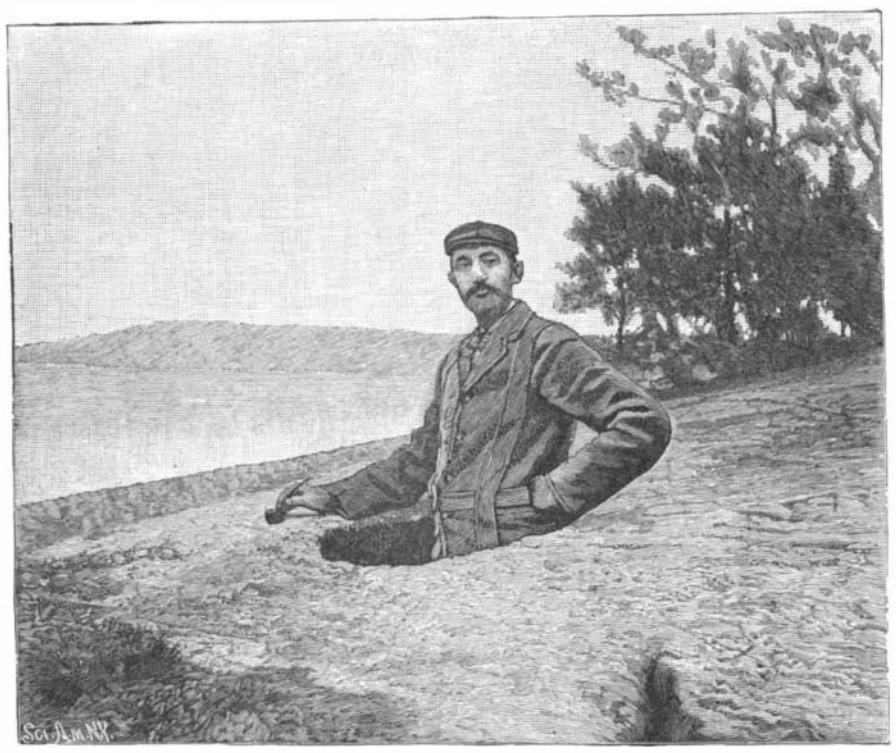
INDIAN KETTLES.

BY GUYLER REYNOLDS.

Summer visitors who have found health-giving recreation along the shores of America's fairest sheet of water, Lake George, can not have failed to notice at different localities certain strange and wonderful holes in the rocks, having a diameter of a foot or more and with a perfectly smooth interior, as carefully made as though a stone carver had worked them out of the solid bedrock.

Seek information of a resident or a tourist wonted to the locality who is familiar with the sight of them, and the reply will come, "Oh, those are simply Indian kettles." When pressed further for an explanation, the fanciful answer is made that Indians who hunted in the Adirondack region, then known as the Great Northern Wilderness, hollowed out these holes in the rocks along the shores wherever they pitched their camp, and therein cooked their liquid food. But how did they heat so peculiar an oven, one without a bottom or sides, one naturally asks. A seemingly good explanation is given that the liquid was placed in the hole, a large stone, or many of them, heated and dropped in until the temperature was raised to the boiling point. In this way large quantities of soup, enough for all the camp followers, could be made. Such is the traditional or rather the mythical explanation of the "kettles" to be found in plenty along the shores of Lake George, but such is far from the true way in which these peculiar holes were constructed.

