

NEW INVENTIONS.

The following are some of the most prominent of the patents issued this week, with the names of the patentees:—

FRUIT BASKET.—ISAAC C. GLEASON, Middletown, Conn.—This invention consists of a polygonal fruit basket with a circular bottom, the tapering sides of which are formed of a single piece, partially cut, to form the angles of the sides, and its ends secured by eyelets, and the round bottom being held in place by its edge fitting into horizontal slits formed in the sides near their lower edge.

DISTILLING APPARATUS.—C. H. HALL, 633 Hudson Street, New York City.—This apparatus consists chiefly of a supply tank or still from which the oil or other liquid courses down in a slow current to a semicircular retort, the bottom of which it covers in a thin stratum so that its temperature can be regulated, and destructive distillation and colorization of the distillate can be avoided. While the liquid passes down over the inclined bottom it evaporates, and the vapors pass through a horizontal tube which is surrounded by a water jacket in which steam is generated, and this steam is conducted back through one branch of the tube where it is superheated and causes the light or condensible vapors of the oil to separate from the condensible gases, and to collect rapidly in a suitable receiver, where they are driven back into the supply tank or out in the open air, while the condensible vapors of the oil or other liquid also collect in the receiver, whence they are drawn off in the liquid state. A suitable scraper, which is carried over the bottom of the retort, prevents the formation of a sediment on the same, and the residuum, composed of the least volatile parts of the oil or other liquid, is carried into a tank by the suction of a jet of steam. The residuum in this tank is washed and cleaned and then returned to the supply tank to undergo a second distillation. The operation of distilling can thus be continued without interruption, and the largest possible percentage of useful material extracted from the liquid to be distilled with the least possible expenditure of fuel.

BUCKLE.—G. F. J. GUNNING, New York City.—This invention relates to a buckle made of one piece of metal wire which is bent so as to form two jaws and a shank, in such a manner that when the end of a belt or strap is secured to the shank and the other end drawn through both jaws and then back between the same, a strain exerted on the strap will cause the jaws to close up and to clasp the strap tightly, and if the strain ceases, the jaws spring open by their inherent elasticity, and the belt or strap can be readily adjusted to any desired length.

ROLLER AND CORN PLANTER.—W. E. RICH, New Providence, Iowa.—This invention consists in a novel manner of operating the seed-distributing device, and in the means for covering the seed, the above parts being used in connection with a roller, whereby a field, after being properly furrowed in one direction, may be planted with corn, in check rows, by the passage of the machine at right angles over the furrows.

EGG BEATER.—FREDERICK ASHLEY, New York City.—In this invention the beater for the eggs is at one end of a shaft upon which is arranged a hollow sleeve or nut, in such a manner that by sliding it up and down upon such shaft a reciprocating rotary movement will be imparted thereto, and consequently to the beater.

WRITING STAND.—DAVID I. STAGG, New York City.—This is a combination of a stand, writing desk, and book holder, whereby the device may, with the greatest facility, be adjusted so as to be used for any of the purposes above specified, and still be simple in construction and economical to construct.

WOOD-MOLDING MACHINE.—THOMAS DICKINSON, Newark, N. J.—This is a wood-molding machine for working irregular forms on circles or parts of circles, and it consists of the combination, with an ordinary wood-molding machine, of an adjustable box table, arranged with guides to bind the molding to the cutters.

PROTECTOR FOR HORSE'S FEET.—A. H. KNAPP, Coxsack, N. Y.—This invention consists of a leather diaphragm supported upon a spring of the same shape as the horseshoe, and introduced within the shoe in such a manner that the diaphragm completely covers and protects the bottom and frog of the animal's foot. For winter use for preventing falling, and, indeed, for protection against gravel, stones, and all liabilities to external injury, this is an effective and admirable improvement. It may be quickly applied or released. We have seen nothing superior.

CORN SHELLER AND BEAN THRASHER.—B. P. PENDEXTER, Mechanic's Falls, Me.—This invention consists of a combination of devices so arranged that they form a strong, compact, and effective corn-shelling and bean-thrashing machine, or grain cleaner, of great practical convenience and utility.

COMBINED KNIFE AND SCISSORS SHARPENER.—M. V. B. HOWE, Ashburnham, Mass.—By this invention the sharpening of both knives and scissors can be accomplished with the utmost ease and facility; the sharpener being both extremely simple and cheap to manufacture.

