By the 7th and 8th Geo. IV. c. 26, s. 36, if any person wilfully and unlawfully, in the night-time, take or kill any rabbit, in a warren, or place kept for breeding rabbits, whether inclosed or not, he is guilty of a misdemeanor; and if in the day-time, the offender shall forfeit such sum, not exceeding five pounds, as to the justice, by whom he may be convicted, shall seem meet.



VARIETIES OF THE RABBIT

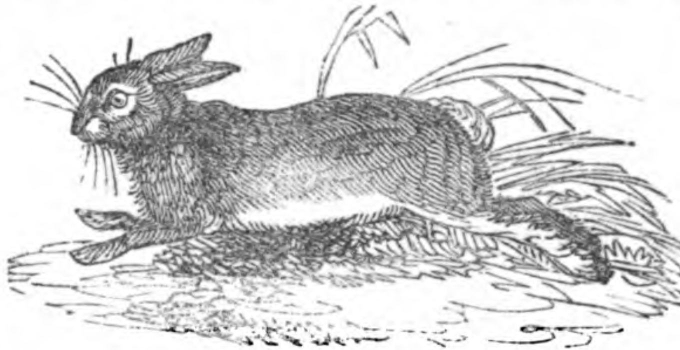
PERSONS, who have never had an opportunity of seeing Fancy Rabbits, will, very probably, be surprised, on looking at the representation of those animals which is faithfully given in the above engraving: the figures are, in fact, taken from nature; and are selected to shew two or three striking varieties of the fall of the ears, rather than as specimens of first-rate rabbits. The one in the back ground is a common up-eared animal, two of the others exhibit ears only half lopped; the one on the right only is perfect. On the origin of lop-eared fancy rabbits we can give no satisfactory information; nor can we say whether they are a variety of our common rabbit, or brought from another country. Our readers will find this subject treated fully in the following pages; but we think it is fit that we should begin our dissertation with a brief notice of the wild or warren rabbit.

THE WILD RABBIT.

Wild rabbits are considerably less than those which are kept in a domestic state: they are, for the most part, of a grey colour; but a few black, black and white, and even fawn-coloured rabbits, are to be seen in some warrens. The flesh of wild rabbits is, in general, preferred to that of tame ones; but the latter may be much improved in flavour by judicious feeding, and affording the animals good air and sufficient room to exercise themselves.

It is said that the wild rabbit will breed eleven times a year, and bring forth, generally, eight young ones each time; at this rate, in four years, a couple of rabbits would produce a progeny of almost a million and a

half. Notwithstanding the fecundity of the animal in its wild state, it is much more profitable when domesticated; for, although a prudent fancier will not suffer his doe to have young more than five or six times in a year, the produce of the tame animal, on account of the care taken of them, will be greater at the end of the year than that of a wild one, notwithstanding the latter should have double the number of litters; multitudes of the wild rabbits, when young, being destroyed by damp, the old bucks, and the numerous four-footed animals which prey on these almost defenceless creatures: wild rabbits are also exceedingly destructive in certain situations, although profitable in proper places.



THE COMMON DOMESTIC RABBIT.

Common domestic rabbits are of various colours, black, white, grey fawn, mouse, &c. &c. Their prices vary according to their age, size, and beauty. In some parts of Norfolk, the price of a pair of rabbits, a month old, is twopence. In other counties, and even in London, young rabbits may be purchased from sixpence to a shilling each. A half-grown rabbit will fetch from eighteenpence to half-a-crown; and five or six shillings is, in general, the utmost price that is given for a common full-grown buck or doe; the average value is three shillings and sixpence or four shillings. One of the chief objects in keeping common rabbits is, for the purpose of occasionally furnishing a dish for the table; and, therefore, those persons, by whom they are kept, attend as particularly to the sort of rabbits whose flesh is said to be the best, as to their colours or shape.

The short-legged stout rabbits are generally supposed to be the most healthy, and also the best breeders. The large hare-coloured variety is much esteemed by some people; but the white, or white mottled with black or yellow, are more delicate in flesh. The grey, and some of the

blacks, approach nearer to the flavour of the wild rabbit than any others.

The Turkish or French rabbit, with long white fur, differs little from the common varieties, and is now but little esteemed. At one time, the Egyptian fawn colour, which was a fawn fur tipped with a dark shade was much in fashion among fanciers, but it is now thought nothing of. The smut, also, some years ago, was the principal property of what was then considered a fancy rabbit. The smut is a mark on the nose, and is has three varieties: there is the single, the double, and the butterfly smut. It should be of the darkest colour which the animal exhibits in its fur; strictly speaking, it ought to be black, according to the old rabbit fanciers. The single smut is a patch of colour on one side of the nose; the double, is a patch on each side; and the butterfly, is a double smut, with a mark of the same colour running a little distance up the ridge of the nose; in such a manner that the whole resembles, in shape, a butterfly reversed, of which the two marks on the sides are the wings, and that on the front of the nose, the body and tail. This is considered a beauty even in fancy rabbits of two colours, but it is not considered an indispensable property by the fanciers.

LOP-EARED, OR FANCY RABBITS.

Formerly, a fine rabbit of any two colours, however short its ears, was accounted a fancy animal: it is now very different. In the eye of a fancier of the present day, the long lopped ear is an indispensable requisite. The first things that are looked at are the length and fall of the ears; the dewlap, if the animal be in its prime, is next noticed; the colours and markings are then inspected; and, lastly, the shape and general appearance. Rabbits, whose ears do not extend to fourteen inches from tip to tip, measured across the skull, would be reluctantly admitted into a fancier's stock, if they fell ever so finely: or, in case they exceeded that length, (and they sometimes are sixteen inches, and even upward,) if they did not lop or fall downward, in what is deemed a graceful and becoming manner. The dewlap, which is only seen in fancy rabbits, some time after they have attained their full growth, adds materially to the beauty of their appearance: it commences immediately under the jaw, goes down the throat, and between the fore legs: it is so broad, that when the head reposes upon it, it projects beneath the chin, and on each side beyond the jaws: it is usually parted in the centre in front, and is equal in size to a couple of good-sized eggs: when the fur on it is of a beautiful colour, it produces a very fine effect. The reader may obtain a better idea of the dewlap from the second sketch, page 185, than from any more lengthened description of it.

The annexed cut is a portrait of WOWSKI, a first-rate fancy lop rabbit, in the possession of the writer. She came from the sister of a famous doe, belonging to Mr. Hawkes, (of Westminster,) for which he gave ten guineas some time ago, and has since, more than once, refused to part with her for double that sum: hitherto he has sold all her young ones at six guineas a litter, delivering them to the purchaser seven weeks after they were kindled. At the time of making the drawing for this cut, Wowski was just ten weeks old; her ears matching perfectly with each other, and measuring, from tip to tip, nearly thirteen inches. The difference in the back, and general appearance, to say nothing of the ears, between the fancy and the common rabbit, cannot fail to strike the reader who will take the trouble of comparing the annexed engraving, or the figures in the groupe at the head of page 181, with the cuts of the wild rabbit and the common domestic rabbit, inserted in page 182.

Fancy rabbits fetch high prices compared with those of the common ones; five, ten, and even as much as twenty guineas, have been given for a first-rate doe. Very good fancy rabbits may, however, be bought for less sums than these; the foundation of a fancy stock, provided young rabbits only be bought, may be made for three or four pounds: a beginning may be made for even much less. We know a youth who began to keep fancy rabbits but two years ago, and has now a very brilliant little stock. He purchased three rabbits, each about two months old, of excellent breed; but being all deficient, in some respect, with regard to properties, they cost him between twenty and thirty shillings only. These three rabbits, being of the true fancy strain, have occasionally thrown very excellent specimens, which he has selected and reared: the first he has disposed of again, and his hutches did not, at the time we saw them, which was about three months since, contain an animal that would not pass muster in the rabbitry of a first-rate fancier.

There are several grades between the up-eared rabbit, and the true and perfect fancy lop. The first remove from the common carriage of the ears is where they fall backward ungracefully over the shoulder, with the hollow part outward. A rabbit that carries its ears in this manner is not allowed to be a fancy animal, being worth but very little more than a common one. The next, and in fact, the most general position of the ears is,

as indicated in the marginal cut. One of the ears lops outward, and the other remains upright. Sometimes the ear, which lops, falls close to the cheek; in this case the other, instead of being nearly horizontal, is drawn over by the weight of the lopped ear; and when the animal is in a state of

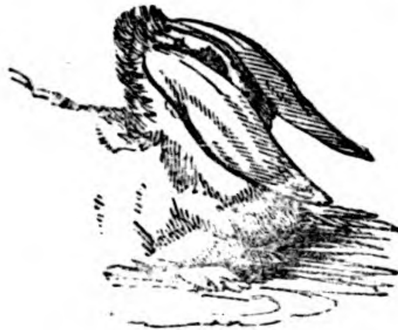
rest, rather inclines to the same side of the head as the one that lops. Rabbits of this description, however beautiful in shape, and fine in colour, are not considered valuable; but they are, in general, very well bred, and throw first-rate rabbits as often as those which are quite perfect. The doe, from which the sketch in the margin was taken, has few equals in strength, shape, colour, and length of ear; two of her progeny have fetched four and five guineas each; still she herself is by no means a first-rate rabbit, on account of her being half up-eared. There is another circumstance which deteriorates from her worth, in the eye of an amateur; she is almost destitute of dewlap, and this shows that she is only half, or, at best, three parts fancy-bred; the stock from which she was produced having, doubtless, been crossed by the common rabbit. Were all the young rabbits which are bred from fancy animals to be reared, one half of them, at least, would, we are convinced, carry one ear upright; a quarter of them would be entirely up-eared, the rest would, for the most part, be oar-lopped, or horn-lopped; and occasionally a perfect fancy fall of the two ears would occur.

The forward, or horn-lop, which is one degree nearer perfection than the half-lop, is when the ears fall downward and project forward in front of the head, as in the marginal sketch, which is taken from an exceedingly well-bred grey doe, whose properties of form are nearly perfect in all other respects, except in the fall of the ears. Her head is remarkably small and well-shaped, and her dewlap very full and handsome. Her colour, grey, is objectionable; she is, nevertheless, a more valuable rabbit than the one we have previously described, as she is nearer perfection in all her properties but colour, and shews less of the common animal. She is bred from a capital grey and white stock, and generally

produces young of that colour. It is necessary to remark, that this doe, like almost all others whose ears fall in the same position, frequently raises one ear upright.

The oar-lop is accurately depicted by the engraving in the margin. It is a sketch of the head of a very fine young buck rabbit, about three parts grown. The ears, in this variety of the lop, spread out nearly horizontally from the side of the head, like a pair of oars from a boat. A great many very excellent does are, more or less, oar-lopped, and the best-bred bucks in the fancy are, generally speaking, entirely so. A rabbit frequently carries one ear in a correct position, while the other is raised sufficiently to constitute it an oar-lop. This, though by no means a capital carriage of the ears, is superior to all others, except the perfect fall; and rabbits whose ears both drop handsomely down the cheek are so rare, that those which are only oar-lopped are valuable animals, if all their other properties are correct.

We now come to the real lop. The ears of the real lop fall, from the roots, down by the side of the cheek, slanting a little outward in their descent, with their hollow parts inward, forward, or partly backward; and their tips touching the ground when the animal holds its head in the usual position. For a first-rate fancy lop, the hollows of the ears should be turned so completely backward, that the outer, or convex part of them may only appear in front: they should match perfectly in their fall, and the less they slant outward in their descent from the roots, the more handsome they are considered These perfect lops are so rare, that a breeder with a stock of twenty capital does, of superior blood and beauty, and all of them nearly, or even quite perfect in the several properties, may think himself very lucky if they produce a dozen first-rate lops, in the course of a season. The rabit, from which the sketch in the margin was taken, is one of the most perfect, in all her properties, that has hitherto fallen under our notice.



Having now, as we think, dwelt sufficiently on this part of our subject, we shall say a few words on the important propriety of colour. Grey is considered the worst of all colours; black is the next in gradation; fawn, fawn and white, and grey, hold the third place in estimation; pure white, with red eyes, is by some reckoned equal with, and by others, superior to these; tortoise-shell (a rich brown and white, and brown, grey and white,) and black and white, rank the highest; mouse colour, though little noticed by fanciers in general, is much admired by a few.

If the rabbit be white and black, grey and white, fawn and white, or tortoise-shell, it is deemed indispensable that they should be mixed as nearly as possible in the following manner:—the greater part of the back, the haunches, and the body, should be of the dark colour, or slightly spotted with white; a chain or series of the darker colour should come up to the shoulders, and the rest of the fore part of the body should be also variegated—white, however, predominating. The ears should be entirely of the prevailing dark colour of the body; if otherwise, they are termed pie-bald, which is a defect. The head should shew a great deal of colour round the eyes, and at the nose, but it must not be without white. The belly may be entirely white, and the throat and dewlap white, dark, or variegated. The spots and dark parts in general, particularly those on the back, must not have many white hairs mixed among them; if they have, the rabbit will be grizzled, and deficient in beauty of colour: the spots must be definitely marked on the white, and the colour on the back should not break off abruptly, neither should it be lightened away into the white by a gradual mixture of white hairs with the black; on the contrary, the edges must be gradually and positively broken, by black spots or patches, lessening in size, and terminating with the chain on the shoulders. There are, however, but few rabbits that are perfectly coloured; the nearer they approach to the preceding description, the stronger they are in this property. A few rabbits are occasionally seen at the poulterers, with but two or three pieces of colour on their skins; for instance, the head, throat, shoulders, hips, back and haunches, will be grey, and a patch of white breaking abruptly on it, will cross the back; or there will be two or three large patches of black on a white ground, or *vice versá*. These are termed old-fashioned country rabbits, and if an animal of a similar colour is produced in a fancy stock, it is reckoned unfit for rearing, and condemned to the cook. But even such a rabbit as this is better than one with a slight sprinkling of colour on white, as a coloured nose and ears, with a slight shade round the eyes, and a streak along the middle of the back. Rabbits thus marked are frequently produced even by good-coloured does; they are termed blood-suckers, because they impoverish the stock, by taking the food and milk which would nourish rabbits that would be good for something; these being actually worth nothing, as they

are not only unsightly, but their constitutions are, with a few rare exceptions, so weak, that they never get fat enough to qualify them for the spit or the pot, and are totally unfit for rearing to replenish old stock, even if their other properties are perfect. The thorough Rabbit Fancier, however, seldom thinks a rabbit worth feeding as an article for the table; but he must, of a necessity, if he keep many does, frequently use rabbits for his own board, give them away, or dispose of them to a poulterer; as among every score which, on account of their colours, he rears to the age of two months, the principal portion will, as we have already stated, be so far distant from perfection in the ears as not to be worth rearing. Fancy rabbits are never parted with to the poulterer alive, because the owner well knows, that though imperfect themselves, they might probably throw very perfect young ones, if reared. An instance occurred lately, within our knowledge, of a person, who kept good rabbits, shewing a lot of young ones for sale to a poulterer, who offered to take them at half-a-crown per couple; the bargain was struck, and the poulterer said to his man, " Sam, these are fancy rabbits, take them home alive." "Oh! no," said the Fancier, " if you take them home alive, the price is one guinea each; if you have them for half-a-crown a couple, I must see them all knocked behind the ears before they are taken from my loft. If I sold imperfect well-bred rabbits alive at this price, the strain would soon grow common, and before that would be the case, you might breed rabbits that would fetch you four or five pounds a-piece, from stock that you had purchased at warren rabbit price."

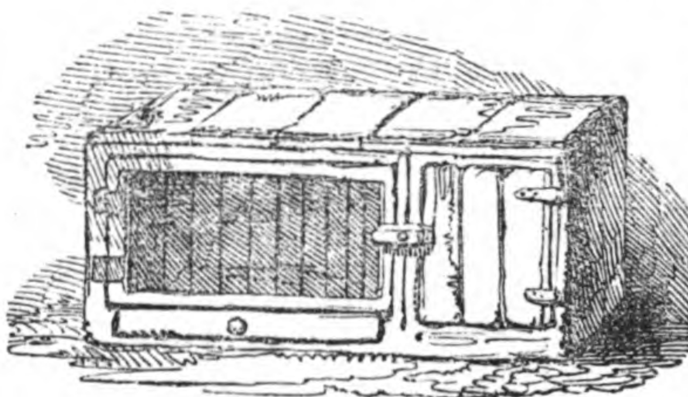
Fine-framed young rabbits are, in fact, frequently sacrificed, because they are up-eared, while others are reared with scarcely one half the substance, and perhaps inferior in colour, because their ears both fall; the consequence is, that the latter often produce puny stock, frequently up-eared, while the former would, probably, produce fine rabbits, which would be just as likely to be perfect in the ears as those which came from the others. It is a practice with some rabbit fanciers, when they have a young animal with long ears, only one of which lops handsomely, to affix a piece of lead to the other, in order to bring it down, so as to make it match with that which is perfect. This practice is seldom successful; and if it were, it would, nevertheless, be highly objectionable, as tending to thwart nature, and putting the animal to pain and inconvenience. The young rabbits seldom lop their ears until they are separated from the doe; it is best to put them, at first, in an open hutch for half an hour, so that they may be tempted to look over the edge of the bottom toward the ground: this will make their ears drop; but they must be watched during this time, lest they fall out and hurt themselves. It frequently happens that a very promising young rabbit at two months old, whose ears lop perfectly, will rise one of them when he attains double that age; and others again lop

only one ear until they are three parts grown, when the other falls, so as to render the pair a perfect match.

Some strains of fancy rabbits have their fore-legs considerably bent inward; this is not considered a defect. The shape of the eye is, in general, different in all fancy rabbits to the common breed; it is not so round, and a fold of skin appears puckered up on the surface of the eye at its lower corner.

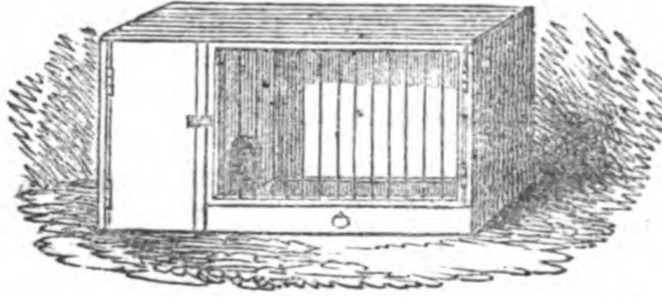
THE RABBITRY AND HUTCHES.

The rabbit house should be dry and well ventilated; too much humidity, whether externally or internally, will cause the rabbits to rot. Where considerable numbers are kept, fresh air is absolutely necessary to preserve them in a state of health; still they should not be exposed to draughts, which, on many occasions, have brought on a disease called the snuffles—a dangerous, and frequently fatal malady. If economy be an object, or the young fancier be desirous of employing his mechanical abilities, he may construct hutches sufficiently good for common purposes himself. A tolerably good doe's hutch may be made out of an old egg-chest, and places for bucks and weaned rabbits, of tea-chests; the former are to be bought at a cheesemonger's, the latter at a grocer's shop. If our reader should become his own carpenter in this case, we recommend him to follow, as much as his abilities will admit, the directions which are given for making hutches in the following page. Young persons should begin by keeping common rabbits, for which common hutches, such as they can construct themselves, if so inclined, will be quite good enough. When they have acquired experience in the management of the Rabbitry, and not before, they may, by degrees, introduce superior animals to their stock, and dispose of the common ones. They should then also obtain superior hutches; for a fine lop-eared rabbit loses half the beauty of its appearance in a clumsy and ill-fashioned hutch.



The hutch for does should have a partition with a hole in it, to let them pass from one part to the other, and a slide to close this hole when necessary. For weaned rabbits, a hutch without this partition is pre-

ferable, and it is unnecessary to make any partition in the bucks' hutches. The breeding hutches should be about three feet long, two feet and a half in depth, and eighteen inches high; the breeding place may be from nine to twelve inches in breadth; it should have a door to fit the whole front of it, fastened by a separate latch or buckle to that used for the door of the feeding place. The latter door should extend the whole distance from the partition to the opposite part of the hutch, and in depth from the top to within two or three inches of the bottom: it must be made of a frame of wood, tinned on the inside, with stout wire or slender iron rods nailed or driven into the top and bottom parts of the frame, from three quarters to an inch apart. Hang it on a pair of small hinges to that side of the hutch which is opposite the partition, and fasten it by a latch or buckle. Under this door, a drawer for food, well tinned round the edges, is to run in; it should be fastened by a buckle fixed to the lower part of the large door, or it may be so contrived that the door will keep it close without any fastening. Nail tin round the hole in the partition, (which ought to be circular,) and, in fact, to every other part of the interior of the hutch which the rabbits can take hold of with their teeth; as they are very destructive animals, and would actually gnaw themselves out of a mere wooden hutch. The bottom must be planed quite smooth, and a slip be taken off the lower part of the back of the hutch to let the urine run off: for this purpose, hutches should also be set a little on the slant backward.



The buck's hutch is made different in every respect from the breeding hutches; instead of being square, it is almost semi-circular; the back and sides being gradually rounded off from the front. The wires are placed wider apart, and are thicker and stronger than those used for does' hutches: it has no partition, and the drawer, instead of running the whole breadth of the cage, as there is never more than one rabbit at a time to feed out of it, is placed in the centre, to a cross piece which goes from side to side, as the front piece of the drawer in other hutches. There must be an aperture at the back close to the floor, for the purpose we have before

mentioned, and the door, which, excepting the drawer, constitutes the entire front of the cage, should be well hinged and fastened with a stout button. The buck's hutch should not be less than twenty inches high, two feet and a half broad, and twenty inches at its deepest part.

The hutches may be stacked one above another, or set in a row, as choice or convenience may direct. They should, however, never be placed upon the ground, but elevated on wooden stools, or horses, a foot or two above it: neither ought the back parts of them to be put close against the wall, but sufficient room should be left for the dung to have a passage from the apertures made in the lower part of the back to the floor

FEEDING.

This is a most important subject. On his skill, as a feeder, mainly depends the young Fancier's chance of prosperity with his stock. If too much food be given at once, the animals will get disgusted with and refuse it, so that a rabbit may be nearly starved by affording it too great a quantity of food. Most persons feed their rabbits twice, but, for our own part, we feed ours thrice a day. To a full-grown doe, without a litter, in the morning, we give a little hay, or dry clover, and a few of such vegetables as are in season; in the afternoon, we put two handfuls of good corn into her trough; and, at night, we give her a boiled potatoe or two, more vegetables, and if her hutch be clear of what we gave her in the morning, but by no means otherwise, a little more hay or clover. If you give rabbits more hay than they can eat in a few hours, except it be to a doe just about to litter, they will tread it under foot, and waste it: if you give them but a moderate quantity at a time, they will eat and enjoy it. Generally speaking, rabbits prefer green or moist food to corn; but it is necessary to make them eat a sufficient proportion of solid food to keep them in health; occasionally, instead of corn, we give our rabbits a few split or whole grey peas. When a doe has a litter by her side, and also for rabbits recently weaned, we soak the peas for a few hours previously to putting them in the trough. If a rabbit will not eat a proper quantity of corn, we mix a small quantity of squeezed tea-leaves with her portion, and stint her proportionately in green meat. Barley-meal, dry as well as scalded, we occasionally use, to fatten for the table, or to bring a poor rabbit into good condition; and in winter, when greens are scarce, but not otherwise, we feed with fresh grains mixed with oats, peas, meal, or pollard. Tea-leaves, in small quantities, well squeezed, may at all times be given, by way of a treat; but it is highly improper to make them a daily substitute for green meat.

Almost all the vegetables and roots used for the table may be given to rabbits; in preference to all others, we choose celery, parsley, and the roots and tops of carrots; and in this choice the animals themselves heartily agree

with us; lettuces, the leaves, and, what are much better, the stumps of cabbages and cauliflowers, they eat with avidity, but they must be given to them with a sparing hand; turnips, parsnips, and even potatoes in a raw state, we occasionally afford our stock, on an emergency, when better roots or good greens are scarce. In the spring time no soft meat is better for them than tares, so that they be not wet; in fact, no green ought to be given to rabbits when there is much moisture on its surface. We have heard of some country persons feeding their rabbits on marshmallows, but we never did so ourselves. Dandelions, milk thistles, or sow-thistles, we know, by long experience, they take in preference to all other food, except celery, parsley, and carrots; and nothing, we are convinced, as green meat, can be better for them.

It must be remembered that a doe will eat nearly twice as much when suckling as at other times; and, when her litter begin to eat, the allowance of food must be gradually increased. In our own Rabbitry we never admit chaff, and grains only, in a dearth of green food. If we can obtain neither greens, roots, nor grains, at feeding time, we make it a practice to moisten the corn with water, milk, or, as we before stated, with tea-leaves. Though a rabbit must be restricted from rioting in green or soft meat according to its own appetite, for its own sake, yet it is cruel to afford it only such food as will increase rather than appease its thirst: for this reason, in such a case as we have mentioned, we moisten the grain; and some rabbits will even do well with an occasional table-spoonful of water, beer, or milk; but it is a dangerous experiment to try the effect of a liquid on their stomachs.

BREEDING.

The doe will breed at the age of six months; her period of gestation is thirty days. The rabbits are not to be left together above ten minutes. Some days before kindling, hay is to be given to the doe, with which, and the flue which nature has instructed her to tear from her body, she will make her nest. Biting the hay into short pieces, and carrying it about in her mouth, are almost certain signs of her being with young. The number produced varies from three to eleven. Destroy the weak and sickly ones, as soon as their defects can be perceived, until the litter is reduced to five or six. If you leave more to be suckled, some will, perhaps, die, others be sickly, and none of them fine. The old rabbits are not to be put together till the expiration of six weeks: the young may be separated from the doe and weaned a fortnight after. If more than five or six litters are obtained in a year, the doe will be soon worn out, and the young ones not worth much. The doe should not be disturbed by any other rabbit, while with young. Should she be weak after kindling, give her a malt mash, scalded fine pollard, or barley-meal, in which may be mixed a small

quantity of cordial horse-ball. In this case, and, in fact, whenever a doe is weak, bread—soaked in milk, and squeezed rather dry again, if she will take it, will considerably strengthen her.

If well fed, and kept warm, does will breed all the year; but most fanciers are contented with five litters a year, and let them rest during the winter. Mowbray states, that the produce of rabbits is so multitudinous, that one might be well satisfied with this practice; for that even four litters in the year would be equal to two thousand young rabbits annually, from a stock of one hundred does. If does devour their young, or do not breed for any considerable time, rabbit fanciers dispose of them as useless incumbrances to their stock. It is advisable so to manage, that two or three does should kindle about the same time; you may then take from the doe that has the greatest number, and put the excess under her that has the least; taking care not to leave more than six young ones to each. It is advisable to obtain rabbits for breeding from a litter of two, three, or four only, as they are generally stronger and finer than those which come from a more numerous one. It is a disadvantage, rather than otherwise, to have above six produced in a litter, as the young rabbits when that is the case, are almost invariably weak and puny; and even if they be reduced to a moderate quantity, by removing some of them to another doe, or otherwise, they rarely become remarkable for their size or beauty.

DISEASES.

Diseases may, in a great measure, be prevented, by regularity in feeding, good food, and cleanliness. The refuse of vegetables should always be scrupulously rejected. For the liver complaint, to which rabbits are subject, there is no cure; when they are attacked by it, fatten them, if possible, for the table.

The snuffles are occasioned by damp or cold. If there be any cure for this disorder, it must be dryness in their hutches and food.

Squeezed tea-leaves generally restore a doe to health, if weak, or otherwise affected after kindling, if the food which we have directed to be given at that time, under the head of Breeding, should fail. When old rabbits are attacked by a looseness, dry food will, in general, restore them; but do what you will, it is very difficult, and, in most cases, impossible, to save young ones from sinking under it; dry food for them, as well as for the old ones, is the only remedy.

GENERAL OBSERVATIONS.

