

SPRING BED BOTTOM—Noah Warlick, of Chamber's Court House, Ala.: I am aware that wooden slats have been used with spiral springs, and therefore do not claim broadly and irrespective of arrangement, such device.

But I claim the wooden springs, D, attached to the under side of the longitudinal slats, B, and resting on the transverse bar, E.

I also claim the use of metal or india rubber springs resting upon said transverse bar, for the purpose specified.

[This invention consists in having the bed bottom formed of a series of longitudinal wooden strips or slats, having their lower ends, or the ends at the foot of the bedstead, permanently attached at equal distances apart, to a transverse bar, the slats at about their centers being attached to springs which rest on a transverse bar attached permanently to the bedstead, and the upper ends of the slats attached to a strap which serves as a stay, the whole being arranged so that a very elastic, simple, and cheap bed bottom is obtained.]

BRAIDING MACHINES—Andrew B. Clemons, of Derby, Conn., (assignor to the Birmingham Iron Foundry, of Birmingham, Conn.): I claim combining and arranging the tension and pull blocks or weights, H K, which have a rising and falling movement over the vertical guide bar, E, in relation to the lower eye, F, in the bar, E, and the bobbins, D, described, for regulating the paying out of the thread from the bobbin, and consequently its tension in the manner set forth.

[The weight which assists in regulating the tension of the thread is so formed as to enable it to have an up-and-down movement beside the vertical guide bar, and the guide bar is surrounded above the weight by a metallic block having a flanch at its side that projects over the ratchet teeth or notches formed on the top of the bobbin. The thread is passed through an eye in the upright guide bar near the bottom, thence under the lower end of the weight and thence through an eye at the upper end of the guide bar to the object to be braided. By this means the diameter of the winding portion of the bobbin may be greatly reduced, and the bobbin made to hold much more thread, and turned with much less friction than if the tension weight were arranged within a box at its center, as in the ordinary method.]

MACHINE FOR CUTTING BUNGS—James Lyon and George H. Brady, (assignors to themselves and Thomas J. Falls, Jr.) of New York City: We claim the cutters, d d, and stocks, c c, sliding in the adjustable blocks, b b, that are revolved by the face plate, E, and which cutters, d d, are projected by means of the disk, F, and act to cut a tapering bung, substantially as specified.

RAILS FOR RAILROADS—John Cochrane, of New York City: In the manufacture of wrought iron rails or bars for railroad tracks, I claim the making or forming of such rails by means of rolls, with additional metal upon the crown or head thereof, which additional metal is forced into the head or top part of the rail by a second process, thereby consolidating the head or top part of the rail, and hardening the bearing surface thereof, substantially as described.

RE-ISSUES.

SEED PLANTERS—Jarvis Case, of Bloomington, Ill. Patented January 16, 1855: I claim, in combination with a corn-planting machine that is constantly moved over the ground and drops the grain intermittently, the so combining of two slides, one of which is at or near the seed hopper, and the other at or near the ground, or their equivalents, with a lever, as that the operator or attendant on the machine can open said slides at the proper time to deposit the seed, and prepare a new charge by the double dropping specified.

PRINTING PRESS—George P. Gordon, of New York City. Patented June 13, 1854: I claim relieving the sheet from the type, and taking the sheet directly from the plate, or either of them, with or by the same nip-ers which shall carry such sheet to its place of deposit or piling.

I also claim giving, with one inking cylinder, two distributions to the inking rollers for each impression, viz., one distribution prior to passing the form, and one distribution prior to the return of the form to its first position.

I also claim the arrangement of the spring, connecting rod, crank, and stops, as described, to operate the bed and give the necessary dwell for the impression.

GRINDING MILLS—Edward Harrison, of New Haven, Conn. Patented June 6, 1854: I claim the improved method described of securing the runner stone on the driving spindle in a grinding mill by means of a metallic band, or its equivalent, embracing the periphery of the stone, by combining said band with a hub, and a back plate of at least as great diameter as the runner, and rigidly attached to the spindle, such combination operating to secure the stone firmly in its place, in the manner and on the principle substantially as specified.

DESIGNS.

HAT AND CANE STAND—Edward Reynolds, (assignor to Thomas W. Brown), of Boston, Mass.

COOK'S STOVE—A. C. Barstow, of Providence, R. I.

SCRIPT TYPE—James Conner, of New York City.

ADDITIONAL IMPROVEMENT.

PROPELLER—Henry Link, of Little Falls, N. Y.: I claim the wings made up of a series of horizontal hinged valves graduated in width as described, in combination with the cylindrical section, either hollow or solid, substantially as and for the purpose set forth.

DISCLAIMER.

VESSELS FOR HOLDING LIQUIDS—James H. Stimpson, executor of James Stimpson. Patented October 17, 1853: I disclaim so much of the first claim of said patent as may include the application of the double wall to other structures or vessels than ice pitchers.