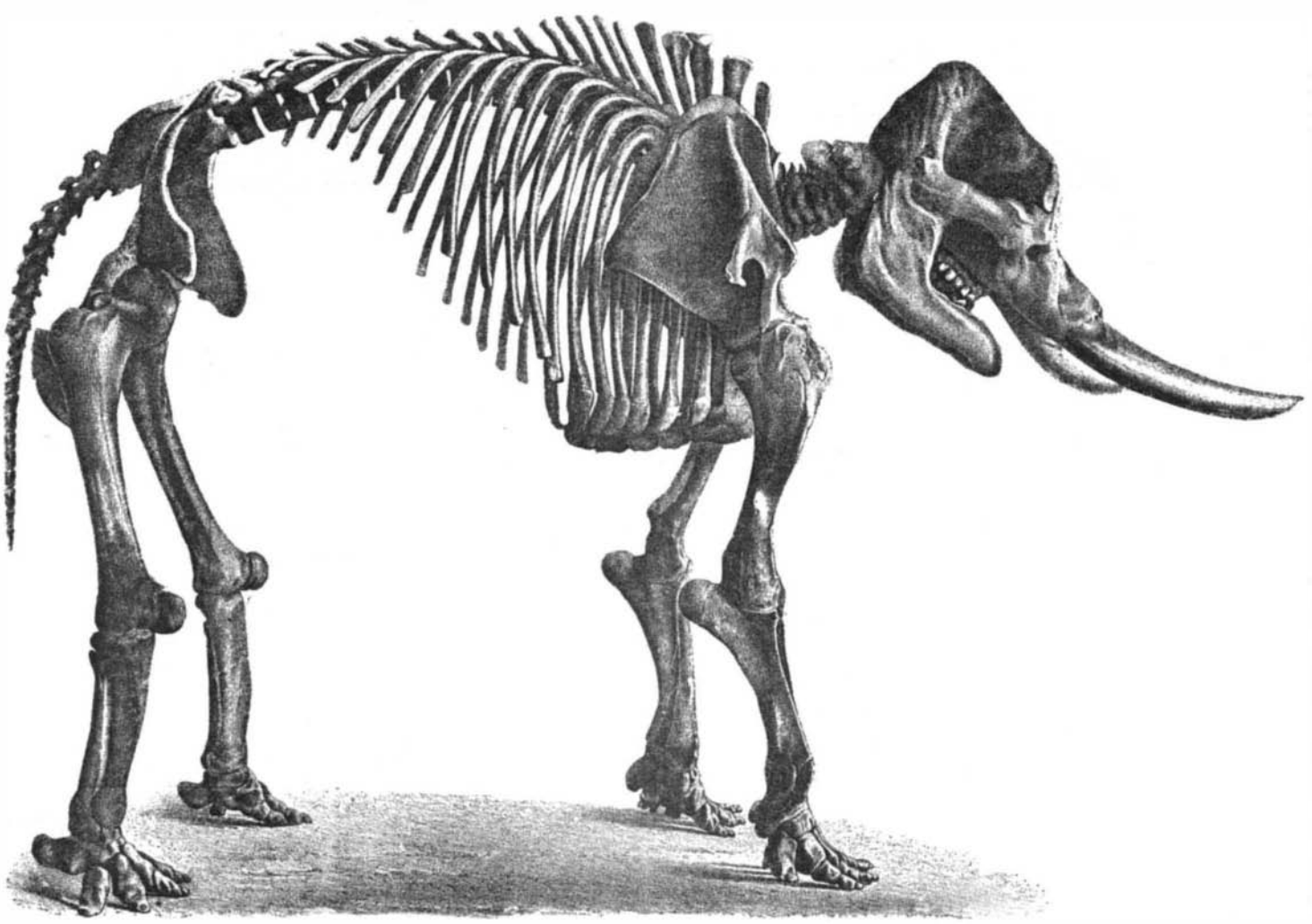


AN "INDIAN KETTLE" OR POT-HOLE.

The "kettles" are the handiwork of nature, and beautifully constructed are they. There is a more common name for them, generally bestowed in regions where Indians are forgotten, and it is that of "pot-holes."

They were made by the action of water many years ago, but to be more definite, the state geologist will tell you that they were made something over 30,000 years ago, or more than 24,000 years before the period fixed by the Bible as the time of the creation of this planet. As these holes are found far above water, it is of interest to explain how they were formed by the water.

