RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week ; the claims may be found in the official list:—

Foot Bellows.—This invention relates to a new and improved foot bellows for blowing and kindling fires, operating blow-pipes, etc. The invention consists in the employment or use of two bellows and a wind-chamber arranged in such a manner that the operator, by standing on the device, may, in connection with his weight, operate it with but a moderate effort and eject a continuous blast from the nozzle. Henry Neumeyer, Macungie, Lehigh county, Pa., is the inventor.

Press.—This invention consists in the employment or use of one or more worms secured to a longitudinally adjustable horizontal shaft and gearing in a corresponding number of worm wheels secured to vertical arbors, each of which carries a worm gearing in a toothed rack which rises from the follower of the press, and also a bevel pinion gearing in a wheel mounted on a horizontal longitudinally adjustable shaft, in such a manner that either of the two horizontal shafts can be thrown in gear with the rack or racks rising from the follower, and the motion of the follower and the power acting on the same can be graduated to be quick and less powerful at the beginning of the operation and slow and very powerful towards the end of the operation, or after the material has been compressed to a certain degree by the quick motion. Joseph P. White, 418 Greenwich street, New York City, is the inventor, and he has assigned one-half of his right to Thomas Gannon, 25 Old Slip, New York.

Machine for finishing Nuts.—The object of this invention is to finish nuts as the same are received from the blacksmith, from the nut-machine, or from the foundry, by reaming out the holes to the proper size, forcing the nuts through dies so that the sides of the same are rendered flat and bright, smoothing off the upper and lower surfaces, and finally tapping the nuts, which are shifted from one reamer or punch to the other by the automatic action of the machine in such a manner that the operator or attendant has nothing else to do but to feed in the rough and unfinished nuts, which, when finished by the machine, are deposited in a suitable receptacle ready for immediate use. Frank P. Pfleghar and Wm. Schollhorn, New Haven, Conn., are the inventors.

Water Closet Cock.—This invention relates first, to an improved arrangement of parts whereby the construction of compression valves and faucets is simplified, and an article produced not so liable to derangement or injury from wear; second, to an improved arrangement of a solid-headed valve and a solid-headed actuating rod, presenting no external joint or connection that could be tampered with, nor any internal joint that can become deranged and cause the valve to leak; third, to an improved method of packing a valve rod, whereby a simple, cheap, and effective substitute for a stuffing-box is obtained; and fourth, to the arrangement of a grate or strainer operating in connection with the supply chamber and valve in such manner that chips and foreign substances are effectually excluded from passing through or obstructing the operation of the valve. John Broughton, 41 Centre street, New York, is the inventor.

Paraffine in the Oil Wells.

Paraffine was discovered about 1830, and by two separate chemists at the same time. Christison, of Edinburgh, found it in Rangoon petroleum. In appearance and in substance it resembles the spermaceti of the whale, and the white wax of the bee or certain plants. It is called paraffine from *parum affinis*, having so little affinity for other bodies. This substance stops up many of the veins of oil in the wells at Oil Creek, for it is a substance held usually in solution and in large quantities in the petroleum, the hydro-carbon oils being its natural solvents. When oil stands, and especially in cool weather, it remains with the heavier oil at the bottom.