CHURN.—W. H. TILLOU AND SOLOMON SHUMWAY, Le Roy, N. Y.—This invention consists in the peculiar construction of the gear wheel, and in its combination with the cog wheel attached to the upper end of the dasher handle, for imparting a reverse or reciprocating motion to the churn dasher.

CHURN AND ICE CREAM FREEZER.—THOMAS W. POMEROY, East Hampton, Mass.—This invention relates to an improved churn and ice cream freezer, and it consists in a novel arrangement of the cream receptacle and an external case, whereby cream may be churned and butter produced in the most expeditious manner possible, and superior butter obtained owing to the cream being brought to a proper degree of temperature during the operation of churning. The same device also serves as a superior ice cream freezer.

CAR COUPLING.—HIRAM HUGHES, Sanora, N. Y.—This invention consists in a pivoted latch and a suspended bar arranged within a draw head and used in connection with a link or shackle, whereby a simple and efficient self-acting or self-connecting coupling is obtained, and one which will admit of being readily disconnected when desired.

RAILROAD CARS.—JOSHUA H. ZINN, Kingston, Tenn.—The object of this invention is to arrange the bottom of freight or other cars so as to rest upon the lever frames of weighing scales to allow the contents or load of the car to be weighed.

WINDOW SHADES.—HENRY READ, Ypsilanti, Mich.—This invention relates to the hanging of a window curtain or shade, whereby it can be rolled up or lowered at pleasure and with the utmost ease and facility.

BROOM HEAD.—MARTIN HANELINE, Clear Creek, Ind.—This invention consists principally in the combination of the metallic plates and toothed and wire bars with the wooden frame of the broom head.

FENCE.—S. H. MITCHELL, El Paso, Ill.—This invention consists in covering the notched ends of the seats of the panels, where they are locked together with wire, in order to preserve the ends or prevent them from splitting; and also in a novel arrangement or application of the stakes of the fence and the securing of the notched ends of the panels in position.

BROOM.—S. S. EVANS, El Paso, Ill.—The construction of this broom is exceedingly simple. The upper or butt ends of the corn are inserted in a ring, the handle is driven up through the corn and ring, and a ring clasp slipped down over the corn a little below the end of the handle, and bent so as to give the desired shape to the broom.

MEDICAL COMPOUND.—T. W. SREISSEGER, Charleston, S. C.—This invention consists in a compound of certain ingredients to be applied as a salve for the cure of the itch, and all cutaneous diseases, bruises, cuts, chaps, eruptions of the skin, etc. The patent was issued June 17, 1866 (last week). The inventor wishes to say that one-half of the patent right will be sold or a range of payments made with some moneyed party to enter into the manufacture of the ointment.

TOPSAIL-KEEPING RIG.—WILLIAM G. SMITH AND DANIEL HOOPER, New York City.—The object of this invention is to obviate the necessity for hauling out the reef-tackles by providing a means for holding up the body of the sail when the upper yard is lowered for reefing, so that, in effect, the reef-tackles are already hauled out, as soon as the upper yard is down, and the men can go upon the yard at once, without first having to stop and expend time and labor in hauling up the reef-tackle.

BROOM HEAD.—JAMES WASSON, Fairwater, Wis.—The broom head, in this invention, is formed of two parts, the upper ends of which are soldered to the socket, for the handle, and the lower ends are secured to each other by barbed spikes or hooks, which also assist in holding the corn to its place. The lower side edges are kept from bulging by hooks that pass through the corn and hook upon the edges of the broom head.

PASSING FISH OVER DAMS.—DANIEL STECK, Hughesville, Pa.—This invention has for its object to furnish a means by which fish may be enabled to pass over dams in ascending streams. It consists in the arrangement of a series of inclined planes, with each other, with the end of the dam, and with the bank of the stream.

FAN MILL SIEVE.—E. D. NORTON, Bradford, Pa.—This invention consists of an improved screen or upper sieve, for a fan mill, formed of strips of corrugated sheet metal, the edges of which overlap each other.

HARVESTING CORN.—ABRAHAM DYSON AND W. C. MACQUEEN, St. Louis, Mo.—The object of this invention is to obtain a device which will perform the work efficiently, admit of the cutting devices being adjusted to suit the width of the spaces between the rows of plants, and also admit of the cut stalks or plants being discharged in gables or bundles of the desired size.

ICE CREAM FREEZER.—JOHN R. CHAMPLIN, Laconia, N. H.—This invention consists in the form and arrangement of the vertical arms of the beaters, in the construction of the frame that supports the gearing, and in the manner in which the gearing is connected to the beater shaft.