About 50,000 years ago, almost the entire State of New York was covered by ice. The Hudson River was a frozen mass from the high ridge of hills on the one side to the other, as is shown today by corresponding erosions of the rocks caused by moving ice, on both sides. Lake George bore the same appearance. From hilltop to hilltop was a single mass. Every valley was filled. Then there came a change. There was a breaking up of this immense field, and glaciers were formed. Invariably all the glaciers of North America passed southward although the water of Lake George now flows northerly. There is a valley now from Baldwin, at the northern end of the lake, continuing southward, which is filled with water, forming the lake. Rogers Rock, an immense elevation rising abruptly with a precipitous face toward the water, is about five miles south of the town of Baldwin and on the west side of the lake. It is one of the features of this beautiful region. To the west of this elevation is another valley, now dry. When the ice broke up, one body moved southward by way of the valley, now Lake George, the other passed to the left of Rogers Rock. The two immense bodies met at the promontory just north of the hamlet of Hague, N. Y. Eddies were formed. The larger eddies were nearest the confluence of the two streams, and smaller eddies, diminishing in size, were strung along in the general course. Bowlders carried down by the fierce current were held in these eddies and passed around and around in the one spot. Knocking against the bedrock, which at this locality is crystalline limestone, they wore a hole. Gradually it increased in depth and diameter until after many years there was formed a hole of considerable size. Some of these pot-holes—and there are twenty-two of them on the one promontory of one-fourth of an acre in extent—measure 40 inches in diameter and range from 6 inches to 14 feet in depth. They occur as close together as 4 feet, and if in a virgin state are filled with muck formed of dry leaves and the water which collects there after a rain, for none has an outlet naturally. Frequently one finds in the holes the stone or a number of small stones which bored the hole. They are generally worn round, and seldom weigh more than a few pounds.



SKELETON OF MASTODON FOUND IN A POT-HOLE NEAR COHOES, N. Y.

Although the Lake George kettles are perhaps the most interesting in the country and have been seen by the greatest number of persons, they are to be found in other parts of the State of New York. In 1866, when clearing a place to establish the Harmony Knitting Mills, at Cohoes, N. Y., a large pot-hole was found. It appeared as a bog, like many a mountain pond covered with floating moss and to which there is no outlet below the surface because it is a bowl in the rock. Excavating disclosed the remains of a mastodon fifty feet below the surface. Evidently in prehistoric times the huge beast had fallen into the hole in the ground, for this one is thirty feet in diameter, and could not extricate himself because of his unwieldy form, or else his remains had been washed down with the glacier and had lodged there. The bones of this big fellow are now on exhibition in the New York State Geological rooms. It is proposed to continue the work of cleaning out these pot-holes, in order to gain information of the animal kingdom of centuries ago. In Scandinavia the pot-holes are called "Thor's kettles," and a quantity of remains of extinct animals have there been found.

In the Canajoharie limestone many "kettles" are to be found, in fact the name of that city is the Indian term for Hole-in-the-Rock. Near the town of Naples, Ontario County, N. Y., where there is a valley containing four lakes, the result of a glacial wash, and where the ice was stopped by the dirt washed down with the torrent, there are a number of them of great interest. Here the rock is sandstone. Near Lucerne, Switzerland, the glaciers have formed some beautiful eccentricities in the form of pot-holes of a variety of shapes and sizes. Visitors always spend some time at the spot, and so beautiful is the place that it is called the Glacial Garden. The Hon. Verplanck Colvin, head of the Adirondack Survey, states that he has recently discovered a pot-hole located 2,000 feet above sea-level, and several hundred feet deep, but he is not prepared to make his wonderful find public.

As they vary much in size, so do they also differ considerably in appearance. Some have a cone at the bottom, while some are flat, the surface along the sides of some is smooth as though sandpapered, while others present spiral grooves. While some are double at the top and end in a single chamber, others run down to a fine point, as though prepared for a blast of powder. All point directly downward, and a majority are large enough to admit a person's body. A man standing in a Lake George "kettle" gives an idea of their shape and size, and how these curious creations of nature look is shown in the picture. Perhaps the Lake George villagers are not far from the right when they style these pot-holes Indian kettles; for though they were not made by Indians, still they might have been put to some practical use by them, and thus the name may not be a misnomer after all.

THE Evening Post reports that the great painter, Mr. G. F. Watts, is an associate of the Society for the Protection of Birds, and feels strongly about the fashion of using the plumage of birds for millinery purposes. He is now painting a picture representing an angel with bowed head and despairing figure bending over a marble tomb covered with birds' wings, while a spirit of evil grins below.

RUSSIA has ordered a 10,000 horse power ice breaker of the Armstrongs, to cost $800,000. It will be ready in October, and will be used to keep open navigation to St. Petersburg throughout the winter.