Be careful to keep your rabbit-hutches particularly clean; a short hoe, or a trowel, and a hand-brush, will be necessary for this purpose. Do not handle your rabbits, particularly the young ones, too much; when you lift

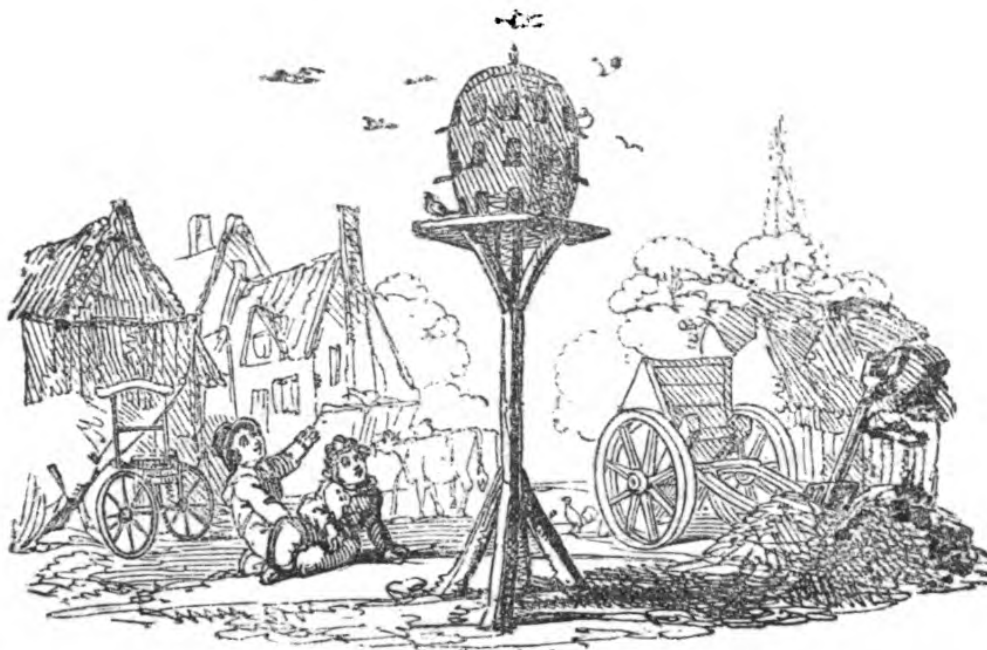
them, take them with one hand by the ears, and place the other under the lower part of their backs. Never slacken in attention; a neglect of a day will do your stock much injury; while by constant care you may breed to great perfection. Those who are fanciful in colours should not only look at those of the rabbits they buy for breeding, but also ascertain, if possible, the colours of the does they come from; for rabbits frequently throw litters, in which not a single young one of their own colour can be found. If there happen, for instance, to have been a single cross of grey in your stock for three or four generations back, it will frequently appear in stock, although every breeding rabbit in your hutches be of a different colour. Grey is the most difficult of all colours to eradicate; but even grey rabbits do not always have young ones of their own colour.

The more you vary the food, the fatter your rabbits will be; but observe, that when they are once *full fat*, (to use a term of breeders,) they frequently fall off and pine away to bad condition. It is impossible to lay down rules for the precise quantity of each sort of food to be allowed; a little experience alone can teach the youthful fancier this secret.

By proper care and attention, rabbits may not only be kept for the sake of their beauty of appearance. and the interesting and harmless amusement which they afford, but the surplus stock may be made to pay for their keep, either by using them for the table, or disposing of them to

The Rabbit-Man.

PIGEONS.



Aloft in air the rapid pigeon soars,
The messenger, by turns, of joy and woe
But heedless ever of her high envoy,
Even while cleaving yonder distant cloud,
Her heart is fix'd on home, and her lov'd young
Thus does brute instinct in man's hand become
A mighty engine.

THE life of this beautiful and useful bird is said to extend to about eight years; but it is useless for the purpose of breeding after it has attained half that age, and ought then to be destroyed, or it will molest those which are in their prime. The pigeon lays two white eggs, and sits fifteen days after the second egg is laid. The female keeps to the nest from four or five o'clock in the evening until nine the next morning; she then goes off to feed, and the cock takes her place during the day. If the hen delay, the cock leaves the nest at the usual time, seeks her out, and drives her to her duty; the hen does the same in case of negligence in this respect on the part of the cock.

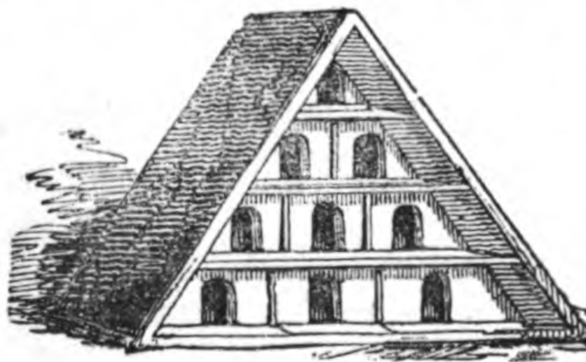
The young ones are usually of different sexes. For the first three days after they are hatched, the female seldom leaves them; after that time, the cock and hen attend to feed them indiscriminately. The way in which the old supply the young with food is singular: the parent birds collect a quantity of grain and water in their crops, which are very capacious, and after it has lain there until soft and macerated, they cast it up into the throats of the young ones. As the young birds acquire strength, the old ones give the food less preparation, and at last drive them out to provide in part for themselves; but they are often seen feeding their young ones even when the latter are able to fly, and they themselves are going to nes again. The young ones, while fed by the cock and hen, are called squabs, under six months old squeakers, and after that age they are denominated pigeons, being in a fit state to mate and breed.

LAWS CONCERNING PIGEONS.

By an act of Parliament of 7 and 8 Geo. 4. c. 27. which repeals 1 Jas. 1. c. 27., and 2 Geo. 3. c. 29; and by the 7 and 8 Geo. 4. c. 29. s. 33. it is enacted—that if any person shall unlawfully and wilfully kill, wound, or take any house-dove or pigeon, under circumstances not amounting to larceny, upon being convicted thereof before a justice, he shall forfeit, over and above the value of the bird, any sum not exceeding 2*l*. But it has, nevertheless, been determined, that the owner of land may kill such pigeons as he may find devastating his corn.

THE DOVE-COTE, OR PIGEON-HOUSE.

As many young people will take a pleasure in breeding a little flock of birds from a common box, fitted up against a wall or elsewhere, we shall give them a few words of advice on the subject. The form of the box is immaterial; the triangular is, perhaps, the best, because it allows the wet to run off quickest, it may be made with any number of holes, which should be sufficiently large for the pigeons to turn round in them with ease. Shelves and partitions of six or eight inches depth should run along the front, to keep the couples apart, and afford them good resting-places. It will be an advantage, if you can allow two holes between each partition for each couple of birds. The box may also be made square; or, in fact, according to the

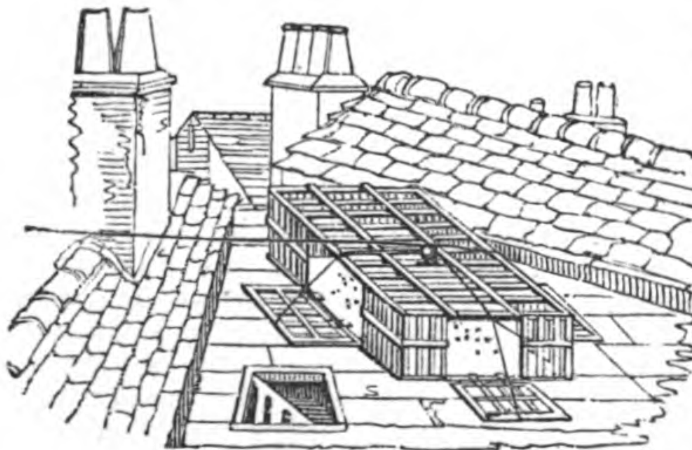


convenience or fancy of the individual fitting it up. It should be fixed where it will be secure from rats and cats, and ought always to face a warm quarter; cold winds being very pernicious to the birds.

PIGEON LOFTS.

We shall now proceed to give the young Fancier proper instructions for building pigeon lofts, which are used for breeding and keeping the more curious sort of birds, or what are commonly denominated Fancy pigeons.

Many persons in London convert the spaces between the garrets and the roofs of their houses into lofts, by making an aperture in the tiling, which opens on a platform, fixed on the outside. It is necessary in this, as in all other cases, to erect proper fences to keep out the cats. If possible, for the sake of warmth, your loft should face the south or south-west; but, as it rarely happens that convenience will allow of a room being occupied entirely by pigeons, it is seldom that the birds are indulged with this advantage. Any place. in fact, that is dry, light, airy, and sufficiently commodious, may be converted into a good loft. The trap or aëry is fixed on the outside upon a platform of wood, at the common entrance of the birds; it is generally made of laths nailed about half an inch, or rather less, asunder. The form depends upon the taste of the constructor. Traps are, for the most part,



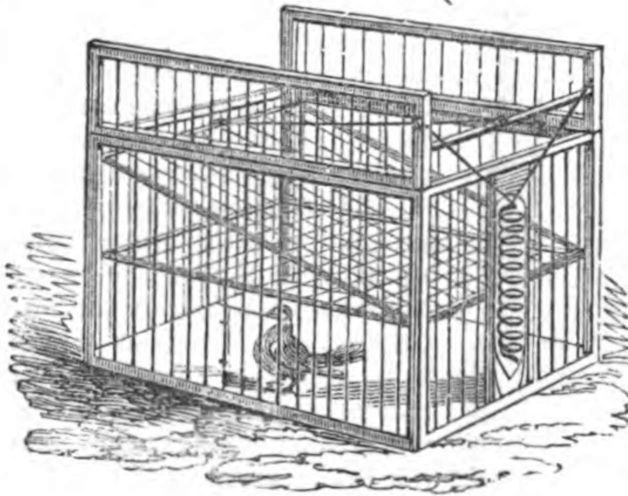
square, with one, two, and sometimes three entrances; each of which is furnished with a door contrived in such a manner, as to allow a person concealed within the loft, or any other place whence he can obtain a view of the trap, effectually to close the entrance in a second, by merely pulling a piece of string. The door is, of course, hung on hinges, and the string is fixed to that part of it, from which it may most easily be pulled to. The trap is frequently used, by depraved persons, for the purpose of catching stray pigeons, which they decoy into it either by some of their own birds, or by baits of hemp, rape, canary-seeds, or otherwise. The trap is, nevertheless, indispensable to the fair fancier, if he keep Tumblers or other pigeons which are occasionally turned loose; for, without it, he would not

have a sufficient control over his birds, and could not confine them in the loft after their *flight*, or whenever he considered it advisable to do so.

The bolting wire is a very useful addition to the loft or aëry. Its construction is very simple:—a little square, or rather, oblong, wooden frame is made sufficiently large for any pigeon to pass through it with ease ; a slip of wood, that is nearly as long as one end of the frame, is then hung

to it, by a couple of pair of wire staples, or small hinges, so as to play easily; into this slip, two pieces of wire are driven, wide enough apart to admit a pigeon's head and neck, but not the body, between and on each side of them; the wires must be long enough to reach below the edge of that end of the frame opposite to where the slip, in which the wires are driven, is hung. The bolting wire is now complete; a lath or two must be cut out of one side of the aëry, or a hole made in the roof, or near the entrance to the loft, according to which of the places is destined for its reception. The frame is fastened in with the points of the wires downward, and so as to open inward; the lower part of the frame against which they fall will then prevent them from moving outward. The object of the bolting wire is to afford a pigeon the means of getting into the trap, or loft, after it is fastened up. For instance, suppose a person, who keeps Tumblers, turns them out for an hour's flight; at the end of that time he calls in all he can, fastens up the entrance, and quits the loft, leaving two or three birds out; the construction of the bolting wire is such, that the birds in the loft cannot push it outward, while those who are out, can and will, when they wish to come in, push it inward, lift it up, and enter. It is equally useful in the aëry, after two-thirds of the pigeons are inside the trap, the doors are pulled up, and the stragglers afterward get in by lifting the bolting wire. The birds already trapped cannot escape through it, while it affords an easy entrance to the few that are not secured when the doors are closed. The pigeon-call is a shrill, long, and loud whistle, to which your pigeons will attend, even when high on the wing, if you make a practice of giving them some choice food after it. It is by this call that the pigeons are brought into the house or trap; they should be regularly accustomed to it, and brought in by it, invariably, before they are fed. Some persons make use of it, even if the pigeons are all in the loft, previously to their food being given to them.

We have lately seen a very good self-acting pigeon trap, which is made in the following manner:—a large square cage is constructed of a wooden frame, and wires instead of rails or laths; with two folding doors, each fastened by hinges to the top. About a foot from the bottom of the cage, a false bottom of open wires is fixed, and in the space between the real and false bottom, a pigeon is placed, by means of a little door in the side, as a decoy. Immediately above the false bottom, a square piece of wire-work, of precisely the same size and appearance, as the false bottom itself, is fastened at one end, by two pieces of wire, to the outer wire of one side of the false bottom itself, which act as hinges. To the opposite edge of this square piece of wire-work, a string is fastened, of about eighteen inches in length, at the other end of which a stick, equal in length to the breadth of the cage, is tied by the middle. To set the trap, the two folding doors are raised to a perpendicular position, the stick is placed between them, with a small portion of the wooden edges of their frames resting against each end of it; the doors are pulled inward and downward, so as to keep the stick, and consequently themselves, in a proper situation, by means of a piece of catgut, communicating with a worm of stout wire, which is placed against a rail of the frame that runs up the middle of one of the sides. When the stick is in its proper place, the string which fastens it to the square piece of wire-work, raises one end of the latter about six inches from the false bottom; the stick is placed on the opposite side to that on which the square piece of wire-work is thus raised; and an ounce weight, dropped on the wire-work, will, by means of the string, pull the stick from between the doors; they being acted strongly upon by the spring-worm, immediately close; so that if a pigeon be attracted to the trap, and endeavour to join the decoy bird, which it sees feeding inside, and alight on the inside of the cage, that is, on the square piece of wire-work, it must, of necessity, be caught. The false bottom is for the purpose of preventing the decoy bird from escaping. It would be a matter of trifling difficulty to adapt a bolting wire to this cage; it should be placed at one of the sides beneath the false bottom; thus a bird may enter after the trap is closed.



The snap trap is frequently used by persons who keep pigeons; it differs from the aëry in shape, although its use is in fact the same. It is either constructed on a platform, or fastened to the roof leads of a house. Two frames, in the shape of a triangle, made of deal, and railed with strips of the same wood or laths, are nailed by one of their sides, to the lead or platform, about three or four feet apart, and exactly opposite each other. A rail is then made of a length a trifle more than equal to the distance between the two triangles, to the upper corner of each of which it is secured. Two similar rails are nailed on the roof or platform, which extend from the lower corners of the triangles, and connect them together. To each of these

rails, a light frame, made of deal, and laths or rails fixed about an inch apart, is hung by small hinges. The frames should be exactly large enough to fill the space between the top and corner rails and the two triangles. A string is fastened to the outer edge of each of the frames or doors, which is brought up and run into a pulley or swivel, fixed on the top of the upper rail. One of the strings is then tied to the other, and the latter is left sufficiently long to reach a window, or other place, which commands a view of the trap. It is set and baited very simply: the frames or doors are placed flat on the roof, and a few vetches are strewed inside the trap: as soon as a pigeon goes in to feed, the two frames or doors are suddenly raised to the upper rail, by a concealed spectator pulling the string, and thus the bird is enclosed in the trap.

The shelves for the breeding place should be fourteen inches, or a little more, in breadth; and if you breed Pouters, there ought to be twenty inches between the upper and lower shelves, otherwise the pigeons will acquire a trick of stooping, which will spoil their deportment. Partitions should be made in these shelves, about three feet apart, and a slip of board run along the front of the lower shelves, about four inches high, to keep in the nests. This slip should run in a groove, or be otherwise managed so that it may be easily removed, in order to clean out the nests when expedient. A similar slip must also be fixed in the middle of each three feet division, which is thus adapted for a double nest, in one of which, the old hen may lay in quietness without being disturbed by her young

ones in the other, as she often leaves them when about three weeks old to the care of the cock, and goes to nest again. Some Fanciers darken the nest by setting up a board a few inches within the edge of the shelves, having an entrance hole cut through it; thus dividing the partition into an outer shelf or landing place, and an inner room or nest: in this case, of course, the slip is unnecessary. A good contrivance to keep the birds private when setting is, perhaps, worth attention, as they are sometimes shy, and set uneasy, or even fly off their eggs, in alarm, on any person's entering the loft. Some tame pigeons will not make their nests; to such it will be right to afford a little hay. Straw buckets and pans of earthenware are used by many Fanciers for nests. When the latter are adopted, it is usual to place a brick between them (there being two pans in every partition) for the convenience of the birds, as well as more effectually to divide and support the nest. The pans should vary in size according to the pigeons for which they are intended. The straw baskets are in general preferred, as the egg is liable to be broken in the pan, unless it be strewed with hay, straw, or frail, of which the latter, for many reasons, is the best for the purpose.

FEEDING, MATING, &c.

Gravel should be strewed on the shelves and floor, the birds being fond of picking it; besides, it gives the loft a much cleaner appearance. Cleanliness is indispensable; if you suffer the loft to be filthy, the dirt will produce effects which will be equally annoying to yourself and your birds. Do not handle your squabs or young birds too much, lest you bring an illness on them which may prove fatal.

The common pigeon will, during a great part of the year, seek the principal part of its own food, and live upon almost any grain; the fancy birds require delicate food and much attention. Of all grain, old tares prove to be the best suited to the nature of these birds; new tares should be given very sparingly, especially to young pigeons, as they are very liable to do them much injury. Horse beans are esteemed the next best food to tares; the smallest of these are preferred, especially small ticks. Wheat, barley, oats, and peas, ought only to be given now and then for a change of diet, as they sometimes hurt them. Rape, canary, and hemp-seed, pigeons are immoderately fond of; but these must not by any means be made a constant diet.

Mating or coupling of pigeons is often attended with much difficulty In order to effect it, let two coops be built close together with a partition of lath between them, so that the birds may see each other, and they should feed out of the same vessels; by supplying them well with hemp-seed, you may soon make them fit for mating, and when you perceive the hen to sweep her tail, you may remove her to the cock's pen, and they

will soon agree. When this convenience is wanting, and you are compelled to put them both into the coop at first, put the cock in three or four days before the hen, that he may get master of the coop, particularly if the hen be a termagant, or else they will quarrel so much, that their bickerings will end in an irreconcileable hatred. When the pigeons are matched, you can give them the run of the loft to choose a nest for themselves, or fix them to one, by inclosing them within it, by a lath railing, giving them food and water in plenty for eight or nine days.

DISEASES AND REMEDIES.

For the wet roup, give them three or four pepper-corns once in three or four days, and steep a handful of green rue in their water, which you may let all the pigeons drink of. The dry roup is known by a dry husky cough, it proceeds from a cold; to cure it, give them three or four cloves of garlick every day.

The canker arises from the cocks pecking each other: for this, rub the affected part every day with burnt alum and honey. When the flesh round the eyes of the Carrier, Horseman, or Barb, is torn or pecked, bathe it with salt water for several days; if this do not prove successful, wash the aggrieved part with two drachms of alum dissolved in an ounce and a half of water.

When pigeons are infested with insects, smoke their feathers well with tobacco.

Pouters and Croppers are apt to gorge themselves when they have fasted rather longer than usual. When this happens, put the bird into a tight stocking with its feet downward, smoothing up the crop, that the over-loaded bag of meat may not hang down; then hitch up the stocking on a nail, and keep it in this posture, supplying it with a little water now and then, till the food is digested. When taken out of the stocking, put the bird in an open coop or basket, and feed it but very moderately for some time.

The megrims is a disease, in which the pigeon flutters about at random, with its head reverted in such a manner that its beak rests upon its back. This malady is pronounced incurable.

When pigeons do not moult freely, put them into some warm place, and mix a good quantity of hemp-seed in their common food, and a little saffron in their water.

If they be lame, or the balls of their feet become swelled, either from cold, being cut with glass, or any other accident, spread some Venice turpentine on a piece of brown paper, and put it to the part affected.

THE VARIOUS SPECIES.

SEVERAL varieties of fancy pigeons are so much alike in form, and, in fact, differ so little, except in size and colour, that it would be of no assistance to the Fancier to give cuts of each species; we shall, therefore, only introduce engravings of the chief varieties.

THE COMMON PIGEON.

Common pigeons are usually blue or ash-coloured, with white backs and red legs. They weigh about thirteen ounces each, require but little attention, and breed once a month for the greater part of the year. By frequent judicious crossing, their plumage becomes variegated with copper and other glaring colours.

THE STOCK DOVE, OR WOOD PIGEON.

All the beautiful varieties of the tame pigeon derive their origin from the Stock Dove. This bird is of a deep blueish-ash colour; the breast dashed with a fine green and purple, the sides of the neck with shining copper colour, the wings are marked with two black bars, one on the quill feathers, and the other on the coverts: the back is white, and the tail is barred near the end with black. It is larger than the common pigeon; but the shape of the body is the same, nor is the colour much different.

THE TURTLE DOVE.

The Turtle Dove is a small, and very shy bird. The top of the lead is ash-coloured, interspersed with olive, the chin and forehead white; there is a spot of black feathers on each side of the neck, curiously tipped with white; the back is ash-coloured, with a tincture of olive brown; the quill-feathers of a dusky brown, the breast of a light purplish red, the extremity of each feather yellow; the sides and inner coverts of the wings are blueish and the belly white.

THE TUMBLER.

This pigeon derives its name from its tumbling backward in the air when on the wing. It is a very small bird; its body is short, it has a thin neck, is very full breasted, with a short round head, and small spindle beak. The irides of the eye should be of a clear pearl colour. These pigeons, by their flight, afford great satisfaction to the Fanciers; for, besides their tumbling, they will rise to such a height in the air as to be almost imperceptible: and, if good birds, and familiarized to each other, they will keep such close company, that a flight of a dozen may be covered with a handkerchief. If the weather be warm and clear, they will continue upon the wing for four or five hours; the favourite sort seldom, if ever, tumble, but when they are beginning to rise, or when they are coming down to pitch.

The Tumbler displays in its plumage a charming variety of colours: reds, yellows, duns, blues, blacks, whites and silvers. Tumblers should not be suffered to have any connexion with other pigeons; for if they be once familiarized to fly with others, they will, by degrees, drop in their flight. Spare no expense in the purchase of one or two birds, that have been used to high flying, as they will be of infinite service in training your young ones to be lofty soarers.

When the pigeons are well acquainted with their habitation, turn them out, and put them upon the wing once a day only; a clear grey morning especially, for young birds, is the properest time; when they are coming down, strew a little hemp-seed, or rape and canary, to inveigle them in, and then confine them for the rest of the day. They should never be let out on a misty morning, when there appears signs of a fog, or during high winds. It should be a standing rule never to suffer a hen tumbler to fly when with egg.

THE BALD-PATED TUMBLER.

There is a fine species of pigeon known by the name of the Bald-pated Tumbler, the plumage of which consists of a great variety of colours; they have a pearl eye, a clean white head, with a white flight and tail, and are reckoned very good flyers. When they are aloft in the air, in fine clear weather, the contrast of their feathers, if the distance be not too great, gives them a very pleasing appearance; though the blue birds have gained the greatest reputation for lofty flights. Some Tumblers are called black or blue-bearded; that is, when a bird of either of those colours is ornamented with a long dash of white, reaching from the under jaws and cheek, a little way down the throat: if this be well-shaped, and the bird runs clean in the flight and tail, as above described in the Bald-pated sort, he may be considered as a very handsome bird. The annexed engraving is taken from a Bald-pated Tumbler which is remarkably handsome, but not quite perfect in properties, the tail and flight not matching in colour.

THE ALMOND, OR ERMINE TUMBLER.

This very beautiful and valuable species derives its origin from common Tumblers, judiciously matched so as to sort the feather. Some of these birds are so magnificent in their plumage, that the rump, tail, back, and flight, have been compared to a bed of the finest and best broken tulips; the more variegated they are in the flight and tail, especially if the ground be yellow, the greater is their value. To be perfect, the rump, back, and breast must be variegated, and the flight not barred. A few are feathered with three colours only, which compose the Ermine or Almond, as yellow, white, and black; bnt these are scarce. Almond Tumblers never arrive at their full beauty of feather till they have moulted several times; they increase in beauty every year until the decline of life, when they change to a mottled, splashed, or other inferior colour.

Many fanciers advise the matching of a yellow, a splashed, or black grizzle, with an Almond, to heighten the colours; black birds, bred from Almonds, are generally better shaped in the beak and head than the Almonds themselves, and the tail and flight have frequently a strong glow of yellow. The less ash or blue they have, the better; sometimes a slight

mixture of these colours will shew, even when they have been carefully and well bred. The yellow and black mottled should coincide with the Almond Tumbler, except in plumage; the former should have a yellow ground body, mottled with white, and a black flight and tail. Both of these two last described fancies make exceedingly pretty birds, and are also very useful, especially when they agree in their other properties, to mix occasionally with the Almond. The Almond Tumbler itself, for its exceeding beauty of feather, is deemed, by many of the first fanciers, to be the most beautiful and valuable, when in perfection, of all the pigeon tribe.

THE CARRIER.

In size, the Carrier exceeds many of the common pigeons; its plumage is close, even and firm; it is remarkable for the elegance of its shape, and, by some of the old fanciers, was called the King of Pigeons. A naked, white, fungous lump of flesh extends from the lower part of the head to the middle of the upper chap; this is called the wattle; it is usually met by two small protuberances of similar flesh arising from the lower chap. The bird is most valuable when its wattles are of a blackish colour. The circle round the black pupil of the eye (which is generally of a red brick-dust colour, though considered more rare when fiery red) is also encompassed with a circle of the same sort of naked fungous: it is generally about the breadth of a shilling, but the broader it spreads, the greater is the value set upon the bird. When this luxuriant flesh round the eye is thick and broad, it denotes the Carrier to be a good breeder, and one that will rear very fine young ones.

The following triple properties are attributed to the Carrier: three in the head, three in the eye, three in the wattle, and three in the beak. The properties in the head consist in its flatness, straightness, and length: for instance, a Carrier with a very flat skull, a little indented in the middle, and a long narrow head, is greatly admired; if the reverse, it is termed barrel-headed. The wattle of the eye should be broad, circular, and uniform; if one part appear to be thinner than another, it is called pinch-eyed: when the eye is equal. full, and free from irregularities, it is a rose-eye, and considered very valuable. The wattle should be broad across

the beak, short from the head toward the point of the bill, and leaning a little forward from the head: if it lie flat it is said to be peg-wattled. This has caused some artful people, in order to impose on the inexperienced, and to increase the price of an imperfect bird, to raise the hinder part of the wattle, fill it up with cork, and bind it in with fine wire, so neatly as not to be easily detected. The beak should be long, straight, and thick an inch and a half is a long beak, but it should not measure less than an inch and a quarter. (See cut, which is a correct likeness of the head of a very valuable Carrier, of which an entire engraving is given on the opposite page.) If the beak be crooked, it is termed hook-beaked, and lightly esteemed; it should be of a black colour, and thick; when it is thin it is called spindle-beaked; this decreases its value. The length and thinness of its neck are marks of its elegance. Its plumage is generally either dun or black, though there are also splashed, white, blue, and pied Carriers; the dun and black agree best with the before-described properties; yet the blues and blue-pieds, being rarities, are consequently valuable, even though rather inferior in other respects.

THE HORSEMAN.

It is a matter of dispute whether the Horseman is not a bastard between a Tumbler and a Carrier, or a Pouter and a Carrier, and then bred over again from a Carrier. It is, in shape and make, very like the Carrier, only less in all its properties; its body is smaller, and its neck shorter: neither is there so much luxuriant, incrusted flesh upon the beak, and round the eye, so that the distance between the wattle on the beak and that on the eye is much more conspicuous. (See cut, which is taken from a bird belonging to Mr. Blundell, of Dean-street, Holborn.) Horsemen are of various colours; but the most distinguished are the blue and blue pieds, which generally prove the best breeders. When young, they should be regularly made to fly twice a day; and, as they gain strength, must be let loose, and put on the wing without any others in company. They are chiefly made use of for deciding bets, or conveying letters, the genuine Carriers being very scarce.

THE DRAGOON.

Dragoons were originally bred between a Tumbler and a Horseman; by frequently matching them with the Horseman, they will acquire very great strength and agility. They are excellent breeders, and make tender nurses; for which purpose, they are frequently kept as feeders for rearing young Pouters, Leghorn Runts, &c.

The Dragoon is lighter and smaller than the Horseman; it is less in all its properties. One of the principal beauties of the Dragoon is the straightness of the top of its skull, and that of its beak, which ought almost to make a horizontal line with each other. The annexed cut is taken from a fine bird in the possession of Jackson, the pigeon-dealer, of Denmark-street, near St. Giles's church. The Dragoon is said to be more rapid for ten or twenty miles than the Horseman; nevertheless, if the Horseman be well bred, it will always distance the Dragoon at a greater flight. They should be flown and trained whilst young, in the same manner as the Horseman.