BRICK PRESS.—JOSIAH S. ELLIOTT, East Boston, Mass.—This invention consists in an improved means for preventing the clogging-up of the hopper and carrier, and also in an improved manner of operating the carrier and the mold in which the bricks are compressed. Also, in a sweep for discharging the brick from the stationary bottom of the mold.

BOOK HOLDER.—DAVID I. STAGG, New York City.—The object of this invention is to obtain a simple, neat, and cheap device, which may be adjusted to suit books of different thicknesses, and to hold them open equally well with a greater or less number of leaves at either side.

SCREW WRENCH.—JOHN C. TAFT, Worcester, Mass.—In this invention, the screw is fitted in a step connected with the ferrule of the handle. The ordinary wrenches of this kind are very liable to have the ferrules of the handles forced back on the latter, under the action of the screw, in adjusting the movable jaw of the wrench to its work, and this renders the screw liable to slip out from the step, a contingency which this invention obviates.

HORSE RAKE.—H. A. BAILEY AND A. R. BURDECK, Racine, Wis.—The object of the invention is to obtain a horse rake which may be readily operated, and be under the complete control of the driver, and one which will be strong and durable.

SKATE.—J. L. PLIMPTON, New York City.—This invention consists in a novel and improved construction and arrangement of the several parts, whereby several advantages are obtained.

MEDICAL COMPOUND.—W. T. SALIE, Bowdoinham, Me.—This is a new and improved medical compound, especially intended for the cure of diphtheria, sore throat, and canker in the mouth.

WELL BORING APPARATUS.—DAVID MORRIS.—Patent was issued June 26, 1866.—This invention consists in a novel arrangement of the horse-power for operating the drill. Also, in the form and construction of the drill and in the water pipe in connection therewith, as fully shown in the drawings and set forth in the claims.

RECEIPTS.—When money is paid at the office for subscriptions, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a *bona-fide* acknowledgment, of our receipt of their funds.

LAW APPLICABLE TO REISSUE OF LETTERS PATENT.

BEFORE THE EXAMINERS-IN-CHIEF ON APPEAL.

S. H. Hoopes for the Board.

Application for the Reissue of a Patent for a Grain Separator.

The entire application was rejected upon the ground, in the first place, that "there appears to be no such defect or insufficiency in the original specification as to render the patent granted therein inoperative." There was but one thing claimed in the patent, the passages for the blast (through the fan tube, the vertical tube, and over the delivery board), as controlled by the valve. If the applicant is entitled to the first combination he now claims, it is manifest that his patent does not protect this right. So of other claims. It cannot, therefore, be intended by the above objection, to assert that it is not inoperative to secure to the applicant the monopoly of those claims. It must be intended—and such is the apparent purport of the language in which the objection is couched—that the patent, being operative for certain purposes, and securing the right to a part of the invention, it is not a proper subject for a reissue. Such would seem to be a fair construction of the statute on the subject; and were the question an open one, strong reasons might be given for adopting it. But it has been often settled in this Office, before the Circuit Courts of the District, on appeal, and by the highest judicial tribunals, in trials at law, that a patent may be reissued for claims not originally claimed, although it effectually embraces others. It must, therefore, be considered the established doctrine of law, that however valid a patent may be, and however sufficiently it may secure to the patentee some of his rights, he is, notwithstanding, entitled to a reissue to secure others.

The following objection embodies another objection: "The Office can see no force in your argument that, in deciding your case, the Examiner did not consider the feature of a 'divided blast,' inasmuch as no such feature was mentioned in any of your claims. It is the practice of the Office to act upon claims as they are presented, not as they may be afterwards modified to avoid the reference given."

As the argument referred to is not in the files, it is not clear what is intended by this. The express design of the statute is to enable an applicant to avoid the references given in any case, and to modify his specification for that purpose, and the practice of the Office has always conformed to this. Hence, the passage quoted is not supposed to allude to the references given in answer to this application, but to those furnished in the original case. Even in that view, it cannot be sustained. It has been expressly decided, on appeal to a Circuit Court Judge, that a reissue may embrace devices expressly disclaimed in the original specification. [Hayden's case, decided Aug. 8, 1860.] Much more may it be made to embrace devices once rejected, after such a modification as shall distinguish them from those which have been advanced as anticipating them.

This consideration also disposes of the further objection, that substantially the features now claimed were relied upon in the original application and were rejected. If the patentee were even persuaded to disclaim such devices, it would not deprive him from now insisting on them. But, it is added that the patentee accepted a very limited claim for eleven years, and that numerous patents have since been granted, embracing devices similar to those before us.