A "Nose Competition" at Milan.

The nose has at all periods of their history possessed a peculiar significance for Italians, says The London Lancet. As a symbol of intelligence it figures in familiar speech ancient and modern, a "homo nasutissimus" being Seneca's equivalent for a very clever man and "Naso" a name held in honor by the Otacilian, Octavian, Ovidian and Voconian "gens," while "Nasica" was a cognomen of the Scipios, one of whom, Publius Scipio Nasica, was, as the most virtuous man in the state, chosen to accompany the image of the Mater Idæa to Rome. In the Italy of to-day "aver naso" and "esser di buon naso" (to have nose, to be of good nose) are the first of a series of phrases all turning on that feature in its symbolic sense, and giving rise to proverbs infinite in the variety of their application. The great Napoleon was true to his Italian origin in his preference for a "big nose," and the late Lord Beaconsfield, descended from Venetian Jews, never concéaled his scorn for the "flat nosed Frank." He held, in fact, that to be "simus" was the first step toward being a "simia" or ape—a "retrocession in evolution" admitted by some among the "facts for Darwin." Such a horror have Italians of any lesion costing the face its nose or robbing the latter of its due proportions that rhinoplasty among them has long been one of the "surgical fine arts," and the great Bolognese anatomist Tagliacozzi (1546-99) has for all time given his name to an ingenious method of replacing the feature when lost. Quite in keeping, therefore, with all precedent as well as with the fitness of things, it is in Italy that we find the "cult of the nose" as vital as ever, insomuch that within the last seven years she has had two "Concorsi di Nasi" (or nose competitions) in which the owners of the feature received prizes according as they could present it in greatest perfection as regards type, size, beauty and olfactory power. The former of these "concorsi" was held in 1891, at Padua, on the initiative of the students of that medical school, and the citizens were invited "con ischeda segreta," by universal suffrage and secret voting, to name the possessors of "i nasi più sviluppati e rispettabili" (noses the most pronounced and respectable) of the ancient Venetian town. The prizes, consisting of pocket handkerchiefs and snuff-boxes, were in due course awarded by plurality of votes. At Milan, and quite recently, a much better ordered and more conclusive competition of the same kind has just come off, the whole proceeding being controlled by a committee and the "examinations" conducted in a "Nasoteca" furnished with drawings and water colors of heads well provided with noses, such as would have gladdened the artistic sense of William Hogarth. The competitors numbered thirty-six, but not more than twenty-three appeared before the "examiners." The first prize (gold medal) was won by a Venetian, Fortunato Michielutti by name, a vendor of lucifers, whose nose was found to be of "proporzioni inquietanti, lungo, deciso, ardito, tagliente come una lama di coltello" (formidable proportions, long, well-pronounced, aggressive, trenchant like a knife blade). The second prize fell to one Antonio Pozzi, possessed of a nose "prepotente, presuntuoso, con nari larghe e cavernose" (domineering, assuming, with nostrils wide and cavernous). The award for this was a medal in enamel; while the third prize (a silver medal of the first order) was adjudged to Carlo Ascani for the refined, symmetrical proportions of his nasal feature. The last two prizes (the fourth and fifth, silver medals of the second and third order respectively) were given for a nose "without pretension, ingenuous, but solid and well planted," and for one "considerable, regular and worthy of respect." The candidates who were unsuccessful—perhaps "plowed" would be a more suggestive word—shared the festivities with which the committee concluded its labors; and so the "Concorso di Nasi" became a thing of the past, till the "Buon-temponi" (merry makers) of a future year or another city think fit to revive the harmless, not inartistic, though dubiously "scientific," competition.

How the Brain Works.

A committee of British physicians, acting jointly, has for some years been giving particular attention to this topic, and their researches, though not yet altogether complete, already show some very interesting results, which, taken together with those of investigators on the Continent, let us see a long way into the intricacies of the brain.