The distinctive qualities and variation of properties in those three beautiful birds, the Carrier, the Horseman, and the Dragoon, will be seen in an instant, by comparing the engravings of the different birds' heads, ir this and the preceding page, with each other.

THE ENGLISH POUTER, OR POUTING HORSEMAN.

This pigeon derives its first name from being originally English; it is a cross breed between a Horseman and a Cropper: by frequently pairing them with the Cropper, Pouting Horsemen have acquired great beauty and considerable reputation.

According to the rules laid down by the fancy, the Pouter ought to measure, from the point of the beak to the end of the tail, eighteen inches; and to have a fine shape, and a hollow back, sloping off taper from the shoulders: when it has a rise on the back, it is termed hog-backed. The .egs, from the toe nail to the upper joint in the thigh, should measure seven inches. The crop ought to be large and circular toward the beak, rising behind the neck, so as to cover and run neatly off at each of the bird's shoulders.

The blue pied, black pied, red pied, and yellow pied, are the most esteemed colours; but, if the blue pied and the black pied be alike possessed of the other qualities, the black pied, on account of its plumage, will

be the most valuable pigeon; and if the yellow pied have these marks, it will be preferable to either. We shall here describe in what manner the Pouter ought to be pied, according to the ablest judges: the front of the crop should be white, encircled with a shining green, interspersed with the same colour with which he is pied; but the white should not reach to the back of the head, for then he is ring-headed: there should be a patch, in the shape of a half moon, falling upon the chap, of the same colour with which he is pied; when that is wanting, he is called swallow-throated. The head, neck, back, and tail, should be uniform. A blue pied pigeon should have two black streaks or bars near the end of both wings; if these be of a brown colour, the value of the bird is greatly diminished, and he is termed kite-barred. When the pinion of the wing is speckled with white, in the form of a rose, it is called a rose pinion, and is highly esteemed; when the pinion has a large dash of white on the external edge of the wing, he is said to be bishoped, or lawn-sleeved. They should not be naked about the thighs, nor spindle-legged; but their legs and thighs ought to be stout, straight, and well covered with white, soft, downy feathers. Whenever it happens that the joint of the knee, or any part of the thigh, is tinged with another colour, the bird is foul-thighed. If the nine flight feathers of the wing be not white, he is foul-flighted; and when only the extreme feather of the wing is of the same colour with the body, he is called sword-flighted. The engraving is taken from life.

The crop of the Pouter ought to be filled with wind, so as to shew its full extent, with ease and freedom. It is a very great fault, when a bird so overcharges his crop with wind, as to fall backward; many a fine bird has, by this ill habit, either tumbled into the street, down a chimney, or become an easy prey to the cats. The reverse is, being loose-winded, so that the pigeon exhibits so small a crop, as to look like an ill-shaped Runt. A Pouter should play erect, and have a fine, well-spread tail, which must not touch the ground, nor sink between his legs; neither should he rest upon his rump, which is a very great fault, and is called rumping. He ought to draw the shoulders of his wings close to his body, displaying his wings without straddling, and walk almost entirely upon his toes, without jumping or kicking, like the Uploper, and move with an easy, majestic air.

The Pouter that approaches nearest to all these properties, is a very valuable bird. Some fanciers, by a patient perseverance, and great expense, have bred these birds so near the standard prescribed, as to sell them for twenty guineas a pair. These pigeons make a very striking appearance on the outside of a building, though the favourite sort are seldom permitted to fly, for fear of accidents. There is a great deal of trouble, time, and expense, requisite for rearing and breeding their young; every single bird must be parted during the winter season, and care taken that the coops be lofty and spacious, so that they may not get an ill habit of stooping, which is so great an imperfection, that it must be prevented by all possible means. In the spring, two pair of Dragoons must be had for every pair of Pouters, as feeders, or nurses. The Dragoons are to be kept in a loft, separate from the Pouters, lest they should degenerate and bastardize the breed. When the hen Pouter has laid an egg, it should be shifted under a Dragoon that has also lately laid an egg, and the egg of the Dragoon put under the Pouter, it being very proper that the Pouter should have an egg or eggs to sit upon, or she will quickly lay again; and this, often repeated, will probably kill her. The Pouters are such unfeeling nurses, as frequently to starve the young ones to death; so that good fanciers never suffer them to hatch their own eggs. Very great caution must be observed to prevent these birds from gorging, and much time be spent to make them tame and familiar: if they become shy, they lose one of the properties for which they are so much admired, which is called shewing.

The expense of raising Pouters is sometimes very great, for a fancier may begin with half-a-dozen pair, and, in a short time, be obliged to buy more, or be forced to exchange some of his best, for worse birds, in order to cross the strain; for he must not breed them in and in, as by these, or any consanguineous connections, the breed would degenerate, and be worth nothing. The above, and some other inconveniences, attend the training of the Pouter; whereas, the same number of Almond Tumblers would stock a fancier for life; for the breeding of Tumblers in and in would only diminish the size, and the smaller they are, the greater is their value; and, if supplied with meat, water, and some clean straw, they give little further trouble.

The Pouter was, formerly, so much valued, as to monopolize the attention of the fancy; but since Almond Tumblers are brought to such perfection, the Pouter has been a little neglected.

THE DUTCH CROPPER.

The body of this pigeon is thick, clumsy, and short, as are also the legs, which are feathered down to the feet; they have a large pouch or bag, hanging under their beak, which they can swell with wind, or depress,

at pleasure; they are gravel-eyed, and such bad feeders of their young ones, that as soon as they have fed off their soft meat, it is necessary to place their young ones under a pair of small Runts, Dragoons, or Pouting Horsemen. They are more addicted to gorge than any other pigeon, especially if not regularly supplied.

THE PARISIAN POUTER.

This bird was, originally, a native of Paris; its body and legs are short it has, generally, a long, but not a large crop, and is thick in the girth. It is greatly admired for its plumage, which is very elegant; every feather being streaked with a variety of colours, the flight excepted, which is white: the more red this bird has interspersed with its other colours, the greater is the value set upon it. They are, generally, what is commonly termed bull or gravel-eyed.

THE UPLOPER.

This bird was, originally, a native of Holland; it resembles an English Pouter, only that it is smaller, and has very slender legs; its toes are short and close together, and it trips so exactly upon them when walking, as to leave the ball of the foot quite hollow.

THE TRUMPETER.

This pigeon is nearly as big as the Runt, and very like it in shape and make; its legs and feet are covered with feathers; the crown of its head is round, and the larger it is, the more it is esteemed. It is, in general, pearl-eyed, and black-mottled; but the surest mark to distinguish a good Trumpeter is the tuft of feathers which sprouts from the root of the beak: the larger this tuft grows, the greater is the value set upon the bird. It derives its name from imitating the sound of the trumpet, which it always does in the spring of the year, those who wish to hear them at other times, feed them very high with hemp-seed, which always has the desired effect. We cannot discover that the Trumpeter is, or ever has been, much in vogue among any of the true fanciers of pigeons; in fact, the Trumpeter, notwithstanding its peculiarity, should be classed among what are called " The Toys."

THE LEGHORN RUNT.

This is a large pigeon, close-feathered, short in the back, and broad chested; it carries its tail up, is goose-headed, and hollow-eyed; the eye is encircled with a thick skin; the beak is very short, with a small wattle over its nostrils, and the upper chap projects a little over the under. They are much hardier birds than many imagine, and breed tolerably well; but they are bad nurses, and ought not to be suffered to bring up their own young ones; therefore, it is proper to shift their eggs under a Dragoon or some other tender nurse, in the same manner as directed for the Pouter: a young one oi some sort should, however, be given to them, to take off their soft meat. They are frequently of a grizzled colour, ermined round the neck; those most esteemed are either red, white, or black mottled. This species is of greater value than any other kind of Runt. There are some persons who greatly admire these birds, but we must confess that we are not among the number: to us they look too clumsy to be attractive.

THE SPANISH RUNT.

This pigeon is a short, thick-legged, flabby-fleshed, loose-feathered bird, with a remarkably long body; its plumage is uncertain, though some of the best are reported to be of a blood red, or mottled colour. They are to be treated precisely as the Leghorn Runt.

THE RUNT OF FRIESLAND.

This bird is a native of Friesland, and is somewhat larger than a middle-sized Runt; its feathers are all inverted, or turned the wrong way. There are several other kinds of Runts, as the feather-footed Runt oi Smyrna, a middle-sized pigeon, with feathers sprouting from the outside of its feet, having the appearance of small wings: there is also the large Roman Runt, which is so big and unwieldy, that it can scarcely fly; also the common dove-cote Runts, which are generally good feeders, and useful nurses for better pigeons.

THE FRILLBACK.

This pigeon is remarkable only for the turn of its feathers, all of which are so raised at the end, as to make a small hollow in each of them; it is less than the common Runt, though very much like it in shape; its plumage is always white.

THE NUN.

This little pigeon attracts notice from the pleasing contrast in its feathers, its head is almost covered with a veil of white feathers, which gives it the name of the Nun. Its body is chiefly white; its head, tail, and the six flight feathers of its wings, should be red, yellow, or black; and they are called, according to the fact, either red-headed, yellow-headed, or black-headed Nuns: whenever the feathers differ from this rule, they are termed foul-headed, or foul-flighted, as the case may be. The best of them have, however, frequently a few foul feathers; this decreases their value, though they often rear as pure-feathered birds as those that are perfect. The Nun should have a pearl eye, with a small beak and head; and the larger the tuft or hood is, the handsomer does the bird appear, and the more valuable it is reckoned by those who admire this sort of pigeon.

THE LACE.

The Lace is at present very scarce in this country: it is about the size of a common Runt, and like it in make and shape; but the colour of its plumage is always white; the web or fibres of the feathers in this bird appear quite unconnected with each other, and, as it were, disunited throughout: this peculiarity gives the bird a pretty, though singular appearance.

THE FINIKIN.

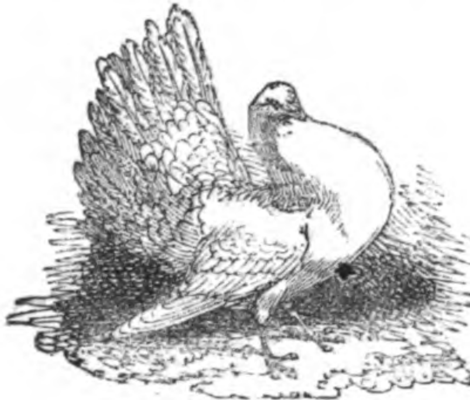
This pigeon differs a little from the Runt: it has a gravel eye, and a tuft of feathers growing on the back of its crown, which falls down its neck like a horse's mane: its plumage is always blue or black pied. When cooing, its antics are very odd; it rises over its hen, flaps its wings, and turns round three or four times; it then turns about as many times the contrary way.

THE TURNER.

This bird is very much like the Finikin; the tuft on the back part of the crown is wanting. When it plays to the hen, it turns only one way, whereas the Finikin turns both.

THE FAN-TAIL, OR BROAD-TAILED SHAKER.

This pigeon has a frequent tremulous motion in the neck, which, with the breadth of its tail, gives it the name of the broad-tailed Shaker. It has a taper handsome neck, of the serpentine form, rather leaning toward the back, like that of a swan: it is full-breasted, has a very short beak, a tail composed of seldom less than four and twenty feathers, and never exceeding six and thirty, which it spreads like that of a turkey-cock, raising it up, so that it almost touches the head: when too crowded with feathers, it frequently drops its tail, which is so great an imperfection as never to be overlooked, be all the other properties of the bird ever so perfect: a very large-tailed bird of this species, which carries its tail according to the rules of the fancy, is of very great value. Though the general colour of its plumage is entirely white, there are yellow, red, blue, and black pieds. The cut is an excellent likeness of the very beautiful bird from which it was taken.



THE NARROW-TAILED SHAKER.

Opinions are divided concerning this pigeon; some say, it is a distinct species; others, that it is only a breed between the broad-tailed Shaker, and some other pigeon; its back is longer, and its neck shorter and thicker than that of the bird last described: it has also a less number of feathers in its tail, which it does not spread out so much, but lets them fall one over the other, like a fan when three parts opened. It is usually white, though there are some of different colours, and it is said, that almond birds of this sort have more than once been met with.

THE LAUGHER.

This pigeon was brought into Europe from Palestine. In shape and make it resembles a middle-sized Runt; its plumage is generally red-mottled, but sometimes blue; it has a very bright, clear, pearl eye, inclining to a white. When the cock begins to seek the hen, he has a rough kind of coo, like the bubbling of water poured from a jug, and then makes a rattling noise, very much like a gentle convulsive laugh: from this the bird derives its name.

THE JACOBINE.

This bird, when good, is very scarce. The real Jacobine, or **Jack**, as it is sometimes called, is a remarkably small pigeon: it has a range of inverted feathers on the back of its head, which turns toward the neck, like the cap or cowl of a monk; hence its name of Jacobine, or Capper. This range is called the hood, and the more compact and close it grows to the head, so much more does it enhance the value of the bird; the lower part of it is called the chain, and the feathers, which compose it, should be long and thick. The Jacobine has a very small head, a short spindle beak, and clear pearl eyes. There are yellow, red, blue, and black Jacobines; the yellow-coloured birds always claim the precedence; yet, of whatever colour they be, they must always, according to the fanciers, have a white tail and flight, and a clean white head. The legs and feet of some of these birds are covered with feathers.

THE RUFF.

This bird has been frequently sold for the Jacobine; but the Ruff has a longer beak, a larger head, and is altogether a larger pigeon: the chain does not flow so near the shoulders of its wings: both that and the hood are longer, but they are not so close and compact as those of the Jacobine.

THE CAPUCHIN.

This bird has a larger beak, and is not so small in its body as the Jacobine; it has no chain, but a very pretty hood, and is in plumage, and other properties, like the Jacobine: some assert it to be a distinct species; others say it is a mixed breed, between a Jacobine and some other pigeon.

THE OWL.

The Owl is rather less than a Jacobine, with a gravel eye and a very short crooked beak, much resembling that of an owl; from which circumstance this bird derives its name. The purle of the Owl is rather larger and expands more like a rose than that of the Turbit; but, in other respects, this bird is so very like the Turbit, the beak excepted, as to render any further description needless. Particular care ought to be taken that the breeding places of these birds be dark and private; for the least noise affrights them, and, when disturbed, they fly off their eggs.

THE TURBIT.

This pigeon is very little larger than a Jacobine: it has a round head, and a tuft of feathers growing from the breast, which opens and spreads both ways like the frill of a shirt; this is called the purle: it has also a *gullet*, which reaches from beak to purle; and it is admired according to the largeness of its purle, and shortness of its beak. There are yellow, dun, red, blue, black, and some few checkered, Turbits. The back of their wings and tails should be of one colour, the yellow and red-coloured ones excepted, whose tails should be white: there ought to be bars of black across the wings of the blue-coloured ones, but the rest of the body and flight feathers ought to be white; and the fanciers term them yellow-shouldered, blue-shouldered, &c. according to their colours. They become very fine flyers, if properly trained when young. Some of this species, of a uniform colour, such as black blue, or white, have frequently been mistaken and sold for Owls.

THE SPOT.

This bird takes its name from a spot just above the beak: the tail feathers are, for the most part, of the same colour with the spot; the body is generally white. The tail and spot of these birds are, generally, either yellow, red, or black; and sometimes, but very rarely, blue; they always breed their young ones of their own colours.

THE HELMET.

The Helmet is rather larger than the Nun; the head, tail, and flight, are generally uniform; either yellow, red, blue, or black; all the rest of the body is usually white; it has no hood, but its head is ornamented with a fine, soft tuft of feathers, of a different colour from those of the body, and slightly resembling the helmet. Helmets are pretty birds, and tolerably good nurses; but they are by no means remarkable for good flying, and have never, we believe, been in great fashion: like most of the minor varieties, they are esteemed only by a few persons: the fanciers, who breed Tumblers, Carriers, or Croppers, think but little of them.

THE BARB.

This pigeon was, originally, a native of Barbary: it is rather larger than a Jacobine, has a short thick beak, with a small wattle, and a naked circle of thick, spongy, red skin round about its eyes: when the feathers of the pinion incline to a dark colour, the irides of its eyes are pearl; but when the pinion feathers are white, the irides are red, as in some other birds: the wider the circle of flesh round the eye spreads, and the redder it is in colour, the greater is the value set upon the bird: this circle is very narrow, at first, and does not arrive at its full size till the bird is four years old. Some of this species are ornamented with a pretty tuft of feathers, sprouting from the back part of the crown of its head, resembling that of the Finikin. The plumage of the Barb is either dun or black: there are pieds of both these colours, but little value is placed on them, as they are supposed to be half-bred birds. This cut is also taken from a living bird.

THE MAWMET.

The Mahomet, by corruption Mawmet, is of a cream colour, with black bars across its wings; though the outside, or surface of the feathers, is of a cream, yet that part next the body is of a dark, sooty colour, as are also its skin and flue feathers. It is about the size of a Turbit, and, instead of a frill, has a fine gullet, with a handsome seam of feathers. Its head is thick and short; it has an orange-coloured eye, encompassed with a small naked circle of black flesh; it has a small black wattle on its beak, which is short and thick, like that of a bulfinch.

CONCLUDING OBSERVATIONS.

Having now gone through the different varieties of the pigeon tribe, we shall conclude with what we consider a useful hint or two, to the purchasers or breeders of these beautiful birds. In the first place, we advise them, when buying for stock, to beware with whom they deal. It would be absolutely impossible for us to enumerate the numerous tricks that are played off to deceive the unwary, by the pigeon-dealers of the metropolis. If you are desirous of obtaining valuable pigeons, it would be well for you, if possible, to obtain the assistance of some experienced

friend in making your purchases. There is not one-tenth part so much jockeyship (" to compare small things with great") among horse-dealers as pigeon-sellers; it is, therefore, highly necessary that great caution should be used when bargaining with them.

If you are desirous of having a flight of pigeons, or even of suffering your birds occasionally to leave the loft, inquire into the character of those persons in your neighbourhood who keep pigeons. If any one of them be in the habit of trapping stray birds, it will be exceedingly ridiculous in you, if you are inclined to keep pigeons, ever to suffer them to go out of your loft; for, if you do, they will, most likely, be soon thinned off.

Lastly, we advise the young fancier by no means to begin with any of what are called "The Toys;" such as Barbs, Spots, Mawmets, &c.; they are neither striking in the loft, nor on the wing: neither is it worth his time or attention to breed such common birds, as, being of no beauty or value, are of no use but for

A Pigeon Pie.

BANTAMS.

—— Proud of his plumage and his spurs,
The feathered coxcomb struts, gallant and blithe
As any beardless Cornet of Dragoons.

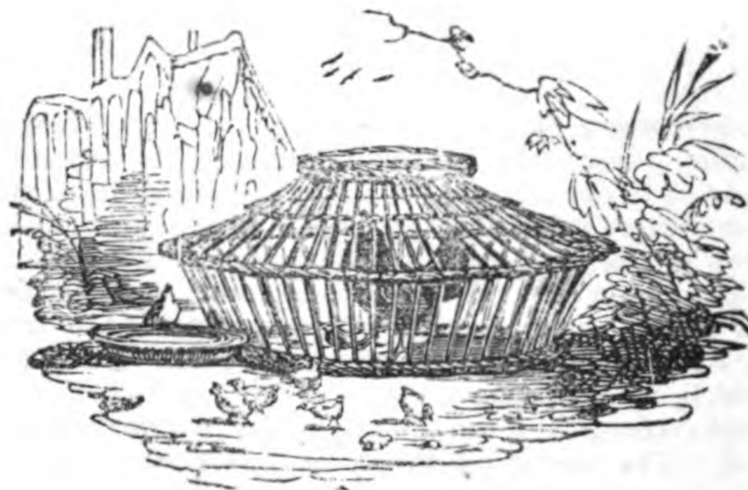
SEVERAL gentlemen of consequence have, for some years past, entertained, and still do entertain, a fancy for these beautiful little birds. A handsome Bantam cock, possessed of all the properties in perfection, is one of the prettiest of domestic birds. He should have a rose-comb, a well-feathered tail, full hackles, a proud, lively carriage, and ought not to weigh more than a pound. The nankeen-coloured and the black are the greatest favourites: if of the latter colour, the bird should have no feathers of any other sort in his plumage. The nankeen bird should have his feathers edged with black, his wings barred with purple, his tail-feathers black, his hackles slightly studded with purple, and his breast black, with white edges to the feathers. The legs should be clean, bright, and perfectly free from feathers. The hens should be small, clean-legged, and match, in plumage, with the cock.

The diseases to which chickens are most liable are the pip, the chip, and the roup; which latter also affects full-grown fowls, and is frequently

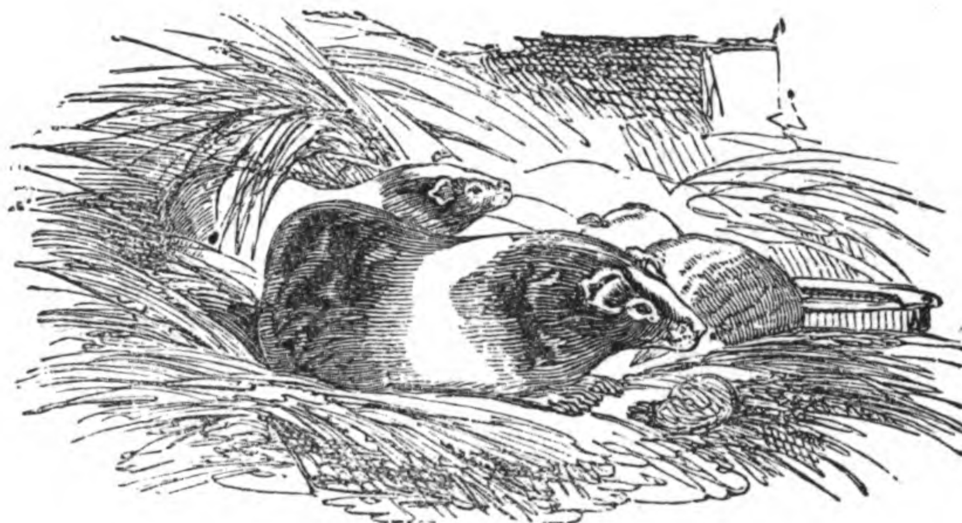
fatal. The pip is a white skin growing upon the tip of the tongue; it should be scratched off with the nail, and the part rubbed with a little salt. When affected by the chip, the chickens sit pining and chipping in corners, apparently dying with cold. Warmth, and a little mustard or black pepper in the water, are, if any, the only restoratives. For the roup, warmth is also necessary; the nostrils should be well washed out with some warm water; and pills, made of chopped rue and butter, be given to them daily.

Bantams are fed, as other fowls, on barley, oats, &c. A warm, dry, and airy place should be chosen for their habitation; and, if possible, they should be permitted to roam in the open air by day; the house should be fitted up with perches, and square boxes for nest-holes, in which some soft hay should be placed. Put a piece of chalk in each box, for a nest egg. Take the eggs away, regularly, as they are laid; and, as soon as the hen manifests an inclination to sit, put her in a quiet nest-box, apart from her companions, with seven, nine, but not more than eleven eggs. The period of incubation is twenty-one days. While the hen is sitting, she should have food and water placed near her nest. Grits, chopped curd, and eggs boiled hard, and cut very small, are the best food for the chickens: as they grow up, you can bring them, by degrees, to tail-wheat, barley, or whatever food you may give the old birds. It is essential that the house be kept clean; and pure water should be regularly supplied to all the fowls, but most especially to

The Hen and Chickens.



GUINEA PIGS.



"A rat without a tail."
MACBETH.

THESE little animals were originally natives of Brazil, but they have long been introduced to this and other European countries. They propagate in temperate, and even cold climates; and would be exceedingly numerous, had they not, like most other animals whose produce is abundant, a great number of enemies. The males frequently devour their own offspring, which also suffer much from cats, &c. It is said, however, that rats will carefully avoid them; and under this idea, they are frequently bred by rabbit-fanciers, for a protection to their young stock against those destructive vermin. In a rabbit-house they are by no means troublesome, as they may be suffered to run loose under the lower tier of hutches, and will feed on the waste food, which is spilled about the floor. If kept up, through choice or necessity, they will do best in hutches similar to those made for rabbits; they need not, of course, be of such large dimensions. They will eat bread, grain, and, in fact, whatever is commonly given to rabbits; tea-leaves, however, they seem to prefer to all other food, but they ought not to be kept constantly on them.

They breed, according to some naturalists, at two months old, and, it is said, have from four to twelve young ones at a time: for our own part, we have frequently known them to have two, and never more than six, in a litter. In size they are considerably less than a rabbit; the upper lip is only half divided; they have two cutting teeth in each jaw, and their ears

are broad and erect. They are of varied colours, white, black, and fawn; the tortoise-shell, (*i. e.*) a mixture of the three colours, is generally preferred. Some of the white ones have red eyes, similar to ferrets and white rabbits. Their flesh is eatable, but by no means good; in this country they are never used for the table, and have been tasted only, it is presumed, from motives of curiosity. They are perfectly harmless, and, unless it be true that they keep rats away from rabbit-hutches, altogether useless. They may be bought at the shops of the rabbit or pigeon dealers, at from sixpence upward, according to their age, shape, and colour.

Nature, which has so abundantly provided the Cape of Good Hope sheep with tails, that the farmers, it is said, are frequently obliged to provide small waggons to support them, has left the little Guinea pig totally destitute of this usual ornament to the hind quarters of animals. Were it not for their colour, they might, indeed, be properly compared to

"A Rat without a Tail."

DRAUGHTS.

To teach his grandson Draughts, then,
His leisure he'd employ,
Until at last the old man,
Was beaten by the boy.

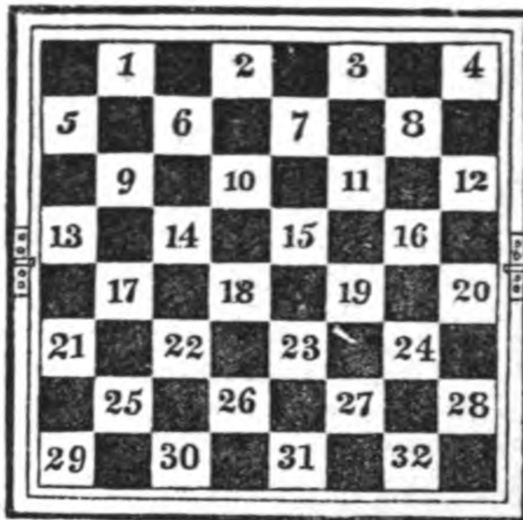
Draughts is a game which it is well to learn prior to commenc hess; though by far inferior to that noble pastime, it is at once unobj tionable and amusing. As in the case of chess, bets are seldom made upo the game of Draughts; it cannot, therefore, be deemed, in any measure conducive to gambling, which we most earnestly entreat our young readers, on all possible occasions, to avoid, as they value their present comfort and future welfare.

The game of Draughts is said to be of great antiquity, but we cannot discover that it was much known in Europe until the middle of the sixteenth century. In the year 1668, an elaborate treatise on the game was published by a Parisian professor of mathematics, named Mallet. Mr. Payne, a celebrated writer on this subject, is said to have copied many of Mallet's games; but both Payne and Mallet have been materially improved upon by a later writer, Mr. Sturges. The present treatise, we trust, will render any reference to the above, or any other writers upon

Draughts, superfluous, except to the most curious and finished adepts in the game.

RULES FOR PLAYING.

In playing Draughts, the table must be placed with an upper white corner toward the right hand; and for the sake of playing the following games and preliminary practice, the numbers may be written upon the board itself, near a corner of each square; or a table may be drawn upon a card, and the squares numbered, as in the figure: such a table will be a ready guide to any move directed.

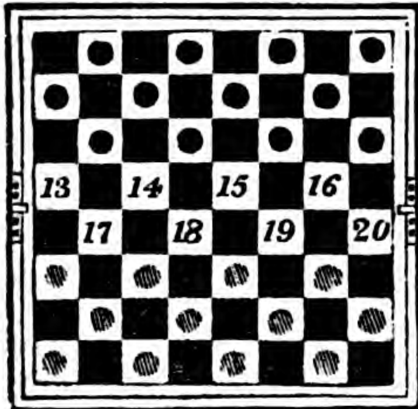


The game is played by two persons, each of whom takes a set of twelve men of different colours, generally white and black, but they may be of any colours, according to the fancy. One player, of course, takes all the men of one colour, and the other all those of the other colour. The black pieces are to be placed on the first twelve white squares, and the white on the last twelve white squares, or *vice versâ*.