The objection last raised has been more than once urged without avail, against reissued patents, as for instance, against Woodworth's planing machine. Neither the fact that the devices sought to be reissued on the reissue were considered and refused in the original application, nor the fact that the patentee has acquired for many years, in a limited claim, constructive a bar. And we are not prepared to say that these two circumstances combined, amount to a sufficient objection.

It is said, further, that great inconvenience will follow from the effect of granting this reissue, upon those who have patented similar devices since the applicant first applied to the Office. The patentees cannot be prejudiced from this cause, however. If the claims interfere with those of the applicant, they must fail, whether the reissue is granted or not; if it appears that they were anticipated by the applicant in their supposed inventions. The doctrine of anticipation upon those who have become engaged in the manufacture of such machines, and in the use of them, cannot be doubted. But it is impossible to avoid this so long as the doctrine announced in *Stimpson vs. The Westchester Railroad Company*, 4 How. 380, and *Battin vs. Taggart*, 17 How. 74, remain unimpacted by competent authority. The evil, great as it undoubtedly is, must be submitted to for the present. [See, also, *Wilson vs. Rousseau*, 4 How. 647, and *John A. Taplin's case*, 1 Com. Dec. 107.]

An elaborate comparison of the devices claimed, with those referred to as anticipating them, is omitted. Washington, D. C., Oct. 20, 1862.

NEW PUBLICATIONS.

PETROLEUM: A HISTORY OF THE OIL REGION OF VENANGO COUNTY, Pa.—By Rev. S. J. M. Eaton. Published by J. P. Skelly & Co., 733 Chestnut street, Philadelphia.

From the publishers we have received a duodecimo volume with the above title, and have examined its contents with much gratification. From personal observation we can testify to the correctness of the descriptions and the fidelity of the illustrations. Next to visiting the oil regions a perusal of this volume will give an excellent idea of that wonderful locality. In some respects the information given in this work is more reliable and satisfactory than that gained by personal inspection. The book is not intended as a scientific treatise, but for the gratification of a laudable curiosity. It is profusely illustrated, and contains an excellent map of the oil region of Western Pennsylvania.

CHICKENS.—Prang & Co., Boston, Mass.

Messrs. Prang & Co. have published a beautiful chrome lithograph of one of their pictures, consisting of a group of five chickens. It is an excellent specimen of the art, and few would be able to detect that it was not a genuine oil painting.

SPECIAL NOTICES.

Henry C. Smith, of Cleveland, Ohio, has petitioned for the extension of a patent granted to him on the 28th day of September, 1852, for an improvement in Lath Machine. The petition will be heard on the 10th day of September next.

Samuel Hurlbert, of Oranburg, N. Y., has petitioned for the extension of a patent granted to him on the 20th day of September, 1853, and ante-dated September 20, 1852, for an improvement in Plows. The petition will be heard on the 3d day of September next.

William Moore, of Brooklyn, N. Y., has petitioned for the extension of a patent granted to James Carman, assignee of the said William Moore, on the 14th day of September, 1852, for an improvement in Door Locks. The petition will be heard on Monday, the 27th day of August next.

Wanton Rouse, of Taunton, Mass., has applied for an extension of his patent on Self-acting Mules. The petition is to be heard on the 15th of October next.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the patent and date of patent, when known, and inclosing \$1 as a fee for copying. We can also furnish a sketch of any patented machine to accompany the claim, at a reasonable additional cost. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

Bushing, Adjusting and Lubricating Millstones.

It entails often a large loss of time and expenditure of labor to raise the running stone of a mill for the purpose of lubricating the spindle. The difficulty, also, of properly adjusting the runner on the bed stone, so that the contact may be even, is a serious one. It is the object of this invention to obviate those difficulties.