It has shown unequivocally, for example, that a brain cell, which is the really important part of the brain, actually loses part of its substance during action. The brain cells of persons and of animals that have died during a period of great exhaustion from overexertion are found to be greatly changed from the condition of the normal cell during times of health and vigor. The cell of the exhausted brain, instead of being plump and full of nervous matter, is found to be hollowed out or "vacuolated," a cavity within its substance having formed and being filled with water. This means that a part of the cell substance has been actually consumed during the time of brain activity, precisely as coal is consumed when one gets heat from a furnace.

It is found, further, that if an animal whose brain cells are thus exhausted is permitted to rest and to sleep, its cells rapidly recuperate, new material being supplied from the blood until the vacuolation has disappeared and the cell is practically as good as new again. This explains why sleep is necessary to our existence. During waking hours our brains are literally worn away, and sleep is the state during which the repair shops of the brain make good the damage of the waking hours. Thus the brain of a person who suffers from insomnia is in the condition of a locomotive which is run night and day without going to the repair shops. Disaster must ultimately result.

It is not sleep alone, however, that rests the brain cell, though sleep is absolutely essential to recuperation of the brain as a whole. But not all parts of the brain are involved in any one kind of mental effort. The blood supply of the brain is so arranged that, by expansion or contraction of different arteries, parts of the brain may be flushed with blood and other parts dammed off, so to speak, somewhat as the various currents of an irrigated field are regulated by the gardener. And as a rapid flow of blood is essential to great mental activity, this means that one part of the brain may be very actively at work while another part is resting and recuperating.

Thus it is that a person suffering from brain fatigue may leave his desk and go out into the fields, or on the highways with a bicycle, and by diverting his mind give the overworked cells a chance to rest and recuperate.

But it must not be overlooked that such exercise involves other brain cells, which in turn become exhausted; and that in the end, for the recuperation of the brain as a whole, sleep is absolutely essential. No recreation, no medicine, no stimulant, will take its place. The man who does not give himself sufficient hours of sleep, or who is unable to sleep when he makes the effort, is literally burning away his brain substance, and can no more keep on indefinitely in this way than a locomotive can run on indefinitely without getting fresh supplies of fuel.—San Francisco Call.

RECENTLY PATENTED INVENTIONS.

Mechanical Devices.

MACHINE FOR SUPERPOSING CLOTHS.—Henri Edouard Couzineau, Lille, France. Briefly described, this machine comprises an endless carrier or apron, partly solid and partly open, mounted to travel over a table or other support. The apron is provided with a clamp or other suitable holder for the free edge of the cloth or other material, and an abutment secured to the table or frame is adapted to engage the holder to open it. The material is first seized by the holder and drawn on the solid portion of the apron. Then the holder or clamp opens to release the material, which remains stationary. The apron continues to move, and gradually its open portion comes under the material, finally allowing the latter to drop through the opening of the apron on the lower layers or folds of the material. The material is then cut and the operation repeated.

ROPE-MAKING MACHINE.—Harry I. Hansen, Boonton, N. J. In this rope-making machine a bar of the flier is provided with a longitudinal slot in one face and a wider longitudinal slot in its opposite face, together with a longitudinal rib extending along the wider slot and stopping short of its ends, the walls of the wider slot being provided with teeth. A traverse is mounted to travel on the bar of the flier and has a guide wheel arranged to enter the annular slot in the bar. A driving wheel is held in engagement with the toothed wall of the wider slot. The yarn or rope is carried over a pulley. A driving connection is provided between the pulley and the driving wheel of the traverse. By this machine a ready means is provided for removing or introducing the bobbin in the flier. The feed-cone can be removed and larger or smaller ones substituted. A support is provided for the outer end of the shaft on which the bobbin turns, which support can be quickly and easily manipulated.

Miscellaneous Inventions.

TABLE.—Alfred N. Heine and Gustav A. Nonweiler, Evansville, Ind. With a table top are connected rails cut away at the top at their meeting ends. A leg has a projecting plate on its upper end to engage in the cut-away portion of the rails and a diagonally extending bridge is secured to the under side of the table top and is notched in its upper edge. A wedge is designed to pass through the notch and engage with the leg, and a block is provided for holding the wedge tightly against the leg and its plate.