When the pieces are thus placed, each player alternately moves one of his men forward, angularly, to the next white square; and when moved to a square adjoining to an enemy, and another square next angularly behind the man so moved is unoccupied at that time, or afterward becomes so, then the man so placed or left unguarded must be captured by the enemy, whose man leaps over to the vacant square, and the prisoner is taken off the board. The same practice is immediately to be repeated in case the man effecting a capture thereby gets situated angularly fronting an enemy and is unguarded behind. When any man gets onward to the last row opposite to that from whence his colour started, then he becomes a king, and is crowned by his adversary placing another man, previously taken prisoner, upon him; he may then move and take either backward or orward.

In order that the moves may be more perfectly understood, we request ttention to the following directions: the men should be placed on the oard precisely as they appear in the cut in the next page, with this difference only, that the white pieces may be placed where the black stand, nd the black where the white are, according to the fancy of the players.

The men being thus posited, we will suppose that white has the first move. As only one of the front rank can be moved, he must either move the man on 21, to 17; that on 22, to 17 or 18; that on 23, to 18 or 19; or, that on 24, to 19 or 20. From 22 to 18 is supposed to be the best first move; we will, therefore, imagine that white makes it. It is black's turn to move a piece; he, like his adversary, can only advance one of his front rank men; he may move the man on 9, to 13 or 14; that on 10, to 14 or 15; that on 11, to 15 or 16; and that on 12, to 16 only. The white having moved from 22 to 18, the black then may move, if he please, from 11 to 15. In the next move, the white man on 18, will take the man so placed by black on 15, by leaping over his head into 11. It is now black's turn to move, and he, in return, can take white's man which stands in 11, by either of the men standing on 7 or 8. In case he makes the capture with 7, he jumps over the head of the man to be taken, into 16; if he prefer taking him with 8, the move, for that purpose, is from 8 to 15. An opportunity, here occurs, of giving a practical explanation of the huff. Supposing, when black had moved from 11 to 15, white had omitted to take him, in the manner we have just explained, and made some other move, white, in this case, would have "stood the huff:" that is, black might have taken away the white man that stood on 18, or compelled white to have taken him, which he pleased. This is "standing the huff;" and, be it recollected, that so taking off the man from 18, is not to be considered as a move, black having his move after having so done, before white can move again.



In case the game were in a more advanced state, and that the black man, which, at the beginning, stood on 4, had been removed, the white man on 18, instead of taking only the black man on 15, would have taken the black man on 8, in addition, by leaping over 15 into 11, and over 8 into 4, which would be reckoned as one move. In this case, the man in 4, having reached one of the back squares of the enemy, (1, 2, 3, and 4,) he becomes a king, and black crowns him, by placing one of white's captured men on his head. The piece can now move, and take either backward or forward, and is of great importance. As many of the black men as, in their turn, reach either of the squares, 29, 30, 31, 32, immediately become kings, as in the case of the white men reaching 1, 2, 3, or 4, and, of course, have equal powers.

We will now give a practical example or two of the "kingly powers" of these "crowned heads." Supposing a black king stood on 29, a white king on 25, a white man on 18, another white king on 19, and a third white king, or a white man, on 27,—if it were black's move, and the board was clear, except only of the pieces that are mentioned, he would take them all thus: from 29 to 22, taking 25; from 22 to 15, taking 18; from 15 to 24, taking 19; and from 24 to 31, taking 27. If, however, the black king only take the first, second, or third of these pieces, he would stand the huff, (i. e.) the adversary might remove the black king off the board, or compel him to take the piece or pieces in his power, at his, the adversary's, pleasure.

To shew the difference between the moves of a man and a king more clearly, suppose, instead of a king, black had only a man on 29, in that case, the man might go to 22, taking 25, and from 22 to 15, taking 18; but here his exploits would end, as he could not move backward from 15 to take 19, but, on the contrary, he must rest on 15; and, at the next move, would himself be taken, by the white king, on 19, jumping over his head into 10.

When all the men, on one side, are taken, or so hemmed in by the opposite colour, that they cannot move, the person who has played them is beaten. If, at the latter end of the game, one, two, or three, more or less, of each colour, be left on the board, and neither can prevail on the other to risk, or if one who is weaker than, or has not the move of the other, be determined to go to and fro in safe squares, where he can never be taken, the game is called drawn, and given up, neither party winning. The way to give the finishing stroke to a game, where one colour has two kings, and the other but one, or where one is, in any respect, a little stronger than the other, will be found in the following pages; as also hints for a weak colour making a drawn game, when the stronger adversary is in such a situation, as to be unable to get out his pieces to make an attack on the weaker party.

LAWS OF DRAUGHTS.

The following are a set of laws for the game, which have been sanctioned by the first players of Draughts in the kingdom.

1. Each player takes the first move alternately, whether the last game be won or drawn.
2. Any action which prevents the adversary from having a full view of the men is not allowed.
3. The player who touches a man must play him.
4. In case of standing the huff, which means omitting to take a man when an opportunity, for so doing, occurred, the other party may either take the man, or insist upon his man, which has been so omitted by his adversary, being taken.

5. If either party, when it is his turn to move, hesitate above three minutes, the other may call upon him to play; and if, after that, he delay above five minutes longer, then he loses the game.

6. In the losing game, the player can insist upon his adversary taking all the men, in case opportunities should present themselves for their being so taken.

7. Persons not playing are not to advise, or in any manner interfere with the game of either party.

8. To prevent unnecessary delay, if one colour have no pieces but two kings on the board, and the other no piece but one king, the latter can call upon the former to win the game in twenty moves: if he do not finish it within that number of moves, the game is to be relinquished as drawn.

9. If there be three kings to two on the board, the subsequent moves are not to exceed forty.

GAMES FOR PRACTICE.

It is now time for us to lead our pupil from theory to practice; for this purpose we shall proceed to lay before him a few games and situations, which he can either play alone, or with another, on a marked board, such as we have previously described. And here we feel it necessary to remark, that it will not be sufficient merely to go over the moves indicated in the following pages; by so doing, much time will be lost, and little learnt: it is indispensable, if the learner be desirous of obtaining any benefit from these games, that he should carefully look to each series of moves, and, if possible, improve upon them as he goes on. The position of a single piece may totally defeat the best attacks, and it is not to be supposed that any two players will ever, except by some extraordinary accident, make all the identical moves, set down in the ensuing games. Still, however, much may be done by a few schemes of moves; especially, as toward the end, the positions of the men are very frequently similar, and we feel convinced, that by playing the following few games, (provided proper attention is given to them) an insight into the game may be acquired sooner than by the longest essay on the subject. We strongly recommend the young Draught-player, if he be desirous of speedily acquiring some proficiency in the game, to make himself a perfect master of the ends of, as well as any nice situations that occur in, the following games, so as to be able to play them, as it were, whenever an opportunity may occur. It is the advice of many experienced Draught-players, that learners should provide themselves with a common-place book for noting down any particular situations that may happen in their progress, or such masterly moves, by older hands, as they may have the good fortune to witness. Books for this

purpose, containing representations of the board, so that the men placed in the proper positions for the moves can be marked in, may be had, reasonably, at the ivory turners. A book of this sort, containing charts of games, and memoranda of moves, by experienced persons, would be invaluable to the young Draught-player. We shall reserve any further remarks on Draughts for our concluding observations, and now proceed at once to the tables and games.

The letters, N. C. F. T. at the head of each of the games, stand for *number*, *colour*, *from*, *to*.

GAME 1, in which White loses by the twelfth move.

N	C	F	T	N	C	F	T
1	B	11	15	28	W	30	25
2	W	22	18	29	B	29	22
3	B	15	22	30	W	26	17
4	W	25	18	31	B	11	15
5	B	8	11	32	W	20	16
6	W	29	25	33	B	15	18
7	B	4	8	34	W	24	12
8	W	25	22	35	B	18	27
9	B	12	16	36	W	31	24
10	W	24	20	37	B	14	18
11	B	10	15	38	W	16	11
12	W	27	24	39	B	7	16
13	B	16	19	40	W	20	11
14	W	23	16	41	B	18	23
15	B	15	19	42	W	11	8
16	W	24	15	43	B	23	27
17	B	9	14	44	W	8	4
18	W	18	9	45	B	27	31
19	B	11	25	46	W	4	8
20	W	32	27	47	B	31	27
21	B	5	14	48	W	24	20
22	W	27	23	49	B	27	23
23	B	6	10	50	W	8	11
24	W	16	12	51	B	23	18
25	B	8	11	52	W	11	8
26	W	28	24	53	B	18	15
27	B	25	29	&c	W	loses.	

GAME 2, a drawn game.

N	C	F	T	N	C	F	T
1	B	11	15	28	W	30	25
2	W	22	18	29	B	6	9
3	B	15	22	30	W	13	6
4	W	25	18	31	B	1	10
5	B	8	11	32	W	22	13
6	W	29	25	33	B	14	18
7	B	4	8	34	W	23	14
8	W	25	22	35	B	16	30
9	B	12	16	36	W	25	21
10	W	24	20	37	B	10	17
11	B	10	15	38	W	21	14
12	W	21	17	39	B	30	25
13	B	7	10	40	W	14	9
14	W	27	24	41	B	11	15
15	B	8	12	42	W	9	6
16	W	17	13	43	B	2	9
17	B	9	4	44	W	13	18
18	W	18	9	45	B	15	15
19	B	5	14	46	W	6	2
20	W	24	19	47	B	7	10
21	B	15	24	48	W	2	6
22	W	28	19	49	B	10	14
23	B	14	17	50	W	6	9
24	W	32	27	51	B	25	21
25	B	10	14	52	W	31	26
26	W	27	24	53	B	14	17
27	B	3	7	&c.	W	drawn.	

GAME 3, which is lost by 30th move.

N	C	F	T	N	C	F	T
1	B	11	15	5	B	10	17
2	W	22	17	6	W	21	14
3	B	9	13	7	B	8	11
4	W	17	14	8	W	24	19

GAME 3, continued.

N	C	F	T	N	C	F	T
9	B	15	24	25	B	16	20
10	W	28	19	26	W	31	27
11	B	11	16	27	B	13	17
12	W	25	21	28	W	30	26
13	B	6	9	29	B	1	6
14	W	29	25	30	W	18	15
15	B	9	18	31	B	20	14
16	W	23	14	32	W	27	29
17	B	16	23	33	B	7	10
18	W	26	19	34	W	14	7
19	B	4	8	35	B	2	27
20	W	25	22	36	W	21	14
21	B	8	11	37	B	6	9
22	W	22	18	38	W	32	23
23	B	11	16	39	B	9	27
24	W	27	23	40	W	loses.	

GAME 4, which is lost by 12th move.

N	C	F	T	N	C	F	T
1	W	22	18	19	W	21	17
2	B	11	16	20	B	1	6
3	W	25	22	21	W	17	13
4	B	10	14	22	B	3	7
5	W	29	25	23	W	28	24
6	B	16	20	24	B	12	16
7	W	24	19	25	W	26	23
8	B	8	11	26	B	8	12
9	W	19	15	27	W	23	19
10	B	4	8	28	B	16	23
11	W	22	17	29	W	31	26
12	B	7	10	30	B	7	10
13	W	25	22	31	W	26	19
14	B	10	19	32	B	11	16
15	W	7	10	33	W	18	11
16	B	6	15	34	B	16	23
17	W	23	7	35	W	27	18
18	B	2	11	36	B	loses.	

CONCLUDING REMARKS.

Even those who have some knowledge of the game of Draughts will, we have no doubt, derive much benefit from a perusal of the foregoing pages, and become enabled to defeat those by whom they have previously been beaten. A person who has never acquired any insight into the game may, we flatter ourselves, from the care which we have taken in preparing the treatise, acquire considerable proficiency, by a proper attention to our rules and instructions.

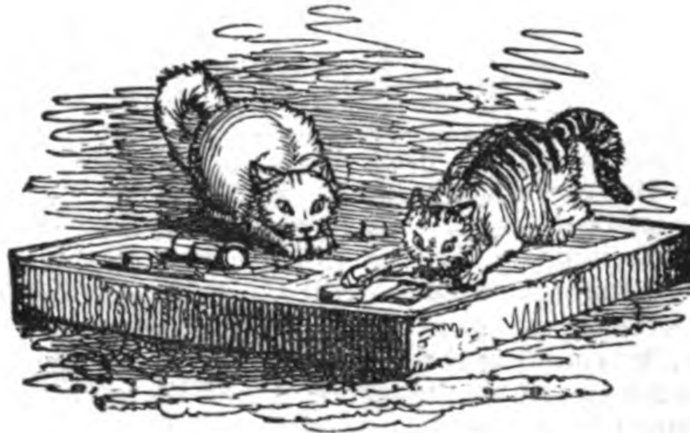
The few remarks which we are about to make, as to one circumstance in Draughts, could not, we conceive, be so aptly introduced anywhere else as here; we allude to the importance of having the move upon an antagonist. The value of this will, no doubt, have frequently occurred to the reader, in the course of the preceding games; but there are situations, when it is not only useless, but detrimental. To have the move when your men are in a proper position, upon an open board, will often, in a short time, give you the power of forcing your adversary into such a situation as will render his defeat certain; but, having the move, when your men are huddled in confusion together, and you are unprepared to point an attack from any quarter, that is to say, when you are strong in number, but powerless in position, will, not unfrequently, cause you to lose the game.

In order to know whether any one of your men have the move over one of your adversary's, you must carefully notice their respective positions, and, if your opponent have a black square on your right angle under his man, you have the move upon him. This is a general rule, and will apply to any number of pieces. To illustrate it with an instance: if white have a man on 22, it being his turn to play, and black's man be on 11, white has the move. A modern writer on this subject, gives another method of ascertaining whether a party, whose turn it is to play, has the move; namely, by counting the squares and the men; and if the squares be odd, and the men even, or the men odd, and the squares even, then the party whose turn it is to play has possession of the move: thus, if there be a black man on 19, on 26 a white king, on 28 a black king, and on 32 a white man, and white have to play, he has the move, and may certainly win the game, if he act judiciously; the opposite party's men being even, and the white squares, between them and his own, odd; there are three white squares from the black king on 28 to the white king on 26, (viz. 24, 27, and 31,) and between the black man on 19 and the white man on 32, two white squares, 23 and 27, making together, five. White begins by moving his man to 27, the black king goes to 32, the white man proceeds to 24, and is taken by the black man on 19; the white king now goes to 23; the black king must next step to 27, having no other move, (his man being on 28,) and is taken by the white king, who thus gets into 32, and wins the game, as black cannot move his man.

Persons who know but little of this game are sometimes found talking lightly of it, as a trifle undeserving of attention; to such speakers we quote the following passage from Dr. Johnson's dedication of Payne's Book on Draughts:—" Triflers may think or make any thing a trifle; but since it is the great characteristic of a wise man to see events in their causes, to obviate consequences, and ascertain contingencies, your lordship will think nothing a trifle by which the mind is inured to caution, foresight, and circumspection."

In conclusion, we beg to assure our young readers, that simple as it may appear, they will never be able to attain any proficiency in this game, without some study, and much caution. Every move should be well considered before it is taken; for, although it does not require one tenth of the attention necessary to the acquirement of chess, yet it is totally impossible for our young friends to derive much amusement at the game, if they move the pieces as carelessly as a couple of

Kittens at Play.



LEGERDEMAIN.

Leaving, at length, the top and taw,
We magic learnt from sage Breslaw,
Flockton, Katterfelto, Jonas,
Gyngell, Moon, Prudhoe, and Comas;
As conjurors at once to prove us,
We vomit fire like Mount Vesuvius.

CIRCUMSTANCES of importance, after man has arrived at the age of maturity, frequently make a much weaker impression on his memory than the trifling occurrences of his youthful days. The latter engrave all their little histories on the "tablet of the brain," and retain all their original distinctness, years and years after those which have subsequently taken place are past away and forgotten,—or, at least, until they have left out a dim and fast-fading record in the "chamber of the mind." We cannot, if our life depended on it, remember where we first saw the greatest author of the day,—nor when, within three or four years, we first shook the "great captain of the age" by the hand; but the memory of that moment, which revealed to our delighted young gaze the mountebank in all his glory of grimace, is as fresh within us, nay, more so, than if it were only a fruition of the last past hour. The recollection of an event, one of the most weighty and influential, perhaps, of our whole life, which took

place some ten years ago, or thereabout, has almost departed from us; we cannot, mentally, and without a blunder, con it over fact by fact in regular order, as we often do the first exhibition of Legerdemain that we ever witnessed;—we see only disjointed portions of it huddled confusedly together—the shadow of the event, vague and indistinct as the morning vapour, flits occasionally before our mind's eye, but the substance itself is almost buried in oblivion;—while every feature of that seeming magician, who swallowed fire—kept it alive and brilliant below the surface of water —enacted other feats of apparent dominion over the elements,—caused dumb figures to give proper answers to all sorts of questions,—padlocked an urchin's cheek,—and in a hundred ways cheated our eyes, before we had well worn out our second suit of boy's clothes,—is as well remembered, as though we had never ceased to look upon him. He has long since been dead,—his body is no more; but in an instant, we can conjure up his image, as he stood before us, smiling contentedly, while bathing his hands in molten lead! The very order of the wonders he performed has not yet escaped us, and we doubt not, but that should we live to be grey-headed, we shall ever be able to tell the colour of his eyes,—the precise position of a mole which he had on his face,—the first, second, third, fourth, and so on, up to the twentieth feat which he exhibited. He was an itinerant quack doctor's Jack Pudding,—a mountebank, as we afterwards ascertained; but, at that time, we had not the least idea of who or what he could be. It was evident, to our unpractised eye, that he was not a mere mortal; for, no man, as we thought, innocent as we were, could by any possibility conjure a shilling, which we held fast in our hand, into one of our little school-fellows' pockets, or make a haberdasher's shop of his mouth, and draw from it dozens upon dozens of yards of ribbons of all colours, and at the option of those around him; we could not conceive that human flesh could withstand red-hot iron, or that any power short of witchcraft could remove a thing from before our eyes, which were all the time earnestly fixed on it, without our seeing its motion. What virtue was there, we reasoned thus, in "Hiccius doctius!" when uttered by the lips of another?—But no sooner did he pronounce those mysterious words, than money danced about as if it possessed life. Would "Crinkum Bovis, Domine Jovis!" restore a chicken to life after its head was cut off, were the phrase to come from any but him?—It was clearly impossible. What could he be then? Certainly not a mere mortal; and if not—what was he? Here we were as much involved and puzzled in conjecture, as a grave philosopher upon some learned and abstruse problem. The feat which mystified us most was this:—He apparently devoured a piece of raw meat, and then actually, as it seemed to us, swallowed a quantity of fire, as he said, to dress it—thus making his stomach its own cook, and his inside, a kitchen!

Remembering, as we do, the delight we felt at this, our first glance at Legerdemain, and the pleasure which we afterwards derived on sundry occasions during the youthful period of our life, from similar, but still more astonishing and scientific exhibitions, as well as the gratification it frequently afforded us, when a boy, to play off certain feats of conjuring, which we had learnt from a highly-talented professor; and knowing, as we well do, that the youthful mind is, as ours once was, fond of this sort of recreation, we shall bestow even more than our usual pains in making this article as rich and complete as can be consistent with the nature of our work. We think that it would be by no means rash in us to pledge ourselves, that there is no superior treatise on Legerdemain to be obtained; it is true, that there are a few more bulky ones, but they contain so much useless matter, and accounts of tricks which it is either impossible to perform at all, or, at any rate, by the rude, antiquated instructions which they afford, that one half of them is useless. The following pages will, we trust, be found to contain every thing that is valuable in this art, unencumbered with dross. We have brought a tolerable share of knowledge on this matter, to the preparation of "Feats of Legerdemain;" we have also gleaned the cream of several old and scarce works, and translated many choice recreations from foreign publications on this subject. Several friendly contributions have been afforded to us; and what is of the greatest value, we have been favoured with the assistance of some eminent and highly popular professors of the art; so that, we are enabled to present to our young readers a collection of conjuring tricks, which is at once copious and select. Our object has been, not only to facilitate the acquisition of such a variety of amusing feats, as will render him, who is enabled to exhibit them, a parlour magician, but also to instruct our young readers in the mode of performing several master-pieces of Legerdemain, which require considerable agility, and expensive apparatus, so that they may understand the means of effecting the apparent wonders displayed by the public professors of the art. In addition to the Feats of Legerdemain, we have devoted several of our pages to descriptions of various Automata and Androides, which have been exhibited to the public. The Marionettes, or figures, whose motions are governed by strings, are too simple for a lengthened notice; it is true, that, among the ancients, they were deemed of importance sufficient to be exhibited in their public shows,—but they are now mere toys, of which every lad knows the construction; for there are few who have not at one time or other possessed, played with, and dissected a pasteboard harlequin, or a bleeding nun. An improvement has lately been made on these juvenile Marionnettes, which, while we are on this subject, is perhaps deserving of notice. The limbs, body, and head of a comic figure, are drawn and coloured on a piece of paper, cut out, and gummed separately to a piece of card of similar dimensions; they are then

united by bits of thread, which, acting as hinges, suffer them to play loosely, and in various directions, when the body is moved. A piece of dark twine is fastened, by its middle, to the back of the body; the ends are tied, by a boy, just below his two knees; he sits, on a low stool, in a dark place, with a light on the ground, a little in front of him—the spectators standing at some distance from the light. By moving his knees quickly to and from each other, a variety of grotesque motions is given to the Marionnette, which dances, apparently, without assistance.

To render the recreations more easy of attainment, we have adopted a plan of classification, so that they may be proceeded in gradually, from the most simple tricks to those which are more complicated, and consequently, more difficult. We doubt not, but that this part of the work will be a favourite amusement with our readers, and that it will afford much innocent amusement during the long evenings of winter, around the comfortable parlour fire, to many a little social circle. Such is our end and intent; and we assure those who amuse themselves, whether alone or in society, with these Feats of Legerdemain, that they are indulging only in what is often instructive, generally agreeable, and always innocent.

We must detain our readers from the practical instructions, to make a few more observations, which are necessary, as well on our own behalf as for their benefit. We wish it to be remembered, that in addition to the matter contained under this title, many excellent scientific recreations, which will be accounted capital conjuring tricks, are to be found in the preceding pages, among the Chemical, Arithmetical, Optical, and Magnetic Amusements, and elsewhere in the work; where they are more properly placed than they would be here; and to these we take leave to refer those who have an inclination to become "Magiciens de Societé." The Wonderful Swan, for instance, under the head of "Magnetic Amusements," was a favourite trick with the celebrated Breslaw, who used to make it spell any person's name at command, by having the inside edge of the basin, in which it floated, marked with the twenty-four letters of the alphabet. He had a powerful magnet concealed about his person, and the swan, of course, followed his motions. Thus, if he wished the swan to spell James, he would first move toward J, and the swan being attracted by the magnet, would drive its bill against the letter; he would then go to A, and so on, till the word was spelt. Breslaw was not a little disconcerted one evening in the Haymarket. The late Sir Francis Blake Delaval, going to see his exhibition, took a magnet in his pocket, and facing the performer on the opposite part of the table, the swan, between the two attractive instruments, became fixed in the middle; the artist, perceiving he could not perform as usual, exclaimed, that there was some one in the room in the secret, and who counteracted his intention. Sir Francis smiled, shewed his magnet, and the trick became no longer wonderful.

TRICKS
EASY OF PERFORMANCE.

THE POISED PENNY.

Place a smooth card on the tip of the middle finger of your left hand, and on it, nicely balanced, and with its centre exactly over your finger's point, a penny-piece. Then, by a smart fillip with the middle finger of your right hand, you may strike away the card from under the penny leaving the latter poised on the tip of your finger. A very little practice will enable you to do this trick without ever failing. The card must be so carefully struck, as to drive it straight off the finger; if you fillip it upward, it will, of course, take the penny with it. *(Vide cut.)*

WATER BEWITCHED.

Pour some water into a plate, light a bit of loosely-crumpled paper and throw it into a glass; then turn the glass upside down, with the burning paper in it, in the plate, and the water will gradually rise from the plate into the glass, until the latter becomes half full, so that the surface of the water it contains is much higher than that of what is left in the plate.

FIRE UNDER WATER.

Fasten a small bit of wood across the mouth of a glass, stick therein a piece of candle lighted, and, with a steady hand, convey the mouth to the surface of the water; then push it carefully down, and the candle will burn under the water; you may even bring the candle up again lighted. In the same manner, you may put a handkerchief, rolled tightly together, and it will not be wet.

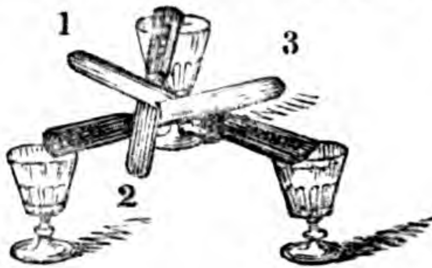
The principal art in performing this trick, consists in the nicety of bringing the mouth of the glass exactly level with the surface of the water; for, if you put it in the least on one side, the water will rush in, and consequently put out the candle, or, in the other case, wet the handkerchief; so that, a nice eye and steady hand are necessarily requisite for this performance

THE SENTINEL EGG.

Lay a looking-glass upon an even table; take a fresh egg, and shake it for some time, so that the yolk may be broken and mixed up with the white. You may then, with a steady hand, balance it on its point, and make it stand on the glass. This it would be impossible to do while the egg was in its natural state.

THE BRIDGE OF KNIVES.

To erect the bridge of knives, you must first place three glasses, or small cups at the corners of a supposed triangle, and about the length of one of the knives you use distant from each other, upon a table, the floor, or any even surface. Then take three knives, and arrange them upon the glasses in the manner represented by the cut. The blade of No. 1 (as you may perceive by inspecting the engraving) goes over that of No. 2, and the blade of No. 2 passes across that of No. 3, which rests on that of No. 1. The knives being placed in this position, their blades will support each other.



EATABLE CANDLE-ENDS.

Peel some large apples that are rather of a yellow tint; cut several pieces out of them in the shape of a candle-end, round, of course, at the bottom, and square at the top; in fact, as much as possible, like a candle that has been burnt down within an inch or so. Then, cut some slips out of the insides of sweet almonds, fashion them as much in the shape of spermaceti wicks as you can, stick them into your mock candles, light them for an instant, so as to make their tops black, blow them out again, and they are ready for use. When you produce them, light them, (the almond will readily take fire, and flame for a few moments,) put them into your mouth, chew and swallow them one after another. This may well be called the juggler's dessert.

THE LITTLE FLOATING BEACON.

Fasten a piece of lead to the end of a candle which has been half burnt; place it very gently in the water, so that it may find its proper equilibrium; then light it, and it will burn to the end without sinking.

THE RINGS AND RIBBONS.

Take two pieces of ribbon, precisely alike in length, breadth, and colour; double each of them, separately, so that their ends meet; then tie them together very neatly, with a bit of silk of their own colour, by the middle, or crease made in doubling them. This must all be done beforehand. When you are going to exhibit the trick, pass some rings on the doubled ribbons, and give the two ends of one ribbon to one person to hold, and the two ends of the other to another. Do not let them pull hard, or the silk will break, and your trick be discovered by the rings falling on the ground, on account of the separation of the ribbons. Request the two persons to approach each other, and take one end from each of them, and without their perceiving it, return to each of them the end which the other had previously held. By now giving the rings, which appeared strung on the ribbons, a slight pull, you may break the silk, and they will fall into your hand.

THE THUMB-STRING.

This is a very simple trick, but by performing it quickly, you may surprize and puzzle a spectator very considerably. Wind a piece of string round your thumb, thus:—Let one end of it *(a)* drop between the thumb and fore-finger of your left hand; then wind the other part, which you retain in your right hand, two or three times round your thumb; next, make a little loop *(b)* with the same end, which hold between your finger and thumb. Now let go the end, *(c)* and take hold of the end, *(a)* which you must have left about six or eight inches long, and you may make a spectator fancy you pass it through the loop, and take hold of it again, when so passed through, in the twinkling of an eye. To increase the surprize, you may make the loop as small as possible. This apparent piece of manual dexterity is performed by passing that end of the string marked *a*, as quickly as possible round the top of the thumb, so as to come between the fore-finger and thumb; it will thus get into the loop, and you will seem to have passed the end through it.

WINE UPON WATER.