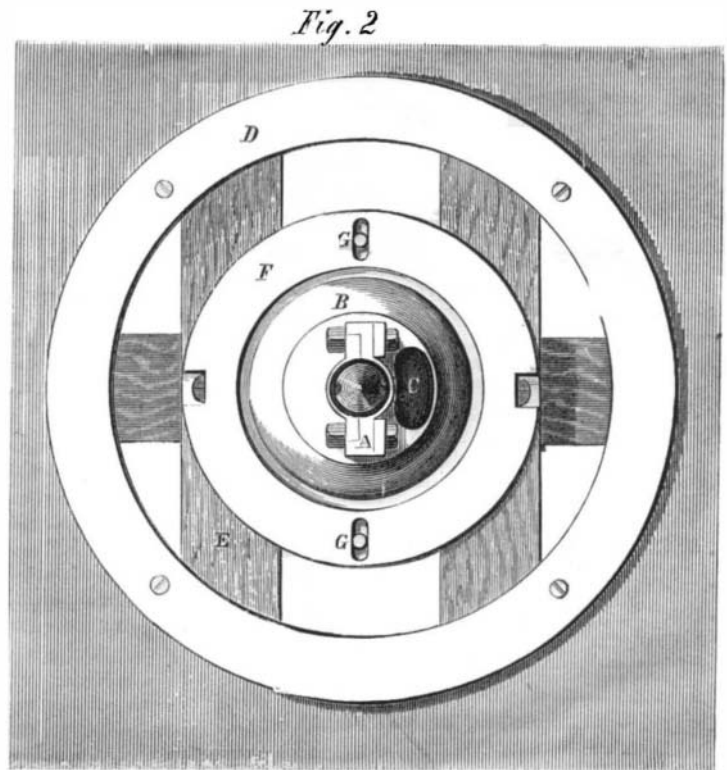
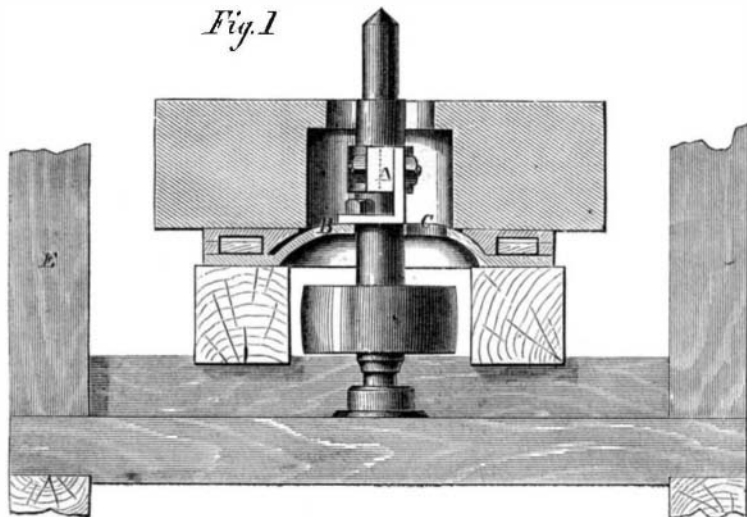
The accompanying illustrations, with the explanation, will convey an accurate idea of the improvement. Fig. 1 is a vertical section of the lower stone, with the bushing supported on a convex circular plate. Fig. 2 is a plan or top view of the bushing, the convex plate, and an outer plate designed to support the stone.

At A is a bushing or box, inserted in the eye of the

oven. The fire, indeed, in the first instance, was lighted with dry fuel, but afterwards the wet fuel was exclusively resorted to. Surely, here are indications of no little importance, at a time when the exhaustion of our coal fields is under consideration.—*Mining Journal.*

[It is hard to argue against facts, and we have had repeated assertions through the press and by individuals, of the great apparent gain by the use of wet fuel, but common sense would say that the heat required to drive off or decompose the gases of water would be equal to that obtained from

fits on the lathe spindle or center. The front of the shell is bored to receive the jaws, C, whose outer surfaces correspond with the incline of the inside of the shell, so that in screwing up the shell, the friction of the thread acts with the compression of the two inclines of the jaws and the conformation of the interior of the shell. The core, B, is slotted to re

**WESTON'S IMPROVEMENT IN MILLSTONES.**

stone and bolted to the plate, B. At C is a hole through the plate designed to admit the hand into the eye of the stone, which is larger where the bushing is than above. The upper outer edge of the bushing is sharp, being beveled toward the spindle, forming a cup-shaped receptacle. This is to facilitate the lubrication of the spindle with tallow or other similar substances.

D, Fig. 2, is a circular plate bolted to the frame, E, sustaining the stone. The plate, F, same figure, is secured to the bottom of the stone, and is curved or concave to fit on the surface of B, and thus allow of an automatic adjustment of the bed stone to the face of the runner; the slots, G, receive pins secured in B, so that a slight lateral motion is allowed, sufficient to insure a perfect adjustment of the two stones at all times.

It will be seen that by this device the lubricating of the spindle can be effected without raising the runner or upper stone, which consumes considerable time and labor, and that the even working of the stones is always secured by the adjustment of the bed stone to the runner.