WINDOW-SHADE.—John S. Judge, Peterborough, Canada. This window shade consists of a series of slats pivotally connected together and arranged in pairs, each pair of slats at opposite ends being provided with roller bearings spring-pressed in an outward direction. The window frame is provided with a tubular guide formed with a longitudinal slot. Tension devices in the guide are connected through the slot with sundry of the slats, whereby the slats may be held at any desired height.

BACK-REST FOR VEHICLE SEATS.—Eugene C. Alford, Portland, Ore. In this rest for vehicle seats, the seat is connected with a back-rest ranging transversely at the rear of the seat, two braces being attached to the back rest and extending downward and pivotally mounted on the seat at the rear portion thereof. Two rods are pivotally connected with the respective ends of the back-rest and extend forwardly. The rods are furthermore respectively slidable in two cylinders mounted at their front portions to swing at the respective sides of the seat. A spring is contained in each cylinder and presses against the rod therein.

VALVE.—Mathew Abt, New York city. The object of this invention is to provide a valve for steam heating radiators whereby the inlet and outlet valves may be simultaneously operated, obviating the danger of leaving one valve open and the other closed. The valve comprises a casing with two chambers separated by a tubular guide. A nut movable in the guide forms a closure for slots on each side of the chambers. Arms integral with the nut extend through the slots and are connected to the valves of the inlet and outlet openings. A screw rod engages the nut and by its means both valves are simultaneously opened or closed.

STOVE.—Ernest C. Cole, Council Bluffs, Ia. The improvement of this inventor is chiefly concerned with the ash-pit and elbow-door. The object of the inventor is to secure a tighter connection of the elbow or jamb with the body of the stove. A sheet-metal collar is forced into a cast-iron elbow and is secured within the latter at a point remote from the extreme heat. By this construction the contact between the sheet-metal collar and the sheet-metal stove-body is tight, because in both parts the expansion will be equal. The invention also seeks to overcome the difficulty resulting from the projection of hinge-studs above the surface of either the door or jamb and permits the grinding of the door and jamb to an air-tight fit on the surface of a grinding wheel. By reason of the double hinge-joint the two surfaces can adjust themselves to an air-tight fit in spite of great variations in grinding off the surfaces or in drilling sockets for hinge-pins, which variations constantly occur in such work.

MITER-SAW GUIDE.—Hamilton Weir, La Porte, Ind. This miter-saw guide comprises a cap-plate having a curved slot, a hanger to which the cap-plate is jointed, a main-plate pivoted to the cap-plate and movable thereon to different adjustments, a screw for securing the main-plate in its different adjustments, clamp-sections hinged together, a spreading device by which the clamp-sections may be adjusted, and ribs or rails by which the moving clamp-sections are held to the main-plate.

DISH-CLEANER.—Robert R. Parry and Edwin Evans, Poultney, Vt. According to this invention, a dish-washing machine, comprising a reservoir, is provided with a cover and carrier rings mounted to rotate in the reservoir and cover. Means are also provided for raising and supporting the carrier rings above the water in the reservoir. A series of open-work receptacles contain the dishes to be washed, the receptacles being arranged to conform to the interior of the carrier rings. A brush is secured to the carrier rings and the dishes are held in the reservoir outside the carrier. With this machine the labor of dish-washing is much reduced, and the reservoir and cover being closed during the operation, there is no discomfort from rising steam.

POTATO-BUG DESTROYER.—Christian Nelson and Henry F. S. Justeson, Arrowsmith, Ill. The object of this invention is to provide a machine which may be quickly adjusted between rows of vines and by means of which the bugs may be removed without tearing or breaking the vines. The machine has a platform which is placed between two rows of vines, the platform having laterally sliding sections curved upward at the outer edge. Longitudinally tapered gathering rollers at the sides of the platform project with their forward ends over the vines at the side opposite to that in which the platform is placed. Means are provided for rotating the rollers. Crushing rollers extending along a slot longitudinally formed in the platform receive the bugs as they drop on the platform and kill them. The edges of the fixed plates of the platform keep the rollers clean.

BANJO-BELL.—William J. McLean, New York city. The improvement provided for by this inventor consists in forming a flange about the central opening in the bell and attaching thereto a flange or ring which is adjustable, so as to vary the thickness of the device and accommodate it for insertion in different banjos in which the distance between the head and the neck extension varies.