Half fill a glass with water, throw a bit of the crumb of a loaf into it. about the size of a nut, pour some wine lightly on the bread, and you will see the water at the bottom of the glass, and the wine floating at the top of it.

THE CONJUROR'S JOKE.

Take a ball in each hand, and stretch your hands as far as you can, one from the other; then state that you will contrive to make both the balls come into either hand, without bringing the hands near each other. If any one dispute your power of doing this, you have no more to do, than to lay one ball down upon the table, turn yourself, and take it up with your other hand. Thus, both the balls will be in one of your hands, without their approaching each other.

THE PERILOUS GOBLET.

To fill a glass with water, so that no one may touch it without spilling all the water.—Fill a common wine-glass or goblet with water, and place upon it a bit of paper, so as to cover the water and edge of the glass; put the palm of your hand on the paper, and taking hold of the glass with the other, suddenly invert it on a very smooth table, and gently draw out the paper; the water will remain suspended in the glass, and it will be impossible to move the glass, without spilling all the water.

THE ENCHANTED COCK.

Bring a cock into a room with both your hands close to his wings, and hold them tight; put him on a table, and point his beak down as straight as possible; then let any one draw a line, with a piece of chalk, directly from its beak, and all the noise you can possibly make will not disturb him, for some time, from the seeming lethargy, which that position you have laid him in has effected.

TO LIGHT A CANDLE BY SMOKE.

When a candle is burnt so long as to leave a tolerably large wick, blow it out; a dense smoke, which is composed of hydrogen and carbon, will immediately arise. Then, if another candle, or lighted taper, be applied to the utmost verge of this smoke, a very strange phenomenon will take place: the flame of the lighted candle will be conveyed to that just blown out, as if it were borne on a cloud, or, rather, it will seem like a mimic flash of lightning proceeding at a slow rate

THE WONDERFUL RE-ILLUMINATION.

After having exhibited the trick of lighting a candle by smoke, privately put a bit of paper between your fingers, and retire to one corner of the room with a single candle, and pass the hand, in which you hold the paper, several times slowly over the candle, until the paper takes fire; then immediately blow the candle out, and presently, pass your hand over the snuff, and re-light it with the paper. You may then crumple the paper, at the same time extinguishing the flame, by squeezing it suddenly, without burning yourself. If this trick be performed dexterously, it is a very good one. It is not necessary for the performance of this trick that all the other lights in the room should be extinguished; in fact, the trick is more liable to a discovery in a dark room, than in one where the candles are burning, on account of the light thrown out by the paper while it is burning, previous to the re-illumination.

TO SUSPEND A RING BY A BURNT THREAD.

The thread having been previously soaked two or three times in common salt and water, tie it to a ring, not larger than a wedding ring. When you apply the flame of a candle to it, though the thread burn to ashes, it will yet sustain the ring.

THE ANIMATED SIXPENCE.

To make a sixpence leap out of a pot.—This is done by means of a long black horse-hair, fastened to the rim of a sixpence, by a small hole driven through it. This feat should be done by night, with a candle placed between the spectators and the operator, their eyes being thereby hindered from discerning the deception.

THE FASCINATED BIRD.

Take any bird, and lay it on a table; then wave a small feather over its eyes, and it will appear as dead, but taking the feather away, it will revive again. Let it lay hold of the stem part of the feather, and it will twist and turn like a parrot; you may likewise roll it about, on the table, just as you please.

TO LIFT A BOTTLE WITH A STRAW.

Take a straw, and having bent the thicker end of it in a sharp angle, as in figure subjoined, put this curved end into the bottle, so that the bent part may rest against its side; you may then take the other end and lift up the bottle by it, without breaking the straw, and this will be the more readily accomplished as the angular part of the straw approaches nearer to that which comes out of the bottle. It is necessary, in order to succeed in this feat, to be particularly careful in choosing a stout straw, which is neither broken nor bruised; if it have been previously bent or damaged, it is unfit for the purpose of performing this trick, as it will be too weak in the part so bent, or damaged, to support the bottle.

THE MOVING PYRAMID.

Roll up a piece of paper, or other light substance, and privately put into it any small insect, such as a lady-bird, or beetle; then, as the creature will naturally endeavour to free itself from captivity, it will move its covering towards the edge of the table, and when it comes there, will immediately return, for fear of falling; and thus, by moving backward and forward, will excite much diversion to those who are ignorant of the cause.

THE PAPER FURNACE.

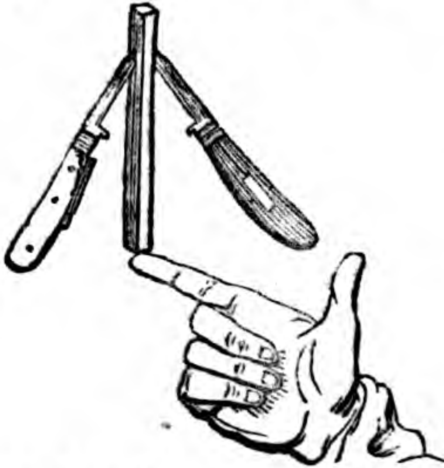
Enclose a bullet in paper, as smoothly as possible, and suspend it above the flame of a lamp or candle; you will soon see it begin to melt and fall, drop by drop, through a hole which it will make in the paper; but the paper, except the hole mentioned, will not be burnt. The art of performing this trick consists in using a smooth round bullet, and enclosing it in the paper with but few folds or uneven places.

THE BOTTLE EJECTMENT.

Fill a small white glass bottle, with a very narrow neck, full of wine; place it in a glass vase, which must previously have sufficient water in it to rise above the mouth of the bottle. Immediately, you will perceive the wine rise, in the form of a little column, toward the surface of the water, and the water will, in the mean time, begin to take the place of the wine at the bottom of the bottle. The cause of this is, that the water is heavier than the wine, which it displaces, and forces to rise toward the surface.

THE BALANCED STICK.

Procure a piece of deal about the length of your hand, half an inch thick, and twice as broad; within a short distance of one end of this piece, thrust in the points of the blades of two penknives of equal weight, in such a manner, that one of them may incline to one side, the second to the other, as represented by the cut in the margin. If its other extremity be placed on the tip of the finger, the stick will keep itself upright without falling; and if it be made to incline, it will raise itself again, and recover its former situation. This is a very pretty performance, and, if properly managed, cannot fail to excite some surprise in the minds of those who behold it for the first time, as the knives, instead of appearing to balance the stick, which they in fact do, will rather appear to increase the difficulty of the feat.



STORM AND CALM.

Pour water into a glass until it is nearly three parts full; then almost fill it up with oil; but, be sure to leave a little space between the oil and the top of the glass. Tie a bit of string round the glass, and fasten the two ends of another piece of string to it, one on each side, so that, when you take hold of the middle of it to lift up the glass, it may be about a foot from your hand. Now swing the glass to and fro, and the oil will be smooth and unruffled, while the surface of the water beneath it will be violently agitated.

THE TRAVELLING EGG.

Take a goose's egg, and, after opening and cleansing it, put a bat into the shell; glue it fast on the top, and the bat will cause the egg to move about in a manner that will excite much astonishment.

THE DOUBLED COIN.

Half fill a glass of water, and put a shilling or a sixpence into it; cover the glass with a plate, upon which, place one hand, while you hold the glass with the other; turn the glass upside down, so that none of the water may escape; place it on a table, and you will see the coin at the bottom, larger than it is in reality, and another will appear, of the natural size, a little above it.

THE TOPER'S TRIPOD.

A trick similar to the Bridge of Knives may be performed by three tobacco-pipes, in the following manner:—Procure three common tobacco-pipes; place the hollow part of the bowl of one of them on the table, as No. 1, and let its stem be supported by another, placed at No. 2; then put the other pipe across Nos. 1 and 2, (as No. 3,) so that its bowl end may support the stem of No. 2, and its own stem rest on the bowl end of No. 3. This little tripod, although constructed of such brittle materials, will, if carefully put together, support a jug of foaming October. When used to shew that it will support a weight, the three bowls should be brought considerably closer together than as represented in the marginal cut, so that the bottom of the jug may rest upon all three of the stems.

THE KNOTTED THREAD.

Considerable amusement, not unmixed with wonder, may be occasioned among a party of ladies, by a clever performance of this trick. It is most frequently performed by a female, but the effect of it is considerably increased when it is displayed by a boy. A piece of calico, muslin, or linen, is taken in the left hand, a needle is threaded in the presence of the spectators, and the usual, or even a double or treble knot made at the extremity of one of the ends of it. The operator commences his work by drawing the needle and the thread in it quite through the linen, notwithstanding the knot, and continues to make several stitches in like manner successively.

The mode of performing this seeming wonder, is as follows: a bit of thread, about a quarter of a yard long, is turned once round the top of the middle finger of the right hand, upon which a thimble is then placed to keep it secure. This must be done privately and the thread kept concealed, while a needle is threaded with a bit of thread of a similar length. The thread in the needle must have one of its ends drawn up nearly close, and be concealed between the fore-finger and thumb; the other should hang down nearly as long as, and by the side of the thread, which is fastened under the thimble, so that these two may appear to be the two ends of the thread. The end of the piece that is fastened under the thimble is then knotted, and the performer begins to sew, by moving his hand quickly after he has taken up the stitch. It will appear as though he actually passed the knotted thread through the cloth.

FEATS REQUIRING SPECIAL APPARATUS.

The following Feats of Legerdemain require special apparatus for their performance.

THE BOTTLE IMPS.

Get three little hollow figures of glass, an inch and a half high, representing imps, or Harlequin, Columbine, and Pantaloon, which may be obtained at the glass-blowers, with a small hole in each of their legs. Immerge them into water contained in a glass bottle, which should be about fifteen inches high, and covered with a bladder tied fast over the top. A small quantity of air must be left between the bladder and the surface of the water. When you think fit to command the figures to go down, press your hand hard upon the top, and they will immediately sink; when you would have them rise to the top, take your hand away, and they will float up. By these means, you may make them dance in the middle of the glass at your pleasure. *(Vide cut, above.)*

THE BIRD IN THE BOX.

Get a box made with a false lid, on which glue some bird-seed; privately put a bird into it, under the false lid; then show it, and it will seem to be full of seed. Put on the true lid, and say,—"I will command all the seed out of this box, and order a living bird to appear." Then, take off the covers together, and the bird will be seen.

THE PRANCING DRAGOON.

Cut out the figure of a Dragoon, mounted, in wood; let the horse be in a prancing position: put the hind legs on the edge of a table, and it will, of course, fall off; but you can prevent it from so doing, by adding to its weight. For this purpose, you must have a little hole made in the centre of its belly, into which run one end of a piece of wire, so bent backward, that the other end of it, to which a weight is fixed, may be under the table. The Dragoon will not only stand safe, but you may put him in motion, and he will prance up and down, without there being the least danger of his falling. The wire should be considerably longer in proportion to the size of the horse than is represented in the engraving in the margin, if you wish the figure to come much below the edge of the table when prancing. If it be no longer than that shewn in the cut, the horse's fore-legs can only descend to a distance equal to that between the weight at the end of the wire, and the bottom of the table on which the figure is set. In fact, the Dragoon may be made to descend lower, and rise higher, in proportion to the length of the wire, if it be properly curved and fixed in the figure.

THE MULTIPLYING MIRROR.

This feat must be performed with a looking-glass made on purpose the manner of making it is this:—First, make a hoop, or fillet of wood or horn, about the size of a half-crown piece in circumference, and about a quarter of an inch in thickness. In the middle, fasten a bottom of wood or brass, and bore in it several small holes, about the size of peas; then open one side of this bottom, set in a piece of crystal-glass, and fasten it in the hoop close to the bottom. Take a quantity of quicksilver, and put as much into the hoop as will cover the bottom; then let into it another piece of crystal-glass, fitted to it; cement the sides, that the quicksilver may not run out, and the apparatus is complete. One side will reflect the beholder's face as a common looking-glass; in the other it will be multiplied according to the number of holes in the wood or brass.

THE BOWING BEAU.

Make a figure, resembling a man, of any substance, exceedingly light, such as the pith of the alder tree, which is soft, and can easily be cut into any form: then provide for it an hemispherical base, of some very heavy substance, such as the half of a leaden bullet, made very smooth on the convex part. Cement the figure to the plane part of the hemisphere; and, in whatever position it is placed, when left to itself, it will rise upright. In this manner were constructed those small figures, called Prussians, sold at Paris: they were formed into battalions, and being made to fall down, by drawing a rod over them, they immediately started up again as soon as it was removed. We think, that the figure of a beau, or master of the ceremonies, is much more appropriate for this trick, than that of a soldier; as the latter seldom bows, while, by the former, the most profound inclinations are often performed, By moving it once downward a succession of bows may be produced.

THE MYSTERIOUS BOTTLE.

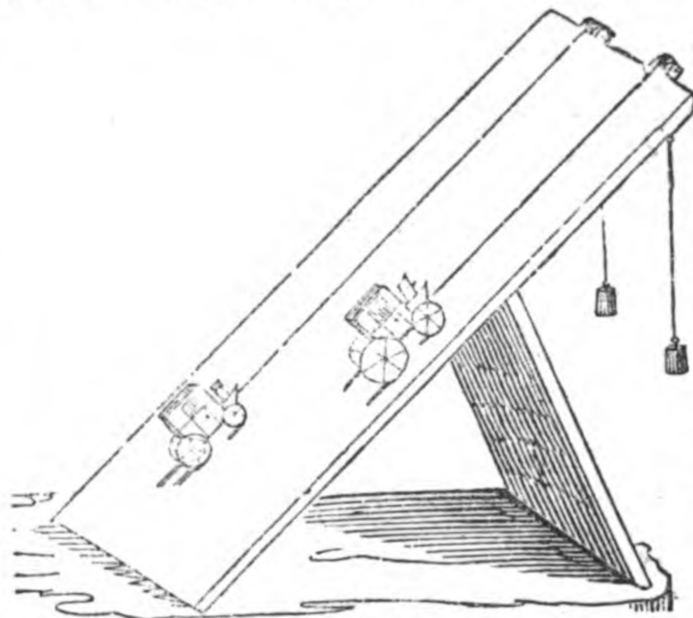
Pierce a few holes, with a glaziers' diamond, in a common black bottle; place it in a vase or jug of water, so that the neck only is above the surface. Then, with a funnel, fill the bottle, and cork it well, while it is in the jug or vase. Take it out, and, notwithstanding the holes in the bottom, it will not leak; wipe it dry, and give it to some person to uncork. The moment the cork is drawn, to the party's astonishment, the water will begin to run out of the bottom of the bottle.

THE BOGLE BODKIN.

Take a hollow bodkin, (or, if you prefer it, a dagger,) so that the blade may slip into the handle as soon as the point is held upward. Seem to thrust it into your forehead, (or, if a dagger, into your bosom,) then, after shewing some appearance of pain, pull away your hand suddenly, holding the point downward, and it will fall out, and appear not to have been thrust into the haft; but, immediately afterward, throw the bodkin, or dagger, into your lap or pocket, and pull out another plain one like it, which will completely deceive the spectators.

THE WIZARD'S CHARIOT.

This trick will call your mechanical abilities into play. First, get a piece of board, planed quite smooth; fasten a cross-piece under it, to support it in the position indicated by the cut. At the upper edge of the slanted piece, fix two little pulleys, the use of which may, at a glance, be seen by the engraving. Next, construct two little coaches, carts, or classical triumphal chariots; let the wheels of one of them be considerably larger than those of the other; they must, however, be precisely the same weight, or, if not, you must load one with shot to make it equal, in this respect, to the other. Do your work so neatly, that the wheels of each may run equally well on their respective axles. Next provide two lumps of lead, which must tally with each other to a scruple, and be sufficiently heavy to pull the chariots up the plane. Fix a piece of thread to the front of each of the chariots; pass these threads through the pulleys, and fasten one of your weights to each of them. The threads, be it remarked, should be long enough only to reach from the chariots, when placed at the foot of the inclined board, through the pulleys to the leads; and the board should be so inclined, that the distance from the pulleys to the ground be precisely the same as that of the chariots to the pulleys. Your apparatus being thus ready, weigh the chariots together, and afterward the leads in the presence of the spectators, that they may be satisfied they are equal, and let them inspect your apparatus, to see that all is fair: then start your chariots, and, notwithstanding the equality of their weights, and the equality of those of the leads, one of them will considerably outstrip the other; the chariot with the highest wheels will always be the winner of the race. This mechanical truth is unknown to many, and may, if properly managed, produce much surprise.



FEATS REQUIRING MANUAL DEXTERITY.

SOME of the tricks contained in this, and the next following division of the CONJUROR, require such manual dexterity as can only be acquired by considerable practice; others of them may be performed with ease, after going through them half-a-dozen times; and to these, perhaps, the young performer had better restrict himself.

THE SIMPLE DECEPTION.

Stick a little wax upon your thumb, take a by-stander by the fingers, shew him a sixpence, and tell him you will put the same into his hand; then wring it down hard with your waxed thumb, and, using many words, look him in the face; suddenly take away your thumb, and the coin will adhere to it; then close his hand, and it will seem to him that the sixpence remains; now tell him to open his hand, and, if you perform the feat cleverly, to his great astonishment, he will find nothing in it. (*Vide cut, above.*)

THE WONDERFUL WAFERS.

On each side of a table-knife, place, in the presence of your company, three wafers. Take the knife by the handle, and turn it over two or three times, to shew that the wafers are all on. Desire some person to take off one wafer from one side of the blade; turn the knife two or three times again, and there will appear only two wafers on each side; remove another wafer, turn the knife as before, and there will appear only one wafer on each side; take the third wafer away, turn the knife as before twice or thrice, and there will appear to be no wafer on either side. After a momentary pause, turn the knife again two or three times, and three wafers will appear on each side.

The secret of this capital trick consists in using wafers of the same size and colour, and turning the knife, so that the same side is constantly presented to the view, and the wafers are taken off that side, one by one. The three wafers will thus remain untouched on the other side, so that when you have first made it appear that there are no wafers on either side, you may, apparently, shew three on each, by the same means.—The way to turn the knife is as follows: when you lift it up, turn it in your hand, with your finger and thumb, completely round, until the side that was uppermost when you lifted it, come uppermost again. This is done in an instant, and is not perceptible, if adroitly managed.

THE HALF-CROWN UPHELD.

Privately cut the rim of the edge which is raised to protect the face of a half-crown, so that a little bit of the silver may stick up; take the coin in your right hand, and by pressing it with your thumb against a door or wainscot, the bit that sticks up will enter the wood, and thus support the half-crown.

THE COUNTER CHANGED.

Take two papers, three inches square each, divided into two folds, of three equal parts on each side, so as each folded paper remain one inch square; then glue the back part of the two together, as they are folded, and not as they are opened, so that both papers seem to be but one, and which side soever you open, it may appear to be the same; if you have a sixpence in one hand, and a counter in the other, shew one, and you may, by turning the paper, seem to change it.

THE CUT LACE JOINED.

Conceal a piece of lace in your hand; then produce another piece of the same pattern; double the latter, and put the fold between your fore-finger and thumb, with the piece which you have previously concealed, doubled in the same manner; pull out a little of the latter, so as to make a loop, and desire one of the company to cut it asunder. · If you have conveyed the concealed piece of lace, so dexterously as to be undetected, with the other between your thumb and fore-finger, the spectators will, naturally enough, think you have really cut the latter; which you may seem to make whole again, while repeating some conjuring words, and putting away the two ends of the piece that is actually cut.

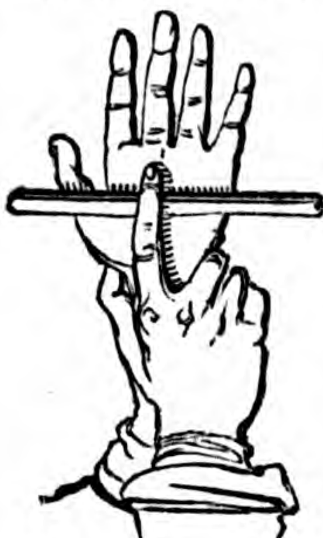
PHILOSOPHY CHEATED.

This feat is really an excellent one, and has astonished crowds of spectators in London, and different parts of the United Kingdom. It was one of the favourites of a late popular professor, and is now first promulgated.

Before you perform it in public, you must practise it, until you are quite perfect, in private, for it would be a pity to spoil its effect by making a blunder in it. Begin by stating very seriously, what is a well-known fact, that, if a bucket full of water be hurled round his head by a man, who is sufficiently strong, none of the water will fall out. If this be at all discredited, be prepared not only to support your assertion, but to carry the point still further, by placing a tumbler full of any liquid in the inside of a broad hoop, which you hold in your hand by a small piece of string fixed to it, and twirling it round at your side. If you do this with velocity although the tumbler, in the circles made by the hoop, is frequently quite bottom upward, it will neither fall from the hoop, nor will any of the water be spilt. To do this, however, requires even more practice than the trick which it prefaces; as, although there is no difficulty in it while the hoop is in rapid motion, yet there is some danger until you are rendered expert by practice, of the tumbler's falling, when you begin to put the hoop in motion, and when you wish to stop it. If, therefore, you are not perfectly capable of doing it, state the fact only, which some or other of your auditors will most probably support, as it is pretty generally known. You now go on to say, that the air, under the water in the glass, when it is topsy-turvy, keeps it in; and that, upon the same principle, if you can turn your hand, upon which you place a piece of thin wood, (about one inch broad, and six inches long,) sufficiently quick, although the back be uppermost, the air will actually keep the wood up against the palm of your hand, without any support. This they will be readily inclined to believe; the more philosophical the party is, the more easy may you lead them to credit your assertion. They will, however, doubt your being possessed of sufficient manual dexterity to perform it quick enough.

We must now tell you how it is to be done:—Lay the piece of wood across the palm of your left hand, which keep wide open, with the thumb and all the fingers far apart, lest you be suspected of supporting the wood with them. Next, take your left wrist in your right hand, and grasp it tightly, for the purpose, as you state, of giving the hand more steadiness. Now, suddenly turn the back of your left hand uppermost, and as your wrist moves in your right hand, stretch out the fore-finger of your right hand, and as soon as the wood comes undermost, support it with such fore-finger may now shake the hand, and, after a moment or two, suffer the wood

to drop. It is two to one but the spectators will admit it to be produced by the action of the air, as you had previously stated, and try to do it themselves; but, of course, they must, unless you have performed the feat so awkwardly as to be discovered, fail in its performance. If you have no objection to reveal the secret, you can do it again, and, while they are gravely philosophising upon it, suddenly lift up your hand, (*vide cut,*) and expose the trick. This will, doubtless; create much amusement. Observe that, in doing this feat, you must keep your fingers so low, that no one can see the palm of your left hand; and move your finger so carefully, that its action may not be detected; and if it be not, you may rest satisfied that its absence from round the wrist of the left hand will not be discovered, some of the fingers being naturally supposed to be under the coat; so that, if the spectators only see two or even one, they will imagine the others are beneath the cuff. There is one other observation necessary before we conclude; it is this: when you have turned your hand over, do not keep the stick too long upheld, lest the spectators should take hold of your hands, and discover the trick; before their astonishment has ceased, adroitly remove your fore-finger, and suffer the stick to fall to the ground.



THE RESTORED THREAD.

Take two pieces of thread, of one foot in length each; roll one of them round, like a small pea, which put between your left fore-finger and thumb. Now, hold the other out at length, between the fore-finger and thumb of each hand; then let some one cut the same asunder in the middle; when that is done, put the tops of your two thumbs together, so that you may, with less suspicion, receive the thread which you hold in your right hand into your left, without opening your left finger and thumb. Then, holding these two pieces as you did before, let them be cut asunder in the middle also, and conveyed again as before, until they be very short; then roll all the ends together, and keep that ball of thread before the other in the left hand, and, with a knife, thrust the same into a candle, where you may hold it until it be burnt to ashes; pull back the knife with your right hand, and leave the ashes, with the other ball, betwixt your fore-finger and thumb of your left hand, and with the two thumbs and fore-fingers together, rub the ashes, and, at length, draw out that thread which has been all this time betwixt your fore-finger and thumb.

FEATS

OF MANUAL DEXTERITY, OR CONFEDERACY, WITH SPECIAL APPARATUS.

We now proceed to a more complicated set of Feats of Legerdemain, which require not only conjuring apparatus, but considerable sleight of hand, to execute them.

THE LOCKED JAW.

A lock is made for the purpose, similar to the cut; that side of its bow marked A, must be fixed; the other, B, must be pinned to the body of the lock, at E; so that it may play to and fro with ease. This side of the bow should have a leg, with two notches filed on the inner side of it, which must be so contrived, that one may lock or hold the two sides of the bow as close together as possible, and the other notch hold them a proportionable distance asunder, so that when locked upon the cheek, they may neither pinch too hard nor yet hold it so slightly that it may be drawn off. Let there be a key, D, to it: and, lastly, let the bow have several notches filed in it, so that the place of the partition, when the lock is shut, may not be suspected. You must get a person to hold a shilling between his teeth; then take another, and, with your left hand, offer to set it edge-wise between a second person's teeth, pretending that your intent is to turn bo

nto which of their mouths they please. This will afford you a fair opportunity of putting on your lock.

THE LONG PUDDING.

The following is a famous feat among those mountebanks who travel the country with quack doctors: it is delineated in the tail piece to this part of our work. This pudding must be made of twelve or thirteen little tin hoops, so as to fall one through another, and little holes should be made at the biggest end, so that it may not hurt your mouth: hold it privately in your left hand, with the whole end uppermost, and, with your right hand, take a ball out of your pocket, and say, "If there be any old lady that is out of conceit with herself, because her neighbours deem her not so young as she would be thought, let her come to me, for this ball is a certain remedy;" then seem to put the ball into your left hand, but let it slip into your lap, and clap your pudding into your mouth, which will be thought to be the ball that you shewed them; then decline your head, open your mouth, and the pudding will slip down at its full length; with your right hand, you may strike it into your mouth again: after having done this three or four times, you may discharge it into your hand, and put it into your pocket without any suspicion, by making three or four wry faces after it, as though it had been too large for your throat.

THE EGG-BOX.

The egg-box is made in the shape of two bee-hives, placed together, as A: the inner shell, B, is covered with half the shell of a real egg; the upper shell, C, is of the same shape, but larger, being, in fact, the lid or upper part of the box, of which D is the lower. Place C, which is the outward shell, upon B, and both upon D, which arrangement puts all in readiness for the performance of the trick. Now call for an egg, and bid all the bystanders look at it, to see that it is a real one. Then take off the upper part, B C, with your fore-finger and thumb, and, placing the egg in the box, say, "Ladies and gentlemen, you see it fairly in the box;" and, uncovering it again, say, "You shall see me fairly take it out;" putting it into your pocket in their sight. Now open your box again, and say, "There's nothing;" close your hand about the middle of the box, and taking C off without B, say, "There is the egg again;" which will appear to the spectators to be the same that you put in your ocket; then, put C on again, and taking C, together with the inner shell, B off again, say, "It is gone again;" and such will appear to be the fact.

THE FLIGHT OF THE RING.

You may cause a ring to shift from one hand to another, and make it go on any finger required on the other hand, while somebody holds both your arms, in order to prevent communication between them, by attending to these instructions:—Desire some lady in company to lend you a gold ring, recommending her, at the same time, to make a mark on it, that she may know it again. Have a gold ring of your own, which fasten by a small piece of catgut-string to a watch-barrel, and sew it to the left sleeve of your coat. Take the ring that is given you in your right hand; then putting, with dexterity, the other ring fastened to the watch-barrel, near the entrance of your sleeve, draw it privately to the fingers' ends of your left hand. During this operation, hide the ring that has been lent to you between the fingers of your right hand, and fasten it dexterously on a little hook, sewed for the purpose, on your waistcoat, and hidden by your coat. After that, shew your ring, which hold in your left hand; then ask the company on which finger of the other hand they wish it to pass. During this interval, and as soon as the answer has been given, put the before-mentioned finger on the little hook, in order to slip the ring on it; at that moment let go the other ring, by opening your fingers. The spring which is in the watch-barrel, being confined no longer, will contract, and make the ring slip under the sleeve, without any body perceiving it, not even those who hold your arms; as their attention will be occupied to prevent your hands from communicating. After this operation, shew the assembly that the ring is come on the other hand; and make them remark that it is the same that had been lent to you, or that the mark is right. Much dexterity must be made use of to succeed in this entertaining trick, that the deception may not be suspected.

THE DEMI-AMPUTATION.