INVENTIONS EXAMINED at the Patent Office, and advice given as to the patentability of inventions, before the expense of an application is incurred. This service is carefully performed by Editors of this Journal, through their Branch Office at Washington, for the small fee of \$5. A sketch and description of the invention only are wanted to enable them to make the examination. Address **MUNN & COMPANY**, No. 125 Fulton street, New York.

New Gelatinous Material.

It is announced in foreign papers that Professor Schetzer, of Zurich, in Switzerland, has discovered that a strong solution of the sulphate of copper into which an excess of ammonia has been poured, will dissolve cotton and convert it into a sort of gelatinous substance something like collodion.

A Cure for Scrofula.

The Cincinnati *Commercial* publishes the following communication from Nicholas Longworth, the great wine manufacturer of that city:—

"All the papers I had, giving the cure for scrofula, have been distributed to persons sending for the remedy. I have never heard of a case where it did not effect a speedy cure, and it can in no case do an injury. In several instances where it has been applied to old sores, it has also speedily effected perfect cures. Put one ounce of aquafortis in a bowl or saucer; drop in it two copper cents—it will effervesce—leave the cents in; when the effervescence ceases, add two ounces of strong vinegar. The fluid will be a dark green color. It should and will smart. If too severe, put in a little rain water. Apply it to the sore, morning and evening, by a soft brush or rag. Before applying it, wash the sore with water. Its first application known to me was a poor girl, sent to our city from Memphis, to have her leg cut off, as it was feared she might not live long enough to have it cut off in that hot climate. She was refused admittance to the poorhouse, and was lying on the sidewalk, as she could not even stand up. From her knee to her foot one-third of the flesh was gone, and all the skin, except a strip about two inches wide. She was laid on a bed, and the remedy placed on a chair by it. She could rise up and apply it. In a few days her peace of mind returned, and she declared her leg was getting well. It was supposed it was a relief from the pain only; but when examined, fresh flesh was found growing, and skin over it. She was soon running about, and would work, which delayed the entire cure, leaving a small sore, which was, in a few months, entirely healed. A young girl with scrofula in her neck, leaving a large open hole, and deemed incurable, came one month after entirely cured, and recently married, with her husband, on their way to the east. I have never known a case where it did not effect a cure."

New Photographic Process.

In a communication to *Cosmos*, Professor M. Godefrey, of France, described the following method of obtaining photographs:—

Float a sheet of paper upon a bath composed of two ounces of nitrate of uranium and 120 grains nitrate of silver dissolved in three and a half ounces of water. The paper is permitted to remain thus situated for three minutes, and is afterwards dried in a dark place, and kept ready for operation. To take a picture, a sheet of paper thus prepared is placed in the camera in the usual manner; or if a copy from an engraving or another picture is to be taken, it is placed under the object to be copied, and exposed to the light. After this, it is immersed in a bath made up of 40 grains proto-sulphate of iron, 20 of tartaric acid, and a trace of sulphuric to every ounce of water. This bath rapidly develops the impression, and the paper is taken and simply washed in rain water which fixes it.

The sensibility of the paper increases with the quantity of the nitrate of uranium which may be employed. Paper thus prepared is very sensitive, and Professor Godefrey thinks it will yet supersede all other kinds now used in photography. By placing a sheet of it between the leaves of a book, and closing it for three hours, a copy of the printed matter will be obtained by immersing the paper in the developing bath, as has been described for taking other impressions.

It is a remarkable fact—and a recent discovery—that objects exposed to light for a certain period absorb or retain a portion of the luminous agency. This action is illustrated in obtaining a copy of a printed book in the manner described.

ACKNOWLEDGMENT.—We have to thank the Rev. Dr. J. Constantine Adamson for the Annual Report of the Council and Officers of the American Geographical and Statistical Society, for 1857.

Enameling Iron.

A very simple method of coating iron with an enamel of glass is a desideratum. The following process, we are assured, is effective for securing this object, and is the cheapest and most simple which has yet been brought under our notice. The iron articles are first thoroughly scoured with sand and dilute acid, then washed and dried. Their surfaces are now covered with a thin coat of gum-arabic laid on with a brush, and over this the enamel powder is sifted, until all the surface is covered to a certain depth, according to the thickness of glaze desired. The articles are now put into an oven heated to 212°, and completely dried, after this they are put into a furnace, and raised to a red heat which melts the powder and it forms the glazed surface. They are now removed to a close chamber when they are allowed to cool slowly, and are then annealed.

The glazing powder for white enamel is composed of 130 parts of powdered flint glass, 20 of carbonate of soda, and 12 of borax. These substances are fused in a crucible and reduced to powder. Some glazes contain oxyd of lead; they are dangerous to employ for culinary vessels, because, if acid is employed in cooking, it is liable to take up a portion of the lead, which is a poison. The enamel powder now described is perfectly safe, and can be applied to any articles of iron.

Machine for making Shoe Pegs.