In this way some of the most valuable and productive wells have been for a time choked up. Neither acids nor alkalis have effect upon it. Heat melts it at a temperature of 112 degrees, and cold solidifies it. As the heat of the earth is supposed to increase as we descend, the temperature of the oil is favorably affected by this circumstance, and the deeper the well the better for holding the paraffine in solution. But it is not until we get the thermometer up to 112 degrees that paraffine always melts, and thus it occurs that portions of it form on the inside of the tubes and those veins in the sand rock through which it passes. Another circumstance considerably adds to this tendency. We all know that as the condensation of gases increases their temperature, so their expansion diminishes it, and whenever there is a large and sudden escape of those hydro-carbon gases, which are among the best indications of oil there, there is a lowering of the thermometer proportionably great. Hence, in all flowing wells, in proportion to their energy and the escape of gas, the oil when it reaches the surface is intensely cold, often it is almost freezing, owing entirely to the liberation and expansion of these gases. The effect of this must be an increased tendency to make deposits of this paraffine along the passages through which the oil passes, and there are many instances in which they become so obstructed that the oil ceases to flow. Many suppose in these cases that the oil is exhausted, when the real cause may be in any of these instances simply an obstruction in the passages. In such case a new well used to be considered the only remedy, but now various other methods are resorted to. Often new tubing in the well is sufficient to set matters straight, but where that fails by connecting the mouth of the tubing with the boiler of the engine, steam is forced down and partly by the pressure and probably still more by the heat, the paraffine is melted like wax by a temperature over 112 degrees.

Not long since a well that had flowed at the rate of a hundred barrels a day, and had finally given out, was by this process so far restored as suddenly to flow sixty barrels, bringing up with the oil through the tubing, immense quantities of paraffine and obstructing materials that had been loosened from their hold below in the undergrouud chambers by the vapor bath. In other cases air forced down by an air-pump, has, by the mechanical pressure, effected much the same sort of relief. Steam cools and condenses to some extent before it reaches the point of action. But condensed air does not. Which on the whole will prove most efficient, time and experience must decide.

Every month new methods are being adopted, and some fresh knowledge is gained, and what will be ultimately reached in the way of injections it is hard to say. But as by the stomach pump we are able not only to draw off the contents of the stomach, but to inject medicines and wash out that great and vital organ, so shall we become increasingly able, as it were, to wash out the bowels of the earth, cleanse the cavities of these oil wells, and by enabling them to cast off their contents, restore their full tone and action to them. Perhaps we shall learn before long that full half the value of nearly every man's farm lies below the surface in the shape of mines, springs of fresh water or salt, oil or mineral manures; and the days will come when artesian wells will be bored, and the strata duly registered, to enhance the value of almost every lot.—*Philadelphia Ledger.*

FRENCH COMPOSITION FOR REMOVING INCRUSTATIONS.—M. Dulrue, of France, has brought forward some compositions for preventing and removing incrustations. These compositions consist entirely of vegetable matters, and are prepared by dissolving or infusing in hot water the bark of the oak and pine, as well as the leaves of the sumach tree ground and reduced to the state of a coarse powder. This infusion is concentrated to a density of about ten degrees Beaume, and to it is added a quantity, say from fifteen to thirty per cent, of cream of tartar and spirits of turpentine. In employing this liquid to prevent incrustation in steam boilers, a quantity of it is introduced from time to time, the quantity required varying according to the capacity of the boiler. Three pints of the liquid are generally sufficient for every thousand pints of water in the boiler for each ten days.

MR. T. BONAR, 124 Nassau street, has sent us a lithograph of the Japanese corvette *Fusiyama*, which is very spiritedly executed.

ISSUED FROM THE UNITED STATES PATENT-OFFICE

FOR THE WEEK ENDING OCTOBER 25, 1864.

Reported Officially for the Scientific American.

☞ Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying size of model required and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

44,776.—Machine for Cleaning Peat.—Edward H. Ascroft, Lynn, Mass.:

I claim the arrangement or combination of rotary perforated drums or cylinders, to operate together as separators, substantially as set forth.

I also claim combining with the separating cylinders the clearers, f, operating in the manner substantially as set forth.

44,777.—Balance Steam Valves.—R. P. Baillie, Detroit, Mich.:

I claim the arrangement of the two seats, B B, on the opposite sides of the valve chest, A, to operate in connection with the double valve, C, in the manner and for the purpose substantially as herein shown and described.

[This invention consists in a steam cheat being provided with two seats on its sides, one opposite the other, and arranged in combination with a double, D, valve in such a manner that each valve works on one of the seats, and the two valves combined are perfectly balanced and allowed to act just as easy under a pressure of a hundred or more pounds as they do in the open atmosphere.]