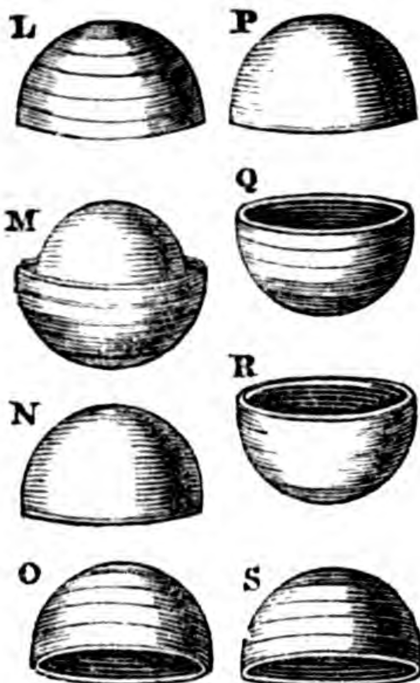
Provide yourself with two knives, a true and false one, *(vide cut,)* and when you shew this feat, put the true knife into your pocket, and, taking out the false one, place it on your wrist undiscovered; then exhibit it, and you will appear to have nearly severed your arm.

THE DOUBLE FUNNEL.

Get two funnels soldered one within the other, so as to appear like one pour a little wine into the smaller end of the outside funnel, turn it up, and keep the wine in by placing your thumb at the bottom of the funnel, this must be done privately. Then pour some more wine into the broad part of the machine, drink it off completely; turn the broad end of the funnel downward, to shew that all is gone; and instantly turning yourself about, pronounce some mystic terms; then withdraw your finger from the narrow end, so as to let the wine between the funnels run out.

THE GLOBE BOX.

This trick is not inferior to the best that is shewn with boxes. It is done with a box made of four pieces, and a ball as big as may conveniently be contained therein; the ball serves, as the egg does in the egg-box, only to deceive the hand and eye of the spectators. This ball, made of wood, or ivory, is thrown out of the box upon the table, for every one to see that it is substantial; then put the ball into the box, which close up with all the pieces one within another; remove the upper shell with your fore-finger and thumb, and there will appear another of a different colour, red, blue, yellow, or any other colour you may fancy; this will seem to be another ball, though, in fact, it is no more than a shell of wood, ingeniously turned, and fitted to the box, as you may perceive by the cuts in the margin. L is the outer shell of the globe, taken off the figure M, the top of which represents the ball; N, is an inner shell; O, the cover of the same; P, another inner shell; Q, the cover of the same; R, a third shell; S, that which covers it. These globes may be made with more or less varieties, according to the desire of the practitioner.



THE MUTILATED HANDKERCHIEF RESTORED.

This feat, strange as it appears, is very simple; the performer must have a confederate, who has two handkerchiefs of the same quality, and with the same mark, one of which he throws upon the table, to perform the feat with. The performer takes care to put this handkerchief uppermost in making a bundle, though he affects to mix them together promiscuously. The person, whom he desires to draw one of the handkerchiefs, naturally takes that which comes first to hand. The performer then desires to shake them again to embellish the operation; but, in so doing, takes care to bring the right handkerchief uppermost, and carefully fixes upon some simpleton to draw; and if he find the person is not likely to take the first that comes to hand, he prevents him from drawing by fixing upon another, under pretence of his having a more sagacious look. When the handkerchief is torn, and carefully folded up, it is put under a glass upon a table placed

near a partition. On that part of the table on which the handkerchief is deposited, is a little trap, which opens and lets it fall into a drawer. The confederate, concealed behind the curtain, passes his hand under the table, opens the trap, and substitutes the second handkerchief for the first. He then shuts the trap, which so exactly fits the hole it closes, as to deceive the eyes of the most incredulous. If the performer be not possessed of such a table, he must have a second handkerchief in his pocket, and change it by sleight of hand.

THE HATCHED BIRD.

Separate an egg in the middle, as neatly as possible; empty it, and then, with a fine piece of paper and a little glue, join the two halves together, having first put a live canary bird inside it, which will continue unhurt in it for some time, provided you make a small pin-hole in the shell to supply the bird with air: have, also, a whole egg in readiness. Present the two eggs for one to be chosen; put the egg, which contains the bird, next to the person who is to choose, and, for this purpose, be sure to select a lady: she naturally chooses the nearest to her, because, having no idea of the trick to be performed, there is no apparent reason to take the further one: at any rate, if the wrong one be taken, you do not fail in the trick, for you break the egg, and say—" You see that this egg is fair and fresh, madam; so you would have found the other, if you had chosen it. Now, do you choose to find in it a mouse, or a canary-bird?" She naturally declares for the bird; nevertheless, if she ask for the mouse, there are means to escape: you ask the same question of several ladies, and gather the majority of votes, which, in all probability, will be in favour of the bird, which you then produce.

THE FIRE AND WINE BOTTLE.

Get a tin bottle made with a tube nearly as big as its neck, passing om the bottom of the neck to the bottom of the bottle, in which there must be a hole of a size to correspond with it. Between the tube and the neck of the bottle, let there be sufficient space to allow you to pour in some wine, which will remain in the bottle outside the tube. Begin the trick by pouring a glass of wine out of the bottle; then place it on the table, over a concealed hole, through which the confederate will thrust a burning fusée into the tube, so that, at your command, fire is emitted from the mouth of the bottle. As soon as the fire is extinguished, or withdrawn, you can take up the bottle again, and pour out more wine.

THE PENETRATIVE SHILLING.

Provide a round tin box, of the size of a large snuff-box, and likewise eight other boxes, which will go easily into each other, and let the least of

them be of a size to hold a shilling. Each of these boxes should shut with a hinge, and to the least of them there must be a small lock, fastened with a spring, but which cannot be opened without a key; and observe, that all these boxes must shut so freely, that they may all be closed at once Place these boxes in each other, with their tops open, in your pocket: then ask a person for a shilling, and desire him to mark it, that it may not be changed: take this piece in one hand, and in the other have another of the same appearance, and, putting your hand in your pocket, you slip the piece that is marked into the least box, and, shutting them all at once, you take them out: then, shewing the piece you have in your hand, and which the company suppose to be the same that was marked, you pretend to make it pass through the box, but dexterously convey it away. You then present the box, for the spectators do not know yet that there are more than one, to any person in company, who, when he opens it, finds another, and another, till he come to the last, but that he cannot open without the key which you then give him; and, retiring to a distant part of the room, you tell him to take out the shilling himself, and see if it be the one marked. This trick may be made more surprising by putting the key into the snuff-box of one of the company; which you may do by asking for a pinch of snuff; the key, being very small, will lie concealed among the snuff: when the person, who opens the boxes, asks for the key, tell him that one of his friends has it in his snuff-box.

THE MONEY BOX.

A piece of money, or a ring, is put into a box, in the presence of a person who holds it; the operator stands at a distance, and bids him shake the box gently, and the piece is heard to rattle inside; he is desired again to shake it, and then it is not heard to rattle; the third time, it is again heard, but the fourth time it is gone, and is found in the shoe of one of the company.

The box must be made on purpose, in such a manner that, in shaking it gently up and down, the piece within is heard; on the contrary, shaking it hard, horizontally, a little spring, which falls on the piece, prevents it from being heard, which makes you imagine it is not within. He who performs the trick, then touches the box, under pretence of shewing how to shake it, and, although it is locked, he easily gets out the piece by means of a secret opening, availing himself of that minute to put in a false piece, and to leave the box with the same person, whom he causes to believe that the piece is or is not within, according to the manner the box is shaken: at length, the original piece is found in the shoe of one of the company, either by means of the person being in confederacy, and having a similar piece, or by sending another to slip it on the floor: in this last case, it is found on the floor, and the person fixed on is persuaded that it fell from his shoe as he was taking it off.

FEATS REQUIRING CHEMICAL AID

In this class are some of the most curious of the performances which we have selected for our article on Legerdemain: we shall commence them with a notice of the exhibition of the Fire-eaters, and the means said to be used by those persons to render themselves incombustible, or rather, insensible to the action of fire. In olden times, it was a custom to ascertain the guilt or innocence of accused parties, by making them walk blindfold over a place upon which red-hot plough-shares were previously strewed (*Vide cut*). If they did not burn themselves, they were acquitted, but if otherwise, executed. Were the following secrets then known, the fiery ordeal might, indeed, be well defied.

THE SALAMANDER.

An experiment to ascertain the degree of heat it is possible for a man to bear, was made in the month of July, 1828, at the New Tivoli, at Paris, in the presence of a company of about two hundred persons, amongst whom were many professors, *savans*, and physiologists, who had been especially invited to attend, by the physician Robertson, director of that establishment. The man on whom this experiment was made was a Spaniard of Andalusia, named Martenez, aged forty-three. A cylindrical oven, constructed in the shape of a dome, had been heated, for four hours, by a very powerful fire. At ten minutes past eight, the Spaniard, having on large pantaloons of red flannel, a thick cloak, also of flannel, and a large felt, after the fashion of a straw hat, went into the oven, where he remained, seated on a foot-stool, during fourteen minutes, exposed to a heat of from

forty-five to fifty degrees of a metallic thermometer, the gradation of which did not go higher than fifty. He sang a Spanish song while a fowl was roasted by his side. At his coming out of the oven, the physicians found that his pulse beat one hundred and thirty-four pulsations a minute, though it was but seventy-two at his going in. The oven being heated anew for a second experiment, the Spaniard re-entered and seated himself in the same attitude, at three-quarters past eight, ate the fowl and drank a bottle of wine to the health of the spectators. At coming out his pulse was a hundred and seventy-six, and indicated a heat of one hundred and ten degrees of Reaumur. Finally, for the third and last experiment, which almost immediately followed the second, he was stretched on a plank, surrounded with lighted candles, and thus put into the oven, the mouth of which was this time closed: he was there nearly five minutes, when all the spectators cried out "Enough, enough!" and anxiously hastened to take him out. A noxious and suffocating vapour of tallow filled the inside of the oven, and all the candles were extinguished and melted. The Spaniard, whose pulse was two hundred at coming out of this gulf of heat, immediately threw himself into a cold bath, and, in two or three minutes after, was on his feet, safe and sound.

About the year 1809, one Lionetto, also a Spaniard, astonished not only the ignorant, but chemists and other men of science, in France, Germany, Italy, and England, by his insensibility to the power of fire. He handled, with impunity, red hot iron and molten lead, drank boiling oil, and performed other feats equally miraculous. While he was at Naples, he attracted the notice of Professor Sementeni, who narrowly watched all his operations, and endeavoured to discover his secret. He observed, in the first place, that when Lionetto applied a piece of red hot iron to his hair, dense fumes immediately rose from it; that when he touched his foot with the iron, similar vapours ascended, which affected both the organs of sight and smell. He also saw him place a rod of iron, nearly red hot, between his teeth, without burning himself; drink the third of a tablespoonful of boiling oil; and taking up molten lead with his fingers, place it on his tongue without apparent inconvenience.

Anxious to discover the means used by Lionetto to render himself capable of thus enduring the application of heat, Sementeni performed several experiments upon himself, and made many important discoveries. He found, that by friction with sulphuric acid diluted with water, the skin might be made insensible to the action of the heat of red-hot iron: a solution of alum, evaporated until it became spongy, appeared to be more effectual in these frictions. After having rubbed the parts, which were thus rendered, in some degree, incombustible, with hard soap, he discovered, on the application of hot iron, that their insensibility was increased. He then determined on again rubbing the parts with soap, and after this,

found that the hot iron not only occasioned no pain, but that it actually did not burn the hair. Being thus far satisfied, the Professor applied hard soap to his tongue, until it became insensible to the heat of the iron; and after having placed an ointment, composed of soap mixed with a solution of alum, upon it, boiling oil did not burn it: while the oil remained on the tongue a slight hissing was heard, similar to that of hot iron when thrust into water; the oil soon cooled, and might then be swallowed without danger.

These are stated to be the results of the experiments performed by Professor Sementeni, and they tend to explain the astonishing performances of Lionetto. It is evident that he prepared his tongue and his skin in a similar manner, previously to his exhibitions. With regard to his passing the hot plate of iron over his hair, it seems pretty evident that the latter was first saturated with a solution similar to that of the alum or sulphuric acid. His swallowing the boiling oil ceases to become a phenomenon, when it is observed that, in order to shew its high temperature, he threw pieces of lead into it, which, in the process of melting, absorbed a quantity of the caloric, or heat, of the oil; and that the small quantity of the latter which he poured upon his tongue, already prepared to receive it in the manner we have stated, cooled before he swallowed it. It is clear that he might put the molten lead upon his tongue with impunity, and suffer even less inconvenience from it, if possible, than from the oil, by the greater heat of which it had been melted. It is, however, probable, that instead of lead, Lionetto used a more fusible mixture; such, for instance, as that which will presently be found described under the title of "The Magic Spoon."

Several scientific men have successfully repeated the experiments of Professor Sementeni; and it is now no longer considered miraculous to behold a man applying hot iron to his skin without suffering from its powers. But we beg to caution our young readers very seriously against making any similar experiments upon themselves: they are only fit for men of science and profound chemical knowledge, and the least inaccuracy or omission would be productive of serious consequences. The foregoing account of the performances of the Fire-eaters and their secrets, we insert for the information of our young friends only, without holding them up as experiments calculated for their capacities or fit for their performance. If, in the course of this work, we should think fit to relate the mode of constructing wings to fly from St. Paul's to the Monument, or even across the Hellespont, it by no means follows that the boys of England, for whose instruction and amusement we are, at this moment, "wasting the midnight oil," should make the attempt. The French author to whom we are indebted for the foregoing particulars,—Monsieur Julia Fontenelle, President de la Société Linnéenne et des Sciences Physiques et Chimiques de Paris; Membre honoraire de la Société Royale de Varsovie; de l'Académie

Royale de Medecine, et de celle des Sciences de Barcelonne; de la Société Royale Academique de Sciences de Paris, et cætera—(we like to give a clever man his titles in full,)—states that, when the Spaniard, Lionetto, undertook the experiments which we have above described, he was under apprehensions of having something to do with the Inquisition, in consequence of his exploits.

TO MELT TWO METALLIC MIXTURES BY FRICTION.

Melt, in one vessel, one part of mercury and two parts of bismuth; and in another, one part of mercury and four of lead; when cold, they will be quite solid: by rubbing them against each other, they will soon melt, as though each were rubbed separately against red hot iron.

THE INCOMBUSTIBLE THREAD.

Wind some linen thread tightly round a smooth pebble, secure the end, and if you expose it to the flame of a lamp or candle it will not burn. The caloric traverses, without fixing in it, and only attacks the stone which it encases.

THE HANDKERCHIEF HEARTH.

Cover the metal case of a watch with part of a handkerchief, single only; bring the ends to that side where the glass is, and hold the handkerchief by them there, so as to stretch it tightly over the metal. You may then place a red hot coal, or a piece of lighted paper, upon that part of the handkerchief which is so strained over the metal, without burning it; the caloric merely passing through the handkerchief to fix in the metal.

SIMPLE AMALGAMATION AND SEPARATION.

Place a globule of mercury, about the size of a pea, on a piece of paper, by the side of a globule of potassium, about half the size of the mercury; fold up the paper so as to bring them into contact with each other; some caloric will be immediately disengaged, and the amalgamation will be complete in a few seconds. If it be then thrown into water, the mercury will be disengaged and fall to the bottom; the potassium, on the contrary, will decompose the water, absorb the oxygen, and the hydrogen being set at liberty, will discharge itself with some noise. The potassium will be converted into deutoxide of potassium, or potass, and dissolve in the water.

HIDEOUS METAMORPHOSIS.

Take a few nut-galls, bruise them to a very fine powder, which strew nicely upon a towel; then put a little brown copperas into a basin of water; this will soon dissolve, and leave the water perfectly transparent.

After any person has washed in this water, and wiped with the towel on which the galls have been strewed, his hands and face will immediately become black; but, in a few days, by washing with soap, they will again become clean. This trick is too mischievous for performance.

TO MAKE A WET STONE PRODUCE FIRE.

Take quick-lime, salt-petre, tutia-Alexandrina and calamine, (lapis calaminaris,) of each, equal parts; live sulphur and camphor, of each, two parts: beat and sift them through a fine sieve; then put the powder into a fine linen cloth, tie it close, put it into a crucible, cover it with another crucible, mouth to mouth; bind and lute them well together; then set them in the sun to dry. When dry, the powder will be yellow. Then put the crucible into a potter's furnace, and when cold, take it out again, and you will find the powder altered into the substance of a stone.

When you have occasion to light a fire or candle, wet part of the stone with a little water, and it will instantly flame; when lighted, blow it out again, as you would a candle.

THE SUB-AQUEOUS VOLCANO.

Take one ounce of saltpetre; three ounces of powder; of sulphur-vivum, three ounces; beat, sift, and mix them well together; fill a paste-board, or paper mould, with the composition, and it will burn under the water till quite spent. Few persons will believe that this can be done before they have seen it tried.

THE CHEMICAL SAMSON.

To melt a rod of iron with a common fire.—Heat a rod of iron, as thick as your finger, in a fire, urged by a pair of bellows, until it is white hot; draw it from the fire, and apply to the hot part a roll of brimstone, held by a pair of tongs; a profusion of most brilliant sparks will be thrown out, and the iron drop like melting sealing-wax. It is necessary to hold it over the hearth, to avoid mischief. If the heated part be a few inches from the end of the bar, a piece of it will be cut off.

THE MAGIC SPOON.

Put four ounces of bismuth into a crucible, and when in a state of complete fusion, throw in two ounces and a half of lead, and one ounce and a half of tin; these metals will combine, and form an alloy fusible in boiling water. Mould the alloy into bars, and take them to a silversmith to be made into tea-spoons. Place one of them in a saucer, at a tea-table, and the person who uses it will not be a little astonished to find it melt away as soon as he puts it into the hot tea.

METAL MELTED ON PAPER OVER A CANDLE.

An alloy, which may be kept in a state of fusion by placing it upon a piece of paper and holding it over a candle, may be made by melting together equal parts of bismuth, lead, and zinc.

THE WONDERFUL DYE.

Dissolve indigo in diluted sulphuric acid, and add to it an equal quantity of solution of carbonate of potass. If a piece of white cloth be dipped in this mixture, it will be changed to blue; yellow cloth, in the same mixture, may be changed to green; red to purple; and blue litmus paper be turned to red.

METALLIC TRANSMUTATION.

Dip a piece of polished iron, the blade of a knife, for instance, into a solution either of nitrate or sulphate of copper, and it will assume the appearance of a piece of pure copper; this is occasioned by the sulphuric acid seizing on the iron, and letting fall the copper.

THE FADED ROSE RESTORED.

Take a rose that is quite faded, and throw some sulphur on a chafing-dish of hot coals, then hold the rose over the fumes of the sulphur, and it will become quite white; in this state dip it into water, put it into a box or drawer for three or four hours, and when taken out, it will be quite red again.

THE PROTEAN LIQUID.

To make a red liquor, which, when poured into different glasses, will become yellow, blue, black, and violet.—This phenomenon may be produced by the following process:—Infuse a few shavings of log-wood in common water, and when the liquor is red, pour it into a bottle; then take three drinking glasses; rinse one of them with strong vinegar, throw into the second a small quantity of pounded alum, which will not be observed if the glass has been newly washed, and leave the third without any preparation. If the red liquor in the bottle be poured into the first glass, it will assume a straw colour, somewhat similar to that of Madeira wine; if into the second, it will pass gradually from blueish grey to black, provided it be stirred with a bit of iron, which has been privately immersed in good vinegar: in the third glass, the red liquor will assume a violet tint.

INCOMBUSTIBLE PAPER.

Dip a sheet of paper in strong alum-water, and when dry, repeat the process; or, it will be better still, if you dip and dry it a third time. After this, you may put it in the flame of a candle, and it will not burn.

Take half an ounce of sal-ammoniac, one ounce of camphor, and two ounces of aqua-vitæ; put them into an iron pot, narrowing towards the top, and set fire to it. The effect will be immediate; a mimic conflagration will take place, which will be alarming, but not dangerous.

PORTRAITS VISIBLE AND INVISIBLE.

These are performed with French chalk, a natural production of the earth, (sold in most oil-shops,) of a greasy, but extraordinary nature. It is made use of to draw portraits upon looking-glasses; which may be made visible and invisible, alternately, by breathing on and wiping off, and they will continue for many months fit for exhibition. The lines will appear very distinct where the glass is strongly breathed on, and disappear entirely when it is wiped dry again.

THE DANCING EGG.

Boil an egg hard, and peel off a small piece of the shell at one end; then thrust in a quill filled with quicksilver, and sealed at each end. As long as the egg remains warm, it will not cease to dance about.

THE EGG IN THE PHIAL.

You may make an egg enter a phial without breaking, by steeping it in strong vinegar, for some time; the vinegar will so soften the shell, that it will bend and extend lengthways without breaking; when put in cold water, it will resume its former figure and hardness.

PERPETUAL MOTION.

Put very small filings of iron into aquafortis, and let them remain until the aquafortis is completely saturated with the iron, which will happen in about two hours; pour off the solution and put it into a phial an inch wide, with a large mouth, with a lump of lapis calaminaris; then stop it close, and the calamine stone will keep in perpetual motion.

THE BLUE BOTTLE.

Expose an ounce of volatile alkali to the air, in a glass, for about a quarter of an hour; then put it into a flask, with twenty-four grains of the sulphate of copper, and the liquid will, by degrees, assume a beautiful blue colour; pour it carefully into another flask, so as to separate the liquid from the copper. If you examine it a few days afterward, you will find that the blue colour has totally disappeared; but, if you take out the cork for a minute, and replace it, you may see the blue re-appear on the surface of the liquid, and descend gradually, until the whole of it is

of the same hue as it was when you laid it aside. In a few days it will again become colourless, and you can restore the blue by the same simple means. The experiment may be performed a great number of times with the same liquid. Care must be taken in making your preparation, that the volatile alkali be not suffered to remain long enough in the first flask, to dissolve too much of the sulphate of copper; for, if it receive too great a degree of colour, the blue will not disappear, when the liquid is deprived of air.

THE CANDLE OF ICE.

Cover a small portion of the upper end of a tallow candle with paper, and give the remainder of it a coat of fine coal and powdered sulphur, mixed together; dip it in water, and expose it to the air during a hard frost, and a slight coat of ice will form round it, which may be subsequently rendered thicker in proportion to the number of immersions and exposures to the air which it receives. When it arrives at a sufficient consistency, take off the paper, light the upper end of the candle, and it will burn freely.

TO DIP THE HAND IN WATER WITHOUT WETTING IT.

Powder the surface of a bowl of water with lycopodium; you may then put your hand into it, and take out a piece of money, that had been previously placed at the bottom of the bowl, without wetting your skin; the lycopodium so attaching itself to the latter, as to keep it entirely from coming in direct contact with the water. After performing the experiment, a slight shake of the hand will rid it of the powder.

TO REMOVE, AND AFTERWARDS RESTORE, THE COLOUR OF A RIBBON.

Dip a rose-coloured ribbon into nitric acid, diluted with eight or ten parts of water, and as soon as the colour disappears, which it will do in a short time, take out the ribbon, and put it into a very weak alkaline solution; the alkali will quickly neutralize the acid, and the colour will then re-appear.

THE PAPER ORACLE.

Some amusement may be obtained among young people, by writing, with common ink, a variety of questions, on different bits of paper, and adding a pertinent reply to each, written with nitro-muriate of gold. The collection is suffered to dry, and put aside until an opportunity offers for using them. When produced, the answers will be invisible; you desire different persons to select such questions as they may fancy, and take them home with them; you then promise, that if they are placed near the fire, during the night, answers will appear written beneath the questions in the morning; and such will be the fact, if the papers be put in any dry, warm situation.

THE SIBYL'S CAVE.

Write several questions and answers, as directed in the preceding article: for the answers, instead of nitro-muriate of gold, you may use the juice of a citron, or an onion. Let any of the questions be chosen by a party, and placed in a box, which may be called "The Sibyl's Cave." This box must be furnished with a piece of hot iron, beneath a false bottom of tin; when the paper is put in it, the heat will cause the answer to appear; you then take it out, shew it to the person who made choice of the question, and, as soon as it is read, put it aside; the answer will vanish, when the paper becomes cold again.

TO SEPARATE OIL FROM WATER.

Most of our young readers are, doubtless, aware, that oil is lighter than water, and floats upon its surface. If a vessel of any convenient description, be half filled with water, and a portion of oil be then poured on it, the oil may be easily separated from the water, by one end of a wick of cotton being placed in it, the other end of which is carried into another vessel: the oil, obedient to the laws of capillarity, will rise gradually into the cotton, and fall, drop by drop, from the other extremity of it, into the vase or cup, which is placed to receive it. We are told, that the process is much quicker, if the cotton be previously dipped in oil.

TO MAKE A COLOURLESS LIQUID BECOME BLUE, LILAC, PEACH-COLOURED, AND RED, WITHOUT TOUCHING IT.

Put a drachm of powdered nitrate of cobalt into a phial, containing an ounce of the solution of caustic potass: a decomposition of the salt, and precipitation of a blue oxide of cobalt, takes place. Cork the phial, and the liquid will now assume a blue colour, from which it will pass to a lilac, afterward to a peach tint, and, finally, to a light red.

THE FOUR ELEMENTS.

Procure a glass tube, about the thickness of a man's finger, and securely seal one end of it. Mark it, all round, with four equal divisions. Introduce mercury, sufficient to fill the space below the first mark; a solution of sub-carbonate of potass for the second division; white brandy, to which a blue tint is imparted, for the third; and turpentine, coloured red, for the fourth. After these preparations are completed, close up and seal the mouth of the tube, and you may then give a fanciful exhibition of chaos and the four elements. Shake the tube, and you will mix all the contents together, and this mixture will represent chaos; in a short time, if the tube be not moved, all the ingredients will separate, and each go to its

allotted division, placing itself according to its specific gravity, in comparison with the others: the contents of the upper division, which is red, will represent fire; the next, which has a blue tint, air; the third, which is colourless, water; and the lower one, earth.

THE MINERAL CHAMELEON.

We are indebted to Sheele for a composition, known by the above title, which is prepared by mixing together, and exposing to a strong heat, in an open crucible, for little more than a quarter of an hour, three parts of nitrate of potass, and one of deutoxide of manganese, both in a finely powdered state. The compound thus obtained, possesses the following singular properties:—If a few grains of this preparation be put into a glass, and cold water be then poured on it, the liquor will first turn green, and then pass rapidly to purple, and finally, by beautiful gradations, to red. If hot water be used, instead of cold, the liquid will assume a beautiful violet colour. The colours will be more or less intense, in proportion to the quantity of the oxide used, for a more or less quantity of water; ten grains, in a very little water, will produce a beautiful green colour, which will pass, with rapidity, to a dark purple, and, subsequently, to red. If a small portion of the Chameleon Mineral be used for four ounces of water, the colour will be a deep green; by the addition of more water it will turn rosy, and become colourless in a few hours, giving, in the process, a yellowish precipitate. When the liquid changes slowly, it is easy to discover other hues, which it takes in the following order—green, blue, violet, indigo, purple, and red.

It appears that the phenomena produced by the Chameleon Mineral, have attracted the attention of several men of science, and it seems, from the result of their experiments, that in those preparations of the Chameleon Mineral, in which there is a greater proportion of potass than manganese, the green requires more time to change into the other colours, and the greater the proportion of manganese, the more intense is the first colour, and the quicker does the liquid acquire the other tints. The effect of hot water, in this experiment, is much more powerful than that of cold.

PHOSPHORIC FISH, METEORS, &c.

Phosphorus was discovered by the alchymist Brandt, who sold the secret to Krafft, with whom Kunkel associated himself for its purchase. He was, however, deceived by Krafft, who never communicated the secret to him. Kunkel immediately commenced a series of experiments, and in 1674, discovered the mode of making it.

Phosphorus, in a state of purity, is solid, demi-transparent, and of a consistence similar to wax; the solar light gives it a red colour; it will

unite with almost all metallic substances. When it is taken in the hand it should never be held for more than a few seconds, for the heat thus applied, is sufficient to inflame it, if continued; and a burn from phosphorus is more painful than any other kind of burn. A basin of cold water ought always to be at hand, to dip the phosphorus in occasionally; and when it is cut to pieces, it must be cut in water. Phosphorus can only be preserved by keeping it in places where neither light nor heat has access. It is obtained from druggists in rolls, about the thickness of a quill; these are put into a phial filled with cold water, which has been boiled to expel air from it, and the phial is enclosed in an opaque case. It does not exist in nature in a state of purity, but as a salt; it is extracted from bones.