Shoe pegs, small and insignificant as they appear and may be thought by some, are yet an important manufacture; and when we look at one, and see its excellent shape and perfect finish, we are surprised to learn that by the aid of machinery they are made with such rapidity as to be sold at almost the same price as oats,—per bushel. Azro Brown of West Waterford, Vt., has invented and patented, this week, an improvement in the machine used in their manufacture, which consists, first in cutting from a bolt or block of wood, thin slips, corresponding in size with the length and thickness of the pegs to be formed, and placing them into radial slots in an intermittent rotating plate, arranged between two other plates, or heads, on the faces of which, next each other, are found projections, whose inner edges are made eccentric, helical or spiral with the center. These latter operate upon the outer ends of the slips of wood, above and below the radial slots in the intermittent rotating plate and thereby force the whole series of strips of wood in the slots towards the center, at every motion of the rotating plate, the required distance to enable a peg to be cut from the end of all of them at every depression of a circular evolving knife. The required taper is previously given the pegs by stationary and revolving knives, and the several operations necessary to this end are performed by a simple compact and novel series of parts arranged in a suitable manner. The claim will be seen by referring to another page.

Improvement in Power Looms.

John Crawshaw, of Rochester, N. Y., has produced an improvement in power looms which consists, firstly, in certain means of controlling the take-up motion of a power loom, whereby its operation is rendered perfectly uniform; and secondly, in certain means of governing the let-off motion, whereby the amount of let-off is caused to be always in proportion to the amount of take-up. It was patented this week, and the claim will be found on another page.

Georgia Prosperity.

The Macon (Ga.) *Telegraph* states that there are now 1,200 miles of railroad in that State, all clear of debt, and paying 17 per cent of yearly dividends to the stockholders. The cotton crop of the present year will bring \$21,000,000, and factories and machine shops are multiplying with great rapidity.

To make Gold Powder and Liquid.

GOLD POWDER.—Take any quantity of gold leaf and grind it with pure honey by a "muller" till the metal is reduced to an impalpable condition. The mixture of gold and honey is then placed in a china mortar containing water, and thoroughly stirred. The contents are then allowed to settle, when the gold sinks to the bottom, while the honey being soluble is taken up with the water and may be poured off. By several washings in this manner the honey will be completely separated and the gold left in the condition of a fine powder. By placing leaf gold in a mixture of nitric and muriatic acid in a glass vessel it will dissolve like sugar in water. By adding some copperas to this *aqua regia*, the gold will be separated and fall to the bottom in fine powder. The acid may then be poured off, and the gold powder washed in pure water, and dried. By triturating leaf gold with sulphate of potassa in crystals, then washing out the latter in boiling water, gold in powder is left behind. This powder is employed by artists for gilding, by mixing it with gum water.

GOLD LIQUID.—Into a solution of nitro-muriate of gold pour an equal quantity of ether, then agitate them for half an hour and allow the contents to settle. The supernatant portion is then poured off, and is called "ether gold." Naptha and several of what are called the "essential oils," such as that of lavender, rosemary, &c., possess the same property as ether in taking up gold from its solutions. Ether gold was at one period much used in medicines; but it is now only moderately employed for writing on illuminated parchment, and on polished steel. The ether rapidly evaporates, when this solution is put on paper and the gold remains adhering with considerable tenacity.

GOLD SOLDER.—Take of pure gold 12 parts (by weight), silver 2, copper 4; and fuse them together. This alloy is employed by jewelers for soldering articles of gold.

A Tall Chimney.

A chimney 256 feet in height has recently been erected at the Charlestown (Mass.) Navy Yard, and it is the tallest smoke-pipe on this continent. There are two chimneys in the old world, however, which have a greater altitude; one of these is in Liverpool, and the other in Glasgow, both of which are over 400 feet in height. A new one is about to be erected in the latter city, the height of which is to be 456 feet; it will be the tallest in existence, capable of frowning down with a well-merited conceit upon all its shorter companions. These tall chimneys belong to large chemical works, and their use is principally to carry up the noxious gases far above the adjacent houses, gardens and fields. Prior to their erection, these gases had injured the shrubbery and completely blasted the trees in the neighborhood.

Bomb Lance for Killing Whales.

A. F. and J. H. Andrews, of Hartford, Conn., have invented and patented this week an improved bomb lance for killing whales. A cylindrical tube pointed at its front end, and having two smaller tubes placed one within the other, and fitted within it is used, the smallest tube being provided with a fuse and cup, and arranged so that the missile may be fired from a rifle, and the missile exploded either by the direct concussion of the discharge, or by the concussion produced by the missile entering the whale.

SODA FROM SALT.—M. Schlessing has sought to obtain soda directly from common salt, by dissolving chloride of sodium in a solution of ammonia with an excess of carbonic acid under pressure, a reciprocal change occurs with the formation of bicarbonate of soda and chloride of ammonium. The former salt from its less solubility is deposited, separated and calcined to get the carbonate.—*Jour. de Pharm.*