44,778.—Diagram for Teaching Penmanship.—Isaac Bat s, Poughkeepsie, N. Y.

I claim the employment or use in teaching penmanship of a diagram representing the correct position of the arm, hand and pen, substantially such as herein shown and described, and for the purpose set forth.

[This invention consists in the employment or use in teaching penmanship of a diagram representing the correct position of the arm, hand and pen in such a manner that the student is enabled, by placing the diagram on the table and his arm over it, to find at once and without further instruction the most approved position for writing.]

44,779.—Clothes Wringer.—Eben Blakeman and Joseph R. Gill, Charleston, Ill.

We claim, first, Holding the main parts of the frame of the wringer together by means of the rods, a, which sustain the springs, e, and the rods, d, and the grooves in the roller shafts substantially as described.

Second, The combination of the friction wheel, D', its hanging journal box, g, and top piece, G, with the friction wheels, D and D'', and the pressure roller, C, substantially as described.

Third, The gear, k, and shaft, S, in connection with the lower friction wheel, D, as set forth.

[The general object of this improvement is to produce a wringer which shall be more convenient for use than those now made, as well as cheaper in its construction, less liable to give way under the strain to which such articles are usually subjected, and which shall be self-adjusting while in operation.]

44,780.—Scythe Fastenings.—Alexander Boyden, East Foxboro', Mass.

I claim the combination of the movable bearer or wedged plate, G, or its equivalent with the snath-holder, A, and the confining clamp, B, thereof.

I also claim the combination of the adjuste , D, with the ribs, e e, or their mechanical equivalents with the snath-holder, A, and its clamp, B, provided with screws and nuts, and applied to such holder substantially as specified, the said holder, A, having a slot, l', made in it in manner and for the purpose hereinbefore specified.

44,781.—Metal Shirt Bosoms.—O. G. Brady, New York, N. Y.

I claim a shirt bosom of metal constructed substantially as above described.

[An illustration and description of this, invention will shortly appear in the SCIENTIFIC AMERICAN.]

44,782.—Apparatus for Raising Water, &c.—Abel Brear, Saugatuck, Conn.:

I claim the arrangement of the inlet and outlet openings of the chamber, A, and the mouth of the elbow-shaped nozzle, D, all in line with each other and in upright positions, substantially as herein specified.

44,783.—Water-Closet Cocks.—John Broughton, New York, N. Y.:

I claim, first, The arrangement of the solid valve, e, and solid headed valve-rod, g, connected together substantially as shown, and supported by and working in the tubular bearing of the nipple or neck, n, in combination with the supply and discharge chambers and the elastic valve-seat, K, all constructed and operating substantially as described.

Second, Forming an annular groove upon that part of the valve-rod, g, which slides within the neck of the chamber, B, and filling the same with cork or other elastic material, substantially as and for the purpose above described, and thus dispensing with a cover on the end of the neck.

Third, The arrangement of a grate or strainer upon the valve stem below the valve, and moving within the supply chamber above the induction pipe, substantially as described.

44,784.—Combined Gun and Pistol Bayonet.—Robt. K. Colvin, Lancaster, Pa.:

First, I claim the arrangement and combination of two triggers to operate a gun, and a revolving pistol, separately or together, as herein described.

Second, I also claim the arrangement and combination of the gun, pistol and bayonet, when arranged and combined as herein described,

44,785.—Plaster and Seed-Sower Combined.—George S. Conklin, Goshen, N. Y.

First, I claim the combination of the rotary shaft, H h, sieve, G, and rectangular and triangular apertures, e f, the whole being employed to agitate the seed and plaster, crush the latter, and separate straw and trash, in the manner and for the purpose set forth.

Second, I claim the shaft, J j, in combination with the triangular apertures, d' l, substantially as and for the purpose specified.

[The object of this invention is to provide more effectual means for depositing mixed plaster and seed, and the invention consists chiefly in the use of a shaft having projections to crush the plaste