The light produced, in the night time, by writing with a stick of phosphorus on a wall, owes its existence to a slight coat which the stick leaves behind it on the parts over which it has passed; this, being combustible, burns slowly, in absorbing the oxygen of the air.

It has been well-known, from time almost immemorial, that animal or vegetable substances, in a state of putrefaction, often become luminous. The glow-worm has, doubtless, been seen by many of our readers, bearing its brilliant midnight lamp; several insects, and some fishes also, possess a luminous property. In 1641, an old woman presented the Prince of Condé with some meat, bought by her the preceding day in the market of Montpelier, and which illuminated her room during the night. We have seen a sole emit most brilliant and beautiful flashes of light on a dark night.

A great number of experiments have been performed by scientific men, to ascertain the cause of the luminous aspect of the sea; it is attributed to those putrid substances, which are found in the waters. The following experiment, which has reference to this subject, is rather curious:—A little fresh whiting was placed in a vase containing water. It produced no light, even after having been agitated; that part of the fish only that was above the water, and not the water itself, grew luminous during the night. On lifting up the fish, by means of a stick, which was passed beneath it, and rested against the opposite side of the vase, the water appeared luminous behind it; on being much agitated, it became entirely luminous, and continued so for some time after it was left undisturbed. The strongest emission of light takes place after the fish has been about twenty hours in the water; after three days, the water loses this property. About four drachms of the substance of a fresh herring were put into a solution of two drachms of sulphate of magnesia, in two ounces of water. On the succeeding evening, the whole of the liquor, upon shaking the phial, became beautifully luminous, and it continued luminous till the fourth day.

There is a fish mentioned by Pliny, the naturalist, which renders such objects luminous as are touched by it. It differs from its fellow tenants of the waters, which become phosphorescent only when in a state of putre-

faction; whereas, the fresher the pholas is, the more luminous does it appear. Brandy extinguishes its light; when it becomes dry, a little pure or salt water will revivify its lustre. When putrid, it loses its brilliancy, which it does not recover until putrefaction has gone its full length, when, by agitating it in water, the latter becomes luminous. Solutions of hydrochlorate of soda and nitrate of potass, augment the brilliancy of the water; acids and wine extinguish it. The water may be rendered still brighter by pouring it on recently calcined sulphate of lime, on quartz, sugar, &c.

The phosphoric meteors, commonly called Will-o'-wisps, which are seen in marshes, near rivers, in churchyards, and low and humid places, in different forms, are to be attributed to the combustion of some hydrogen gas, principally phosphoric hydrogen gas, which, as is well known, has the property of inflaming itself on coming into contact with oxygen gas or air. These meteors are more frequently seen in winter than in summer; in rainy weather their light is more intense than when it is dry.

PHOSPHORIC WOOD.

Rotten wood often becomes luminous; many circumstances induce us to ascribe its light to slow combustion; a fact in favour of this idea is, that if phosphorescent wood be placed in a pneumatic machine, and the air be pumped out of it, the light disappears, and if the air be restored, the wood again becomes luminous. The same experiments performed with a fish that emitted light, produced the same results. The light of fish differs from that of rotten wood in this respect,—namely, that water, alcohol, and several saline solutions, destroy the light of the latter; while water does not diminish the brilliancy of the former, no more than it does that of the glow-worm. If luminous wood be introduced to a tube of glass, and plunged into a freezing mixture, the light will be extinguished.

Rods of wood may be rendered phosphorescent, by steeping them in a solution of chlorate of lime, and then burning one of their ends in the flame of a lamp or candle; after the combustion has taken place, if the stick be withdrawn, a little white matter will be found at the extremity, which will shed a brilliant light. The harder kinds of wood are most proper for this experiment. The white remains of the combustion, it is said, are pure lime; and that a similar luminous property might be given to the wood, by plunging it into lime-water, or a solution of sulphate of magnesia.

PHOSPHORIC PLANTS.

Persons working in mines sometimes meet with phosphorescent plants; the light is perceptible at the points of the plants, especially when they are broken. This phosphorescence disappears in an atmosphere of hydrogen gas, of chlora, or oxide of carbon.

The daughter of the celebrated Linnæus discovered that the *tropeolum maius* is sometimes phosphorescent in the evening.

PHOSPHORIC OYSTER SHELLS.

Place some very thick oyster shells upon, and cover them with, some burning coals; in half an hour take them carefully out of the fire, and it will be only necessary to expose them to the light for a few minutes to be convinced that they have become phosphorescent. In fact, if put in a dark place, they shed a light accompanied by the greater part of the prismatic colours. If the calcination be made in a closed crucible, the colours will be less brilliant. If the crucible be of lead, the parts that have come into contact with it will yield a reddish light; if a few bits of steel be strewed about the crucible, the phosphorescence will be more lively; but if some flat pieces of coal be used instead of steel, the colours will be more beautiful, particularly the blue, red, and green. It seems that scientific men either do not know positively, or are not agreed as to the cause of the phosphorescence of certain bodies; according to some, it is owing to an accumulation of solar light; while others say that it ought to be attributed to a light inherent in the phosphoric substance.

TO RENDER MILK LUMINOUS.

Milk may be rendered luminous by immersing a pholas in it. One of these fishes is sufficient to communicate light to seven ounces of milk, which, as it becomes luminous, appears also to be turned transparent. Beccaria felt convinced that air was necessary for the production of this light; for, having filled a tube with milk made luminous in the foregoing manner, he could only disengage the light from it by suffering the admission of air to the tube. The juice of this fish, reduced into a paste with meal, throws out considerable light when plunged into hot water. If preserved in honey, the fish will retain its luminous property for more than a year; and, in fact, by plunging it into hot water, it will shed as much light as if it were quite fresh.

IGNITION BY COMPRESSION.

By compressing a bit of phosphorus between two pieces of wood, it will inflame. The same effect may be produced by the friction of one piece of phosphorus against another.

THE MASK OF FLAME.

Take six parts of oil of olives and one of phosphorus, suffer them to digest well together, and preserve the solution, which, in the dark, will become luminous. An experiment that is considered amusing may be performed by closing the eyes and lightly passing a sponge, dipped in this solution, over the face and hands, which will then, in the dark, appear covered with a light blueish flame. This trick, we are told, is not at all dangerous.

THE MINIATURE THAMES ON FIRE.

Let fall a few drops of phosphorized ether on a lump of loaf sugar, place the sugar in a glass of warm water, and a very beautiful appearance will be instantly exhibited; the effect will be increased, if the surface of the water, by blowing gently with the breath, be made to undulate.

PHOSPHORESCENT SPAR.

Coarsely powder some fluor spar, and sprinkle it, in a dark room, on a fire shovel made hot, (but not to redness,) and it will emit a beautiful phosphorescent light for some time.

THE PHOSPHORIC STEAM BATH

Lay a small piece of phosphorus upon a bit of glass, place the glass upon the surface of hot water in a basin, and the phosphorus will inflame.

IGNITION BY PERCUSSION.

Put into the middle of some dry cotton, a piece of phosphorus the size of a large pin's head, previously dried on blotting paper; strike it with a hammer and it will inflame.

TO BURN BROWN PAPER BY PHOSPHORUS AND FRICTION.

Wrap a grain of phosphorus, dried on blotting paper, in a piece of brown paper, rub it with some hard body, and it will set fire to the paper.

THE ILLUMINATOR AND EXTINGUISHER.

Make two little figures of wood or clay, or any other materials you please, with a little hole in the mouth of each. Put in the mouth of one, a few grains of bruised gunpowder, and a little bit of phosphorus in the other. Then take a lighted wax candle, and present it to the mouth of the figure with the gunpowder, which, taking fire, will put the candle out; then present your candle, having the snuff quite hot, to the other figure, and it will light again immediately.

TO LIGHT A CANDLE BY A GLASS OF WATER.

Take a little piece of phosphorus, of the size of a pin's head, and with a piece of tallow, stick it on the edge of a drinking-glass. Then take a lighted candle, and having blown it out, apply it to the glass, when it will immediately be lighted. You may likewise write, with a bit of phosphorus, on paper, some words, which will appear awful, when the candle is withdrawn from the room.

AUTOMATA.

Our object being to acquaint our young readers with the mode of performing many pieces of astonishing deception, as well as to instruct them how to do several pleasant tricks of a more simple nature, the most celebrated Automata occur to us as being subjects which ought to occupy a conspicuous station in our Feats of Legerdemain.

THE CHESS PLAYER.

The construction of machines capable of imitating the mechanical action of the human body shews exquisite skill. This, however, has been done; M. De Kempelen, a gentleman of Presburg, in Hungary, constructed an Androides capable of playing at chess. Every one, who is in the least acquainted with this game, must know that it is so far from being mechanically performed, as to require a greater exertion of the judgment and rational faculties than is sufficient to accomplish matters of greater importance. That such a machine really was made, the public had ocular demonstration. The inventor came over to Britain in 1785, and exhibited his automaton to public inspection for more than a year. On his death, it was purchased by M. Maelzel, who paid this country a visit in 1819, when the invention created as much wonder as ever, notwithstanding the vast progress made in mechanical science.

The room where it was exhibited had an inner apartment, within which appeared the figure of a Turk, as large as life, dressed after the Turkish fashion, sitting behind a chest of three feet and a half in length, two feet in breadth, and two feet and a half in height, to which it was attached by the

wooden seat on which it sat. The chest was placed upon four castors, which, together with the figure, might be moved to any part of the room.

On the plain surface formed by the top of the chest, in the centre, was raised an immoveable chess-board, of handsome dimensions, upon which the figure had its eyes fixed, its right arm and hand being extended on the chest, and its left arm somewhat raised, as if in the attitude of holding a Turkish pipe, which was originally placed in its right hand.

The exhibitor proceeded by wheeling the chest to the entrance of the apartment within which it stood, in front of the spectators. He then opened certain doors contrived in the chest, two in the front and two in the back, at the same time pulling out a long shallow drawer, made to contain the Chess-men, a cushion for the arm of the figure to rest upon, and some counters; two lesser drawers and a green cloth screen, contrived in the body of the figure and its lower parts, were likewise opened, and the Turkish robe which covered them was raised; so that the construction, both of the figure and chest, intentionally was displayed, and the exhibitor introduced a lighted candle into the body of the chest and figure, by which the interior of each was, in a great measure, rendered transparent.

The chest was divided by a partition into two equal chambers; that to the right of the figure was the narrowest, and occupied scarcely one third of the body of the chest; it was filled with little wheels, levers, cylinders, and other machinery used in clock-work: that to the left contained two wheels, some small barrels with springs, and two quarters of a circle, placed horizontally. The body and lower parts of the figure contained certain tubes, which appeared to be conductors to the machinery. After a sufficient time, during which each spectator satisfied his scruples and curiosity, the exhibitor closed the doors, made some arrangement in the body of the figure, wound up the works with a key inserted into a small opening in the body of the chest, and placed the cushion under the left arm of the figure, which then rested upon it.

In playing a game, the automaton made choice of the white men; it likewise gave the first move. It played with the left hand instead of the right,—the right hand being constantly fixed on the chest. This slight incongruity proceeded from inadvertence of the inventor, who did not discover his mistake until the machinery was too far completed to remedy the defect. At the commencement of a game, the automaton made a motion of the head, as if taking a view of the board; the same motion occurred at the close of the game. In making a move it slowly raised its left arm from the cushion placed under it, and directed it toward the square of the piece to be moved. The arm then returned to its natural position on the cushion. Its hand and fingers opened on touching the piece, which it took up and conveyed to any proposed square. The motions were performed with perfect correctness, and the anxiety with which

the arm acted, especially in the delicate operation of castling, seemed to be the result of spontaneous feeling; bending at the shoulder, elbow, and knuckles, and cautiously avoiding to touch any other piece than that which had been moved.

On giving check to the king, it moved its head as a signal. When a false move was made by its antagonist, which frequently occurred through curiosity to observe in what manner the automaton would act,—as for instance, if a knight had been moved like a castle,—the automaton smote impatiently on the chest with its right hand, replaced the knight in its former square, and would not permit its antagonist to recover his move, but proceeded immediately to move one of its own pieces, thus appearing to punish him for his inattention.

It was considered of importance that the person matched against the utomaton should be attentive in moving a piece exactly in the centre of a square; otherwise, the figure, in attempting to lay hold of the piece, might even sustain some injury in the delicate mechanism of the fingers. If its antagonist hesitated for a considerable time to move a piece, it tapped smartly on the chest with its right hand, as if testifying impatience at the delay.

During the time the automaton was in motion, a low sound of clock work was heard, as if running down, which ceased soon after the arm was reclined on the cushion. The works were wound up at intervals of ten or twelve moves by the exhibitor, who was usually employed pacing up and down the room; approaching the chest, however, from time to time, on its right side. It was understood that the automaton could not play, unless M. De Kempelen, or his substitute, was near to direct its moves; but it is very certain that the whole mystery lay in the chest, and that there could be no connection with the floor, as the inventor advertised his willingness to exhibit at private houses.

To avoid the obstructions frequently occasioned by the inattention of strange antagonists, in moving the pieces required exactly to the centres of squares, a new arrangement was subsequently made, by which the adversary did not play at the same board with the automaton, but had a chess-board to himself, on which he copied the automaton's moves, and made his own; while a person who attended at the automaton's board, copied, with due precision, for the automaton, the adversary's moves.

In concluding our account of this extraordinary machine, we must observe that it has been asserted, without contradiction, that, although it beat numerous skilful chess-players, in different countries, its moves were directed by a boy concealed within the machinery; so that, in fact, whoever the boy could beat at the game, was sure to be conquered by the automaton. This will shew that it is in the power of youth to attain such a mastery over chess, as to render them capable of competing with capital players of a mature age.

THE FLUTE PLAYER.

The celebrated Vauconson invented an Automaton Flute-player, of which there is a minute description in the Memoirs of the Royal Academy of Sciences at Paris, by which it appears that the figure was about five feet and a half high, and was placed upon a square pedestal, which concealed portion of the machinery. The air entered the body by three separate pipes, into which it was conveyed by nine pairs of bellows, which expanded and contracted in regular succession, by means of a steel axis turned by clock-work. These bellows performed their functions without any noise, which might have discovered the means of conveying the air into the machine. The three tubes that received the air from the bellows passed into three small reservoirs in the trunk of the figure, where they united, and ascending towards the throat, formed the cavity of the mouth, which terminated in two small lips. Within this cavity was a small moveable tongue, which, by its motion, at proper intervals, admitted the air or intercepted it in its passage to the flute. The fingers, lips, and tongue, derived their appropriate movements from a steel cylinder, also turned by clock-work. It was divided into fifteen equal parts, which, by means of pegs pressing upon the ends of fifteen different levers, caused the other extremities to ascend. Seven of these levers directed the fingers, having wires and chains fixed to their ascending extremities, which being attached to the fingers, caused them to ascend in proportion as the other extremity was pressed down by the motion of the cylinder, and *vice versâ;* thus the ascent of descent of one end of a lever produced a similar ascent or descent in the corresponding fingers, by which one of the holes of the flute was occasionally opened or stopped, as it might have been by a living performer. Three of the levers served to regulate the ingress of the air, being so contrived as to open and shut the three reservoirs above mentioned, by means of valves, so that more or less strength might be given, and a higher or lower note produced. The lips were directed by four levers, one of which opened them to give the air a freer passage; the other contracted them; the third drew them backward; and the fourth pushed them forward: the lips were projected upon that part of the flute which received the air, and by the different motions already mentioned, properly modified the tune. The remaining lever was employed in the direction of the tongue, which it easily moved, so as to open or shut the mouth of the flute. The just succession of the several motions performed by the various parts of the machine, was regulated by the following simple contrivance:—the extremity of the axis of the cylinder terminated, on the right side, by an endless screw, consisting of twelve threads, each placed at the distance of an eighth of an inch from the other. Above this screw was fixed a piece of copper, and in it a steel pivot, which falling in between the threads of the screw, obliged

the cylinder to follow those threads; and thus, instead of turning directly round, it was continually pushed on one side. Hence, if a lever were moved by a peg placed on the cylinder, in any one revolution, it could not be moved by the same peg in the succeeding revolution, because the peg would be an eighth of an inch beyond it, by the lateral motion of the cylinder. Thus, by an artificial disposition of these pegs in different parts of the cylinder, the statue was made, by the successive elevation of the proper levers, to exhibit all the different motions of a flute-player.

THE INVISIBLE GIRL.

The operators have a communication, from the exhibition room to another where the confederate is concealed, by tin pipes, which end in a clear horn trumpet, inserted in an isolated glass chest or barrel, attached to the ceiling by coloured ribbons, twined round a small gilt chain. In the inside of these pipes, at right angles, are placed small mirrors, which reflect and contract every object in the exhibition room, so that the confederate, who answers the questions put, can not only hear all that is said, but see even the objects that are held in the hands of the visitors, such as watches, money, miniatures, letters in a book, and every other thing that is uncovered. The following curious dialogue took place between a traveller from this country, and the Invisible Girl, at Siccard's Diversion Room, in Paris:—"What age are you? Fourteen years of age.—Where were you born? At Marseilles.—What is your name? Françoise.—Are you pretty? No.—Are you good? Yes, though sometimes ill-natured.—What is your position? I am reclining.—Do not all the questions that are put to you disgust you? Never; but I am sometimes very much vexed.—How is it that you see every thing that is presented to you; that you hear every thing that is said to you; and that no person can discover you? That is a secret of those to whom I belong," &c. It is a matter of much complication, and cannot be performed without a good confederate and considerable scientific knowledge. We trust, however, we have said sufficient to render the Invisible Girl no wonder.

THE MAHOMETAN MAGICIAN.

The following description of the mechanical conjuring figure, so called, as well as that of "The wise little Turk," will, doubtless, remind our readers of the Automaton Chess-player.

The Mahometan Magician is a figure of sixteen or eighteen inches high, and holds a little hammer in its hand. When exhibited, it is first taken off the table on which it stands, and shewn to the company, to convince them that it is perfectly detached, and stands by itself: the exhibitor then having replaced it on the table, asks if he will compliment his master?—

The little Turk, by turning his head, expresses "No." He then asks if he will pay his respects to the company?—He bows his head to express "Yes." A pack of cards is then presented to the spectators, who draw out one by chance; without seeing the card, or approaching the automaton, his master orders him to strike the number of strokes, necessary to describe the card with his hammer, on a bell:—the little Turk instantly obeys. He is then asked if the card drawn be a heart, a diamond, club, or spade?—And, as the suits are mentioned, he moves his head, to give approbation or disapprobation, and an answer conformably to truth. He then tells the number thrown on dice; and also, before-hand, the number which a second throw will produce. One of the company having hid a little figure in a box, divided into several compartments, he tells in which of them, and at what number, the little figure is to be found; and, to give a humorous termination to this trick, when he is asked which of the company is the most amorous, he points out some old gentleman with spectacles.

The table on which the little Turk is placed, is covered with a green cloth, concealing three levers, which are put in motion by the aid of three brass wires, passing through the feet of the table, and conducted behind the partition: the person who is hid, and acts as the confederate, draws these brass wires as he has occasion to act on the cranks concealed in the pedestal of the automaton, which cranks terminate in the base. By these means, the different motions are communicated to the machine the moment they are required, in the same manner as a repeating watch is made to strike by pushing the button of the case. The performer then holds in his hand a pack of cards, arranged in such a manner that he understands their sequence; that the spectators may not suspect this arrangement of the cards, he apparently mixes them, but, in reality, he only cuts them, which does not change the combination of the game; when he has had a card drawn, he cuts them the last time in the place where the card has been chosen, by which means, he passes to the bottom the card which was immediately over the one drawn: then, looking adroitly at the bottom, he knows, without seeing, the card which the spectator had drawn by chance. He then interrogates the little Turk by a question, which is so composed, that either the words, syllables, or vowels, communicate to the confederate the colour and denomination of the card. By a similar stratagem, knowledge is conveyed to the confederate of the first number thrown on dice; the automaton can then very easily tell what number will come up on the second throw of the dice, because fresh dice are introduced, and such are substituted as have the same numbers on all their faces. As the person, to whom the dice are given, might, by looking at them, perceive the imposition, to escape detection, peculiar care is taken not only to recommend to him to hold the dice carefully hidden in his hand until he throws them, but also to prevent them being too long

exposed to the sight; loaded dice might also be employed, which are so contrived, that the centre of gravity operates invariably. As the person who has already thrown the dice may wish to throw again, either accidentally, or through suspicion, and, as the return of the same points might occasion the honesty of the dice to be suspected, all these inconveniences are removed by getting rid of them as soon as possible.

The box where the little figure has been concealed has a bottom of soft leather, by which means, in handling beneath, the compartment where the little figure is, may be discovered by the hand of the operator; and the figure is constructed of such dimensions as to press on the bottom of the box when it is shut.

THE CANARY.

A Canary bird is shewn, perched on a bottle, which sings any air required. He also sings equally well when changed to different bottles, and on different tables: the breath from his bill blows out a candle, and lights it afterward. The machinery and manner of working we shall now proceed to describe.

Behind the curtain which covers part of the partition are placed two hollow cones of metal. These cones, which are unequal in size, serve as a speaking trumpet to the confederate, and act as echoes, which conduct the voice to different parts, as two mirrors, of different concavities, operate in the reflection of objects at different distances. The confederate, imitating the notes of a bird, executes the required air. The confederate employs the two different echoes to convey the voice to different points, according to the position of the table and the bottle on which the bird is perched. The bird has in its body a little double bellows, and between its legs, a little moving peg, which puts the bellows in motion; this peg, entering the neck of the bottle, leans on a piece of wood which cannot be seen, as the bottle is opaque. This piece of wood, being placed vertically on the moveable bottom of the bottle, easily moves the bellows, and is readily moved by the levers which are under the cloth, when the confederate draws the brass wire which is hidden in the feet of the table: by the same means, the bellows are moved to blow out the candle, and it apparently proves to the spectators that the notes are really formed in the throat of the bird, because the air comes through the bill. When the operator takes the bird in his hand he puts the bellows in motion with his thumb, and the wind in the same manner extinguishes the candle, and he persuades the company that the bird sings without the aid of any machinery hidden in the table; the candle being only a moment extinguished, and the wick still warm, is lighted instantly, by the air through the bill of the bird, which, for that purpose, has been furnished with a little flour of brimstone, and operates as a match.

Besides the curious Automata we have already described, various others have been produced by ingenious persons of different countries. Albertus Magnus is said to have devoted thirty years of his life to the construction of a head that not only moved, but spoke: Thomas Aquinas was, it is related, so terrified at its powers, under the impression that it was the work of magic, that he broke it to pieces. A locksmith of Nuremberg, in the sixteenth century, constructed figures that beat drums, while others played on lutes: and the emperor Charles the Fifth amused himself, in his retirement, by making similar Automata, or rather, Androides, for so such figures are called by the learned. The celebrated John Muller, it is reported, made a wooden eagle, in 1470, which, on the Emperor Maximilian's approach to Nuremberg, flew to meet him. Vauconson made an Automatic duck, and, as Labat tells us, General de Gennes, (who, in 1688, defended St. Christopher against the English,) an Automatic peacock; both of these were of a size and plumage perfectly natural: they ate, drank, walked about, and uttered the same sounds as the birds themselves. The machinery, in both cases, was similar to that of a watch. However astonishing these more complicated pieces of machinery may have been to our forefathers, in modern times, enlightened persons regard Vauconson and his Flute-player, and De Kempelen and his Turk, with much less wonder than that with which the rustics of the present day gaze upon

The Jack-Pudding and Tin-Pudding.

THE DEAF AND DUMB ALPHABET.

Though poor and old, she had a golden joy;
Her dim eye brightened oft, to see her boy,—
Albeit by Heaven deprived of speech and hearing,—
    Throw by his homely toy,
And tell his love, in manner so endearing,
Upon his nimble fingers, that she thought
Him more endowed than those bereft of nought.

THE art of teaching those who are Deaf and Dumb a mode of comprehending whatever it may be desirous to convey to their minds, and of expressing their own wants and ideas to their more happy fellow-creatures, is one of the greatest triumphs that humanity can boast. To such perfection may this art be carried, that those beings, to whose benefit the exertions of its professors are directed, may be raised nearly to a par with the rest of the world. It has the great advantage of being remarkably simple; so that a mother, a brother, sister, or school-fellow, by a little perseverance, may give the deaf and dumb youth the means of communicating his wishes on all occasions. He may be led progressively from the alphabet to the construction and signification of words, the composition of sentences, and, ultimately, to such a complete knowledge of language, as will enable him to study other branches of education with as much promise of success as if he had been born with all his senses in perfection. Our limits will not allow us to enter into any detail of the manner of conveying instruction to the Dumb, beyond the acquirement of the Alphabet, to which we add an engraving shewing the position of the hands to express each letter.

A, E, I, O, U.—The vowels *a*, *e*, *i*, *o*, and *u*, are expressed by touching, with the fore-finger of the right hand, the thumb, or one of the fingers of the left, according to the letter required to be expressed.

A is made by touching the top of the thumb; *e*, by touching that of the fore-finger; *i*, by touching that of the middle finger; *o*, by touching that of the ring, or fourth finger; and *u*, by touching that of the little finger.

B.—Join the fore-finger and thumb of each hand, and place the backs of the two fore-finger nails together.

C.—Curve the fingers and thumb toward each other, so as to resemble as much as possible the shape of the letter.

D.—Curve the fingers and thumb of the right hand, but not quite so much as for *C*, and place the tops of the fore-finger and thumb against the side of the fore-finger of the left hand, which is to be kept straight.

F.—Place the fore-finger of one hand across the back of the two first fingers of the other.

G and *J.*—Clench the hands, and place one fist upon the other.

H.—Draw the palm of one hand across the palm and fingers of the other, beginning near the ball of the thumb, and going along the hands to the tips of the fingers, precisely as if you were brushing something off the palm of one hand with the other.

K.—Curve the fore-finger toward the thumb, and place the second joint of the fore-finger so curved, against the back of the second joint of the fore-finger of the other hand.

L.—Lay the fore-finger of the right hand straight upon the palm of the left.

M.—Lay the three first fingers of the right hand upon the palm of the left.

N.—Lay the two first fingers of the right hand upon the palm of the left.

P.—Bend the thumb and fore-finger as for *D*, only make a lesser curve, and place the tops of the thumb and fore-finger to the two first joints of the fore-finger of the other hand.

Q.—Place the tops of the fore-finger and thumb together; curve the fore-finger of the other hand, and place it on the inside of the fore-finger and thumb, precisely where they touch each other.

a
e
i
o
u
B
C
D
G
F
H
K
L
M
N
P
Q
R
S
T
V
W
X
Y
Z

R.—Curve the fore-finger of the right hand. and place it on the palm of the left.

S.—Curve the little fingers of each hand, and hitch them together.

T.—Place the top of the fore-finger of the right hand against the lower edge of the left hand, between the little finger and the wrist.

V.—This letter is made nearly as *N*, with this difference only, that for *V*, the two fore-fingers of the right hand are placed apart, upon the palm of the left, instead of close together, as is the case for *N*.

W.—Join the hands, with the fingers of one between those of the other

X.—Cross the two fore-fingers at the second joint.

Y.—Place the fore-finger of the right hand between the thumb and fore-finger of the left, which must both be extended.

Z.—Raise one hand toward the face, and place the palm of the other under the elbow of the arm which is so elevated.

It is usual to mark the conclusion of each word by snapping the middle finger and thumb of the right hand: this, it may readily be imagined, renders the dumb language much more intelligible.

Numbers are counted by the fingers in the most simple way: one finger held up, signifies 1; two fingers, 2; the open hand, 5; the two hands, 10, &c.

Thus, it will be perceived, that although many persons are by Nature deprived of speech, yet Art has so ameliorated their condition, as not to leave them altogether

THE RIDDLER.

A riddle is not solved, impatient Sirs,
By peeping at its answer, in a trice;—
When Gordius, the plough-boy King of Phrygia,
Tied up his implements of husbandry
In the far-fam'd knot,—rash Alexander
Did not undo, by cutting it in twain.

RIDDLES are by no means of modern origin; the Sphynx puzzled the brains of some of the heroes of antiquity, and even Alexander the Great, as it is written, made several essays to untie the knot (a practical riddle) with which Gordius, the Phrygian king, who had been raised from the plough to the throne, tied up his implements of husbandry in the temple, in so intricate a manner, that universal monarchy was promised to the man who could undo it: after having been repeatedly baffled, he, at length, drew his sword, considering that he was entitled to the fulfilment of the promise, by cutting the Gordian knot.