WINDOW-SCREEN.—Bennett J. Kolb, Florence, Ky., and Michael Kolb, Newport, Ky. A netting or screen in this invention is made to wind on a screen-roller contained in a casing. The casing is formed with a slot for the passage of the screen and on its end is provided with a removable cap. A rod is secured to this cap and extends into the roller. On the rod a spring is coiled and secured at one end to the rod and at its other end to the roller. A bearing on the cap is provided on which the roller turns.

PROCESS OF CLEANING AND DRYING EGGS.—John A. Kunkel, New York city. This process for cleaning and drying eggs without injuring them consists in cleaning the eggs in a weak solution of a vegetable acid, as vinegar, and soda, in water having cornmeal stirred therein, and then drying them in cornmeal.

SAW.—John I. Caruthers, 156 Fifth Avenue, New York city. This invention has for its object the provision of a saw with the teeth so arranged as to cut during both the back and forth movements and also so arranged as to clear the kerf of sawdust. The saw has the front sides of its teeth arranged at a slight incline relatively to the blade and the rear sides arranged at a greater incline. The teeth are beveled outwardly from their longitudinal centers, the inner end of a tooth engaging with and terminating at a point between the inner and outer ends of the front portion of an adjacent tooth.

BOW-FACING OAR.—Thomas H. Brosnihan, Livermore Falls, Me. The object of this invention is to provide improvements whereby the operator can readily manipulate the oars to insure a proper and easy propulsion of a boat with a minimum exertion on the part of the operator. The device consists principally of a rock-frame, an oar holder pivoted on the frame, and a connection of special construction between the handle and the oar holder to impart a swinging motion to the same.

VACUUM PAN.—Henry G. Boswell, Lihue, Kauai, Hawaii. This vacuum pan is designed for use in sugar-making, and by its means the liquids carried by the vapors in the generating pan are readily separated from the vapors and the latter are not deflected in the pan or obstructed in their passage from the pan to the condenser. The pan has an outlet orifice and a number of depending cup-shaped screens fitting one within the other and spaced apart from one another. The screens are foraminous at the bottom and sides and arranged under the orifice and within the vacuum pan. The vapors passing from the pan will thus be separated from the liquids that may be therein suspended.

PRIVY-STOOL.—William G. Bliss, Constantinople, Turkey. The object of this invention is to enable a person to avoid personal contact with frequently foul and sometimes infected seats, the invention at the same time permitting the stool to be used in the ordinary manner, if desired. The stool is provided with the usual basin, and a pan or tray having an opening is mounted on the basin, so that the opening will register with the basin. The pan or tray is extended horizontally beyond the sides of the basin and has a smooth top surface inclined gradually toward the opening in the pan or tray. Two series of parallel ribs are formed on the top surface of the pan or tray at the horizontally extended portions thereof and located one series at each side of the opening therein, such ribs forming raised gratings on which the feet of a person may rest. A weighted seat is horizontally mounted adjacent to the basin and normally extends perpendicularly to expose the pan or tray, the seat being capable of swinging downward to cover the pan or tray.

FUNERAL-CAR.—James Burns, Cincinnati, O. The car provided for in this invention is adapted to carry funeral biers and other appurtenances used in funeral ceremonies. The invention may also be used in railway cars for transporting fire-engines and similar vehicles. The car is provided with rails upon which a removable floor portion is carried and movable in and out of the car. A removable sill is held on the car and a sliding panel is capable of moving on and off the same to permit the displacement of the floor portion. In operation the movable floor is lowered by means of the rails, and the bier placed upon the floor. By means of ropes attached to the floor the bier is raised into the car. The rails may then be folded out of the way under the car, and the sliding panels closed.

Designs.

MOULD FOR PAVING-BLOCKS.—John L. Adams, New York city. In this design side walls and end walls are so grouped as to form a skeleton figure of the shape of a parallelogram. Partitions in the figure are diagonally arranged and appear integral with the surfaces that they connect.

LOCKET.—Tillie J. Zeltmacher, New York city. This locket consists of a slide-body in which a depression is formed. A frame surrounds the depression and receives a panel transparent in appearance.