Patented through the Scientific American Patent Agency, Oct. 24, 1865. Application on other improvements pending. For particulars address the patentee, Charles T. Weston, Scranton, Pa.

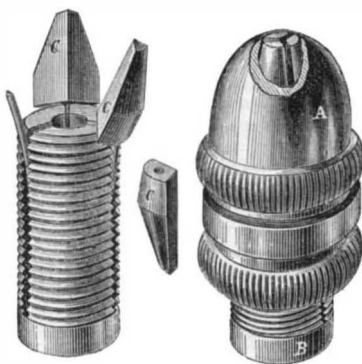
Water as Fuel.

Few persons are aware of the large percentage of actual moisture that abounds in most fuels. The careful housewife, desirous to economize her fire, "backs" it up with wet cinders. The poor employ wet tan. And there are not many who have not watched the nailer with curious interest, when, after a good sprinkle with his handbroom, previously dipped in water, he had made his smithy fire glow again with a very few blasts of his bellows. The Rev. M. Mouie, of Dorchester, has had constructed a cooking stove, in which the combustion, to a certain extent, of water is the principal feature. In the trials made a few years since for ascertaining the economy of burning wet fuel, the results obtained were perfectly marvelous. Fuel containing actually 70 per cent of moisture was burnt in an arched brick stove or furnace. The heat produced was sufficiently intense, the thick wrought-iron door having been previously closed, to raise to whiteness the arch of the

their subsequent combustion. Dr. Hagan's water-burning stove has been in use for some time, but whether it anticipates that of Dr. Mouie is a question.

OLMSTED'S PATENT DRILL CHUCK.

We well remember the time when the "live" spindle of a lathe was provided with a tapering square hole to which the shank of the centers and each drill used was fitted. Then came the round hole, and then the drill chuck, holding the shank of the drill by a set screw or by a flatted portion fitting in a transverse slot through the chuck. The idea of a



proper drill chuck, adapted to all sizes of drills and demanding only perfectly round chucks, is quite modern. Yet these chucks are considered now an absolute necessity in every well ordered shop.

The chuck hereby illustrated seems to be a very convenient form, easily adjusted and holding the drill securely. It is also well adapted for holding wire to be threaded. Every piece of which it is composed is of cast steel well hardened. It can be furnished with a shank to fit the hole for the center, screwed on the spindle, or slipped on the center. No wrench is necessary, the gripe of the fingers being sufficient to secure the shank of any drill. The inventor claims that he has used a one-inch drill, in tenacious wrought iron in one of them, receiving a shank of only three-eighths of an inch diameter without using a wrench.

A represents the shell of the chuck with milled bosses for the fingers. The core, B, is threaded and

receives a steel wire spring which is inserted into the rear of each jaw, so that when relieved from pressure, the jaws open automatically.

With this brief explanation, the operation of the chuck can be easily comprehended. These chucks are made of two sizes, one with an opening of three-eighths of an inch, and the other of three-sixteenths of an inch, and they can be made of larger sizes. Patented May 15, 1866. For more particular information address L. H. Olmsted, Stamford, Conn. [See advertisement in another column.]

Water-proof Enamel for Card Photographs.

The following process for enameling cards is a very good substitute for the collodion transfer process, and is much easier of application. First apply to the surface of the card, with a brush, a solution of gum arabic in water, of sufficient strength to give considerable gloss when dry. As soon as dry, apply a coating of plain collodion in the same manner as coating a plate. If the collodion is not very tough, two or three coatings may be applied to advantage. Finish by passing the card through a roller, and you will have a fine gloss. Care must be taken not to have the gum solution too thick, or the surface will crack when dry, though there is but little danger if the collodion is applied soon after the gum is dry. Gelatin, instead of gum arabic, answers the purpose well, though it gives hardly as much gloss. Perhaps you or your readers may have a better process than this. If so let us have it.—*Philadelphia Photographer.*

VARNISH FOR PHOTOGRAPHS.—M. Bussi first brushes the prints over with a solution of gum arabic, and when this is dry, applies a coating of collodion. The following are the proportions recommended:—

- 1.—Clear transparent gum arabic, 25 grammes; distilled water, 100 cub. cents.; dissolve and strain.
- 2.—Gun cotton, 3 grammes; alcohol, 60 grammes; ether, 50 grammes.

By this double varnish the inventor insures the preservation of the proofs.—*Chemical News.*

THE engines and boilers for the new steam frigate *Ammonoosuc*, are constructing at the Morgan Iron Works, in New York, at a cost of \$700,000, and are of the most powerful description.