Charades, Rebusses, Conundrums, &c. are, with many persons, favourite occasional fire-side recreations. In the construction of several of them, considerable ingenuity is displayed; they are not, in all cases, the production of mere witlings and holiday rhymesters; for more than one author of celebrity, doubtless, in some of those sportive moments when the mind relaxes from graver pursuits to toy and dally with comparative trifles, has

contributed his mite toward the great fund of riddles now in circulation. One of the most clever and best-written among the following collection has been ascribed to the pen of the late Lord Byron:—we allude to the lines on the letter H (Enigma 1, page 439). Conundrums, it must be admitted, are a set of verbal distortions; but still, these distortions are often so droll as to excite mirth. Anagrams, or the letters of a name resolved into any apt phrase, were, at one time, considered of great importance; many of them by no means lack humour. A work of thrice this bulk would scarcely contain all the Enigmas, Charades, &c. now current: we have, therefore endeavoured to make a judicious selection from the mass.

CHARADES.

1.

My first is a part of the day,
  My second at feasts overflows;
In the cottage my whole is oft seen,
  To measure old time as he goes.

2.

A cat does my first, and men drink at my second;
My whole is the drift of an argument reckon'd.

3.

My first gave us early support,
  My next is a virtuous lass;
To the fields if at eve you resort,
  My whole you will probably pass.

4.

My first, a native of the ground,
  In English counties much prevails;
My next's in every county found,
  My whole was never out of Wales.

5.

By candle-light, ladies, my first will appear,
  And the less light the larger it grows;
My second few like when applied to the ear,
  Though many my third to the nose.

6.

My first, nor book nor volume nam'd,
Contains more leaves than most;
My next, when certain crops are claim'd,
Still stalks a numerous host:
My whole—a creeping flower so fair,—
Regales the eye, and scents the air.

7.

My first is to ramble; my next to retreat:
My whole oft enrages in summer's fierce heat.

8.

My first do all nurses possess,
And dandle my second upon it;
My whole is a part of the dress
Attached to the cap or the bonnet.

9.

My first oft preys upon my second:
My whole a bitter shrub is reckon'd.

10.

My first in fruit is seldom rare;
My second all relations are:
My whole is only earthen-ware.

11.

My first dreads my second, for my second destroys my first, while many delight in my whole.

12.

In every hedge my second is,
As well as every tree;
And when poor school-boys act amiss,
It often is their fee.
My first, likewise, is always *wicked*,
Yet ne'er committed sin:
My total for my first is fitted,
Compos'd of brass or tin.

13.

My first gives protection when robbers invade;
" Dear sir, this brown jug," of my second is made:
My total will shew a pedestrian, whose name,
Unrivalled will stand in the annals of fame;
And also a brewer, whose mighty renown
Has been spread, by his beer, all over the town.

14.

Without my first, my second would be undone:
My whole's a village near Hyde Park and London.

15.

My first's a prop, my second's a prop, and my whole's a prop.

16.

My first is in most shops;
In every window my second:
My whole is used for the bed,
And, in winter, a comfort is reckon'd.

17.

My whole is under my second, and surrounds my first.

18.

My first assuages the appetite of a horse, and agonizes the foot of a man; my second, if made of brick, is good; when of stone, better; and, as the seaman would say, when wooden, is best of all: my whole is famous for its—(but, hold! we must make a charade upon a charade here)—take the principal produce of China, a part of the body that is often black, and as frequently grey or blue, and a useful domestic bird,—or, rather, the three letters which, in pronunciation, resemble these things,--and they will shew for what my whole is famous.

19.

My first, if you do, you won't hit;
My next, if you do, you won't leave it:
My whole, if you do, you won't guess it.

20.

My first we oft lend to each other in turn,
To borrow it would be excessively droll;
My next, *near* my first you may often discern;
In my first, too, alas! you'll perhaps find my whole.

CONUNDRUMS.

1. What does a seventy-four gun ship weigh, with all her crew on board, just before she sets sail?
2. Why is a short negro like a white man?
3. Why is the statute book like the Grecian army before Troy?
4. Why is your nose like V in civility?
5. How far is it to the bottom of the sea?
6. What is most like a horse's shoe?
7. Who is that lady, whose visits nobody wishes, though her mother is welcomed by all parties?
8. What is that which few like to give away, and yet nobody wishes to keep?
9. What word is that in the English language, of one syllable, which, by taking away the two first letters, becomes a word of two syllables?
10. Which is the left side of a plumb-pudding?
11. Why are children at the breast like soldiers on a campaign?
12. What thing is that which is lengthened by being cut at both ends?
13. Why is a horse in a stable like a tortured criminal?
14. What word of five syllables is that, from which, if you take one syllable away, no syllable remains?
15. What burns to keep a secret?
16. Why is a stormy, windy day, like a child with a cold in its head?
17. What word is that, to which, if you add a syllable, it will make it shorter?
18. Why should boiled peas of a bad colour be sent to Knightsbridge?
19. Where did Noah strike the first nail in the ark?
20. Why is a tailor like a woodcock?
21. Why is a pack of cards like a garden?
22. Why do we all go to bed?
23. Why is a calf, following a cow, like a monk?
24. Why was Titian's fat daughter, Mary, like William Cobbett?
25. If you give a kiss and take a kiss, what does it make?
26. In which month do ladies talk least?
27. Why is a man who is making cent. per cent. by trade like Ireland?
28. Why is a town in Essex like a noisy dog?
29. Why is Paris like the letter F?
30. What town in Devonshire will denote a woman making a wry face?
31. Why is a man sailing up the Tigris, like one putting his father into a sack?
32. Why does the eye resemble a schoolmaster in the act of flogging?
33. Why is a room full of married folks like an empty room?

34. Why is an angry person like a loaf?
35. Why is a placeman like a cobbler?
36. Why is a peach-stone like a regiment?
37. Why is a dwarf's whole suit like a pair of breeches?
38. Why is a dancing master like a cook?
39. Why is money like a whip?
40. Why is a man, who runs in debt, like a clock?
41. What question is that to which you must answer "Yes?"
42. If you throw a man out of a window, what does he fall against?
43. Why is an island like the letter T?
44. When is a door not a door?
45. Why is a bee-hive like a spectator?
46. Why is a tale-bearer like a bricklayer?
47. Why is a Welshman, on St. David's day, like a foundering vessel?
48. What is that which a coach cannot move without, and yet is not of the least use to it?
49. Why is a man in love like a lobster?
50. When is a man over head and ears in debt?
51. What is smaller than a mite's mouth?
52. Why is the soul like a thing of no consequence?
53. Why is a handsome woman like bread?
54. What snuff is that, the more of which is taken, the fuller the box is
55. Why is the wick of a candle like Athens?
56. Why is a fender like Westminster Abbey?
57. Why is Richmond like the letter R?
58. Why is a blind beggar often like a wig?
59. What fruit is that whose name answers to a busy-body?
60. Why is a cat on her hind legs like a waterfall?
61. Why is a poor man like a sempstress?
62. Why is that which never fails, like a strong knot?
63. Why are false wings like mushrooms?
64. Why is swearing like a ragged coat?
65. Why is sealing-wax like a soldier?
66. If I buy four books for a penny, and give one of them away, why am I like a telescope?
67. Why is a man led astray like one governed by a girl?
68. Why is a clergyman's horse like a king?
69. What is that which makes every one sick but those who swallow it?
70. What kin is that child to its own father who is not its father's own son?
71. What is that which is often brought to table, always cut, and never eaten?
72. Why is a dejected man like one thrown from a precipice?

73. Why is a Jew in a fever like a diamond?
74. Why are fixed stars like pens, ink, and paper?
75. Why is a jest like a fowl?
76. Why is a man in a garret committing murder like a good man?
77. What relation is your uncle's brother to you who is not your uncle?
78. Why should ladies wringing wet linen remind us of going to hurch?
79. What is that which lives in winter, dies in summer, and grows with its root upward?
80. Why is an avaricious man like one with a short memory?
81. Why is a man walking to a town like one endeavouring to prevent a blow?
82. Why is the sun like a man of fashion?
83. Which is the heavier, a bargeman or a lighterman?
84. Why is a blacksmith's apron like a duenna?
85. Why is a lady embraced like a pocket-book?
86. What step must I take to remove the letter A from the alphabet?
87. Why are there three objections to a glass of spirits?
88. Why do cats see best in the dark?
89. A man would drink a glass of wine, and not let it go down his throat—how could he do it?
90. Why is a man beating a boy for telling a falsehood, like another playing on a certain musical instrument?
91. Why is a cook like a barber?
92. Why is a man opening oysters like Captain Cook firing on the savages?
93. A farmer meeting Jack Ketch, asked him the difference between their occupations, which he gave in one word:—what is that word?
94. What is that which is always invisible, yet never out of sight?
95. Why is Alderman B.s belly like the street he lives in?
96. Why is an impudent fellow like a case of ketchup?
97. Why is a pair of trousers, too big every way, like two populous towns in France?
98. What word in the English language expresses the following question,—"Are you a reserved man?"
99. Why is a waiter like a race-horse?
100. Why is a dandy like a haunch of venison?
101. Tom went out, and his dog with him, he went not before, behind, nor on one side of him:—then where did he go?
102. Why is a madman like two men?
103. What is a man like that is in the midst of a river and can't swim?
104. Why is a lady curling her hair like a housebreaker?
105. Why is a lady in her shift like Amsterdam?

106. Why is a fish-nook like a badger?

107. Why is a man in a fever like a burning candle?

108. Why is your hat, when it is on your head, like a giblet-pie?

109. A carpenter made a door, but it was too large; he cut it, and cut it too little; he cut it again, and made it just fit.

110. Why is a good story like a parish-bell?

111. Why is Chancery Lane like your eye?

112. What most resembles a cat in a hole?

113. If a man sham hanging himself, why does he resemble a conjuror?

114. In what place did the cock crow, when all the world could hear him?

115. Why does a brunette's face resemble a wet day?

116. You are requested to ask the following question in one word:—"Are you the person?"

117. Why is a man moping from morning till night like a favourite clown?

118. What animal is that, who, in the morning, goes upon four legs; in the afternoon, upon two; and in the evening, upon three?

119. Why is a conundrum like a monkey?

120. Why is Mr. Mc Adam like one of the seven wonders of the world?

121. What smells most in a doctor's shop?

122. What do we all do when we first get into bed?

123. What is the weight of the moon?

124. Why is St. Paul's like a bird's nest?

125. Why do pioneers march at the head of regiments?

126. What river is that which runs between two seas?

127. What sea would make the best bed-room?

128. What words are those which we often see in a pastry-cook's shop window, which a person afflicted with hydrophobia would use in describing his malady?

129. When is the river Thames good for the eyes?

130. Why has a glass-blower more command over the alphabet than any other man?

131. What is that which you would say to a short boy, and which names a trade?

132. Why is a speech delivered on the deck of a man-of-war like a lady's necklace?

133. Why is a lady in a sedan like the equator?

134. Why is a tallow-chandler the most vicious and unfortunate of men?

ENIGMAS.

1.

'Twas whispered in heaven, 'twas mutter'd in hell,
And echo caught faintly the sound as it fell;
On the confines of earth 'twas permitted to rest,
And the depths of the ocean its presence confess'd;
'Twill be found in the sphere, when 'tis riven asunder;
'Tis seen in the lightning, and heard in the thunder;
'Twas allotted to man from his earliest breath,
It assists at his birth, and attends him in death;
Presides o'er his happiness, honour, and health,
Is the prop of his house, and the end of his wealth;
In the heap of the miser 'tis hoarded with care,
But is sure to be lost in his prodigal heir;
It begins every hope, every wish it must bound;
It prays with the hermit, with monarchs is crown'd;
Without it the soldier and seaman may roam,
But woe to the wretch that expels it from home;
In the whispers of conscience 'tis sure to be found,
Nor e'en in the whirlwind of passion is drown'd;
'Twill soften the heart, though deaf to the ear,
'Twill make it acutely and constantly hear;
But, in short, let it rest; like a beautiful flower,
(Oh! breathe on it softly,) it dies in an hour.

2.

In a garden there strayed
A beautiful maid,
As fair as the flowers in the morn;
The first hour of her life
She was made a wife,
And she died before she was born.

3.

Without a bridle or a saddle,
Across a thing I ride a-straddle,
And those I ride, by help of me,
Though almost blind, are made to see.

4.

I've seen you where you never was,
And where you ne'er will be;
And yet within that very place,
You shall be seen by me.

5.

A shining wit pronounced, of late,
That every acting magistrate
Is water in a freezing state.

6.

Form'd long ago, yet made to-day,
Employ'd while others sleep;
What few would ever give away,
Or any wish to keep.

7.

A word of three syllables seek till you find,
That has in it the twenty-four letters combined.

8.

Form'd half beneath and half above the earth,
We, sisters, owe to art a second birth;
The smith's and carpenter's adopted daughters,
Made on the earth to travel o'er the waters.
Swifter we move, as tighter we are bound,
Yet neither touch the water, air, nor ground.
We serve the poor for use, the rich for whim,
Sink when it rains, and when it freezes, swim.

9.

I'm rough, I'm smooth, I'm wet, I'm dry;
My station low, my title high;
The king my lawful master is;
I'm us'd by all, though only his.

10.

There is a thing was three weeks old,
When Adam was no more;
This thing it was but four weeks old,
When Adam was fourscore.

11.

We are two brothers, born together, who seldom touch the earth, though we often go to the ground; although we never eat fodder, buy sell, or barter, we may be said to be interested in the *corn* laws.

12.

Never still for a month, but seen mostly at night.

13.

In spring, I am gay in my attire; in summer, I wear more clothing than in spring; in winter, I am naked.

REBUSSES.

1.

To three-fourths of a cross, add a circle complete;
Then, let two semi-circles a perpendicular meet;
Next, add a triangle that stands on two feet;
Then, two semi-circles, and a circle complete.

2.

A hundred and fifty, if rightly applied,
To a place where the living did once all reside;
Or a consonant joined to a sweet singing bird,
Will give you a name that you've oftentimes heard;
Which, 'mong your friends, at least, one person owns,
Its the rival of Smith, and as common as Jones.

3.

A numeral, a pronoun, and a syllable that, in sound, resembles the neighing of a horse, will compound that, without which, even a palace would prove an uncomfortable habitation.

The following are Rebusses on the Names of London Performers.

4. What Roman Catholics reverence.
5. The head of a monastery.
6. One of the tallest productions of nature
7. A colour and a vowel.

8. A king of England and a consonant.

9. A word synonymous with sham.

10. What we all stand upon, and a vowel.

11. A famous French dancer.

12. One-fourth of what a lover gives his mistress, a measure, and a vowel.

13. A measure, a vowel, and four-fifths of a weight used in Smithfield.

14. A numeral, the French for A, and the refuge of a wild beast.

15. The usual distinction of a Scotch name, and what we should always be to do a good action.

16. The fourth of a sovereign, and five-sevenths of an age of terror.

17. A female Christian name, and three-fourths of the reverse to soft.

18. A trade.

19. A word implying distance, and three-fourths of a small bird.

20. A preparer of eatables and a vowel.

21. An exclamation of the ghost in Hamlet, and a preposition.

22. A vowel, and four-fifths of the safe-guards of a prison.

23. A consonant, and a portion of the earth.

24. A production of the pastry-cook.

25. Four-sixths of traffic, and a liquid made with pearl-ash.

26. A Hebrew measure.

27. A tool used to take off coach-wheels.

28. A famous river on the continent, and what we all wish to be.

29. What most young ladies try to obtain, preceded by a consonant.

30. An abbreviation for Harry, part of the earth, and a vowel.

31. An Irishman's nick-name, and the reverse to off.

32. Two-thirds of a lively colour, and the mother of mankind.

33. An English city: or, a box, and two-thirds of to do wrong.

34. What we rub our feet on, and what the woodman does when he cuts down a tree.

35. One of the points of the compass.

36. A fruit, and what your father is, and your mother is not.

37. The initials of his majesty, two-thirds of what the inhabitants of Bedlam are, and a Spanish title.

38. Four-fifths of the earth in a dead language, and the penultimate letter of the alphabet.

39. Part of a ship, and two-thirds of an eye.

40. What the ambitious wish to possess.

41. Part of a lock, and a vowel.

42. Half of a foreign country, and what shopkeepers buy for.

43. A measure, and the middle of a hare.

44. A city that was mistress of the world, and a rough consonant.

ANAGRAMS.

1 Ten tea pots.
2 Sly ware.
3 It's in charity
4 Golden land.
5 Great helps.
6 Rare mad frolic.
7 Honor est a Nilo.
8 Hard case.
9 Claims Arthur's seat.
10 No, appear not at Elba.
11 No more stars.
12 O poison Pitt.
13 I hire parsons.
14 Got as a clue.
15 To love ruin.
16 Best in prayer.
17 Nay, I repent it.
18 Veto. Un corse la finira.
19 Comical trade.
20 Spare him not.

SOLUTIONS.

CHARADES.

1 Hour-glass.
2 Pur-port.
3 Milk-maid.
4 Flint-shire.
5 Snuff-box.
6 Wood-bine.
7 Gad-fly.
8 Lap-pet.
9 Worm-wood.
10 Pip-kin.
11 Fox-chase.
12 Candle-stick.
13 Barclay.
14 Hammer-smith.
15 Foot-stool
16 Counter-pane.
17 Waist-coat.
18 Corn-wall, famous for its T I N (tea-eye-hen.)
19 Mis-take
20 Ear-wig.

CONUNDRUMS.

1 She weighs anchor.
2 He's not at all (*a tall*) black.
3 It has many laws (***Menelaus***) in it.
4 It's placed between two I's—(*eyes.*)
5. A stone's throw.
6 A mare's.
7 Misfortune—(***Miss* Fortune**)
8 A bed.
9 Plague—Ague.
10 That which is not eaten.
11 They are in arms.
12 A ditch.
13 He is tied to the rack.
14 Monosyllable—no syllable.
15 Sealing-wax.
16 It blows, it snows—(***it blows its nose.***)
17 Short—shorter.
18 It is the way to Turnham-Green—(*turn 'em green.*)
19 On the head.
20 He has a long bill.
21 There are spades in it.
22 The bed will not come to us.
23 It is cow-led—*(cowled.)*
24 She was a great Polly Titian—(*politician*).
25 A re-bus.
26 In February, because it is the shortest.
27 His capital is doubling—(*Dublin.*)
28 It is Barking.
29 It is the capital of France.

30 Cockermouth (*cock her mouth*).
31 He is going to *Bag-dad*
32 It has a pupil under the lash.
33 There is not a single person in it.
34 He is crusty.
35 He sticks to the *last.*
36 It has a kernel—(*colonel*).
37 They are small clothes.
38 He cuts *capers.*
39 It makes the mare to go.
40 He goes on *tick*
41 What does Y, E, S, spell?
42 Against his inclination.
43 It is in the midst of water—(*wa-t-er.*)
44 When it is a-jar—(*a jar*).
45 It is a bee-holder—(*beholder*).
46 He raises stories.
47 He carries a leak—(*leek*)
48 Noise.
49 He has a lady in his head.
50 When he has a wig on that is not paid for.
51 His tongue.
52 It is immaterial.
53 She is often toasted.
54 The snuff of a candle.
55 It is in the midst of grease—(*Greece*).
56 It contains the ashes of the grate—(*great*).
57 It is next to Kew—(*Q*).
58 He is cur-led—(*curled*).
59 A medlar—(*meddler*).
60 She is a cat erect—(*cataract*).
61 He makes shifts.
62 It is a certainty—(*certain tie*).
63 They are sham pinions—(*champignons*).
64 It is a bad habit.
65 It often bears arms.
66 I make a farthing present—(*a far thing present*).
67 He is misled—(*miss-led*).
68 He is guided by a minister
69 Flattery.
70 His daughter.
71 A pack of cards.
72 He is down cast.
73 He is a Jew-ill—(*jewel*).
74 They are stationary—(*stationery*)
75 It contains a merry thought.
76 He is *above* committing a bad act
77 Your father.
78 The belles are wringing—(*ringing*).
79 An icicle.
80 He is always forgetting—(*for getting.*)
81 He is going toward it—(*to ward it*).
82 It turns night into day.
83 A bargeman.
84 It keeps off the sparks.
85 She is clasped.
86 By B heading it—(*beheading it*).
87 Because there are three scruples to a dram.
88 They eat *lights.*
89 By standing on his head and letting it go *up* his throat.
90 He is striking a liar—(*lyre*).
91 He dresses hare—(*hair*).
92 He's astonishing the natives.
93 Utility—(*you till, I tie*).
94 The letter I, which is always in visible.
95 It's widened at the expense of the corporation.
96 He is a sauce-box
97 Because they are too long and too loose—(*Toulon and Toulouse*).
98 R-u-shy—(*are you shy?- R U shy*).
99 He often runs for a plate or a cup.
100 He's a bit of a buck.
101 On the other side.
102 He's one beside himself.
103 Like to be drowned.
104 She is turning locks.
105 She's in Holland.
106 It is often baited.
107 He's light-headed.
108 There's a goose's head in it.
109 He cut it too little, *i. e.* he did not cut enough of it.
110 It is often tolled—(*told*).
111 It is near the Temple.
112 A cat out of a hole.
113 He is a neck-romancer—(*necromancer*).
114 In Noah's ark

115 It is not fair.
116 R, U, E—*(Are you he?)*
117 He's grim all day—*(Grimaldi)*.
118 Man: *viz.* In the morning of his life, on all fours; in the afternoon, on two; and in the evening, with a stick
119 It is far-fetched, and full of nonsense.
120 He is the colossus of roads—*(Rhodes)*.
121 The nose.
122 An impression
123 Four quarters.
124 It was built by a Wren.
125 To *axe* the way
126 The Thames, which flows between Chel*sea* and Batter*sea*.
127 Adriatic—*(a dry attic)*.
128 Water-ices and ice-creams—*(water I sees, and I screams)*.
129 When it is eye-water—*(high-water)*.
130 Because he can make a D canter-*(decanter)*.
131 Grow, Sir!—*(Grocer)*.
132 It is a deck oration—*(decoration)*.
133 She is between the poles.
134 All his works are *wicked*, and all his *wicked* works are brought to *light*.

ENIGMAS.

1 The letter H.
2 Eve.
3 Spectacles.
4 In a looking-glass.
5 Justice—(*just-ice*).
6 A bed.
7 Alphabet.
8 A pair of skaits.
9 Highway.
10 The moon.
11 The feet.
12 The moon
13 A tree.

REBUSSES.

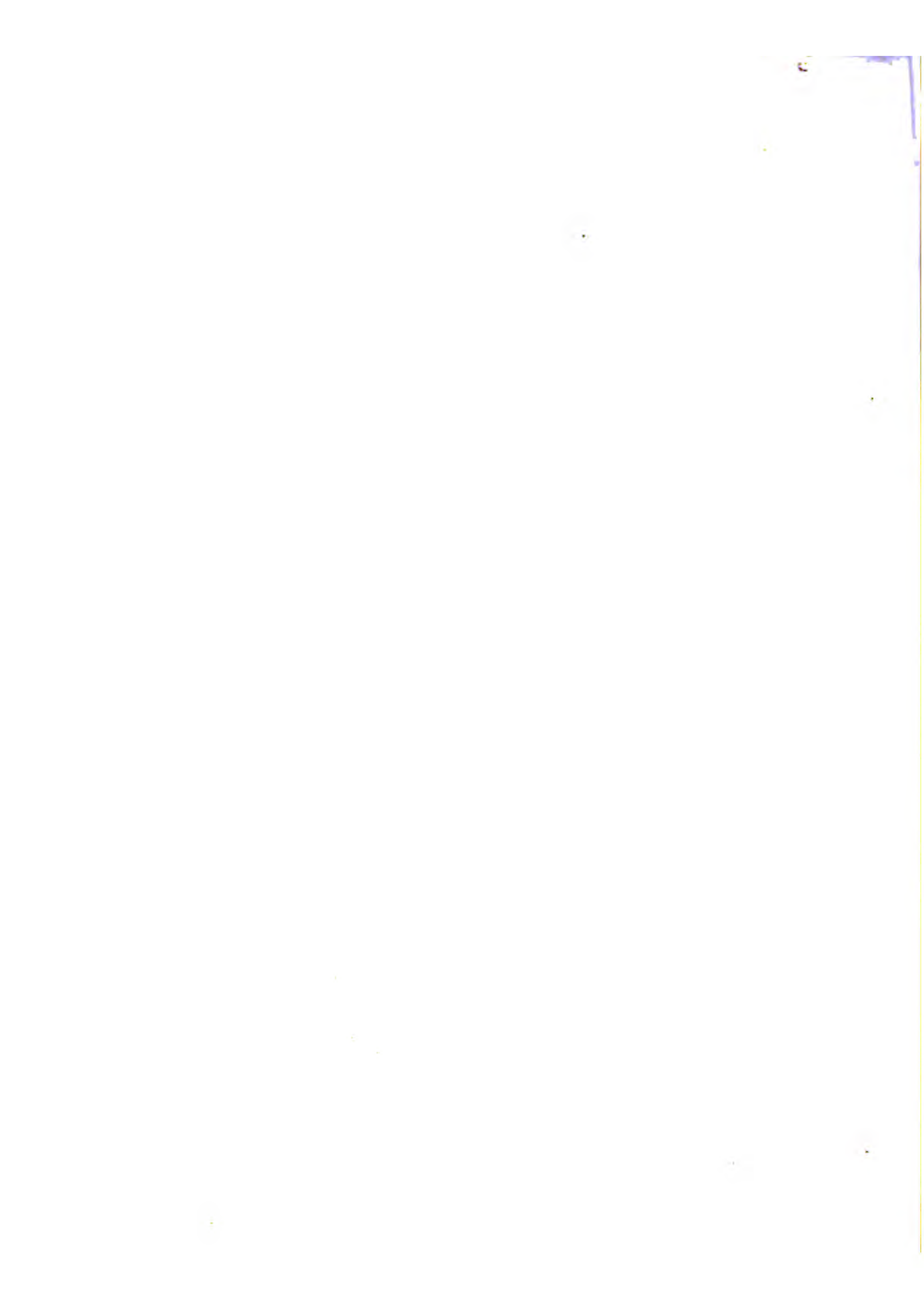
1 TOBACCO.
2 C-L-ark; or C-lark, (Clark).
3 C-him-ney (Chimney.)
4 Pope.
5 Abbott.
6 Tree.
7 Browne
8 Stephens
9 Kean.
10 Foote.
11 Vestris.
12 Kelly.
13 Elliston
14 Munden.
15 Macready.
16 Kemble.
17 Blanchard.
18 Cooper.
19 Farren.
20 Cooke.
21 Liston
22 Yates.
23 Bland.
24 Bunn.
25 Bartley.
26 Cubitt.
27 Wrench.
28 Powell.
29 Glover.
30 Hallande.
31 Paton.
32 Reeve.
33 Chester.
34 Matthews.
35 West.
36 Pearman.
37 Graddon.
38 Terry.
39 Keeley.
40 Power.
41 Warde.
42 Russell.
43 Ellar.
44 Romer.

ANAGRAMS.

1 Potentates.
2 Lawyers.
3 Christianity.
4 Old England.
5 Telegraphs.
6 Radical reform.
7 Horatio Nelson.
8 Charades.
9 Charles James Stuart.
10 Napoleon Buonaparte.
11 Astronomers.
12 Opposition.
13 Parishioners.
14 Catalogues.
15 Revolution.
16 Presbyterian
17 Penitentiary.
18 La Revolution Francaise.
19 Democratical
20 Misanthrope.

Thus ends our Key to the Riddler: our young readers, we doubt not, have very frequently referred to it, in perusing the various questions and puzzles which precede it, in order to save themselves the trouble of tasking their ingenuity to discover the solutions. They ought not, however, to have recourse to the Answers, until they have made frequent attempts to solve the Riddles. Some persons cannot, without considerable difficulty, find the proper answer to an Enigma or a Rebus; while others, of no greater general acuteness, do so with ease. It is no proof, therefore, of inferiority, not to be able to reply to a quaint Conundrum, so quickly as another. Many young people have displayed much ingenuity in the construction of different sorts of Riddles in rhyme,—they are, in general, the most happy in solving those of others. The admirers of these frequently amusing trifles, consider opposition in their component parts, or curious combinations, to be most essential in the construction of good Riddles. They should be " made of odds and ends, like fairy elves," and the most appropriate crest that could be chosen for a Rebus-factor, would, perhaps, be that fabulous creature,

The Mermaid.



LEIGHTON
SON &
HODGE.
SHOE LANE
LONDON.
1757