

# Scientific American.

------The market stranger

# Advice to American Patentees Concerning Foreign Patents.

It is generally much better to apply for foreign patent simultaneously with the application here. If this canno be conveniently done, as little time as possible should be lost after the patent is issued, as the laws in some foreign countries allow patents to any one who first makes the application, and in this way many inventors are deprived of their right to take patents for their own inventions.

Many valuable inventions are yearly introduced into Europe from the United States,-by parties ever on the alert to pick up whatever they can lay their hands upon which may seem useful.

It is a part of our business to secure European patents -in fact three-fourths, and probably more, of all the patents granted in Europe to American citizens, are solicited through this office. We have faithful agents in the chief cities in Great Britain and on the Continent, and through them we can not only solicit patents, but often effect their sale upon advantageous terms. We can give the names of many of our patrons who have realized fortunes out of their European patents through our Agents abroad, if it is desired

We are prepared at all times to furnish advice in regard to Foreign Patents, and will cheerfully do so on application personally at our office or by letter.

Modelsare not required in any European country, but the utmost care and experience is necessary in the preparation of the case. Almost every invention that is of value in this country

is of equal value abroad, and we would recommend pat entees to pay more attention to securing their inventions in foreign countries than they have heretofore done.

All particulars in regard to the modus operandi of obtaining patents in any country where patent laws exist, may be had by addressing the publishers of this paper.

MUNN & CO. 128 Fulton street, New York.

(Reported Officially for the Scientific American.) LIST OF PATENT CLAIMS issued from the United States Patent Office

FOR THE WEEK ENDING NOVEMBER 25, 1856. STUFFING HORSE COLLARS – JOSEPh Albright, of Greenville, Tenn.: I do not claim separately the tooth-ed revolving feed, arranged for operation in connection, from the outside, with a rack-built hopper, as such is de-soribed in the patent granted toGerad Sickles. Nov. 20, 1855.

scribed in the patent granted toGerad Sickles, Nov. 20, 1855. Nor yet do I claim, separately of themselves, the croaked fed straw retaining spaces, c3, described, as the equivalent of such is tound in the bearded rack de-scribed in the patentof H. G. Robertson, June 20, 1856. But I claim in horse-collar stuffing machines the inter-mittently revolving toothed feed wheels, a, when ar-ranged at the backandon the outside of the hopper, in combination with the crooked fedstraw retaining spaces or chamber, c3, at the bottom of the hopper, and extend-ing backwards, as show 1 and described, the teeth of the wheels, a, which work from the outside of the the retain-ing spaces, c3, to wait the action of the plunger, as set forth, and whereby the many advantages specified are obtained. obtained.

obtained. LATTHE FOR CUTTING FLUTED MOLDINGS-James Anderson, John McLaren and John Bryant, of New York City: We claim, first, the adjustable rotating cut-ters, quattached to shafts, pp. which are fitted inframes o o, the frames being fitted and working in pendant guides, n, attached to the adjustable block, G, substan-tially as described for the purpose specified. Second, we claim placing the leg. E, between centers which are attached to a swinging frame, C, fitted on a re-ciprocating carriage, B, the leg being turned or rotated between its centers as the carriage moves, by means of the incline slet, i, in the lege or plate, J, and the lever, h, and gearing, Fg, as described. [This is a good improvement on machinery for cutting

[This is a good improvement on machinery for cutting spiral fluting on the legs of articles of furniture. There are two sets of adjustable rotary cutters rotating in opposite directions, and an adjustable reciprocating field car-riage which holds the article, which is turned by a guide block, lever, and gearing, so that it is fluted in an expe-ditious manner. This invention is ingenious. The machine flutes cylindrical, or tapering legs.]

PRINTING PRESSES—F. L. Bailey, of Boston, Mass. : I claim the combination of the stationary bed, D, with the revolving distributing cylinder, G, when the two are placed within the circle of revolution of the ink rolls, H, asset forth.

asset form. Second, I claim the impression lever,  $\mathbf{M}$ , in combination with the connecting bar, L, when the two are so arranged that they may be disconnected at pleasure for the purpose set forth.

purpose set form. FOURNEYRON TURBINE WHEEL—Stephen K. Bald-win, of Gillord, N. H.: I do not claim the water guides, J J, &c., or the circular gate, N, or any particular meth-od of applying the water to my wheel, as there are vari-ous methods in which it may be done. But I claim the extending of the bucket, B, of the Fourneyron turbine water wheel further inward towards the center of the wheel, either on the radial lines or on lines varying either side of the central point, and thence upward and outward so as to receive the direct action of the tropelling water against the extended bucket on the part, as described.

TREATING FELDSPAR—Charles Bickell, of Baltimore, Md.: 1 claim the decomposing of feldspar by heating it with lime and phosphate of lime, for the purpose of ob-taining potash or soda either in the caustic or carbonated state, or for the purpose of obtaining a manure, in the manner substantially as described.

ALCOHCL COOKING APPARATUS—Thomas G. Clinton of Washington, B. C.: I do not confine myself to the ar-rangement of the parts, E D C G, as shown, because those parts may be arranged otherwise to do the very same duties

these parts may be arranged of the way to be arranged of the several parts duties. I claim an alcohol burner arranged in its several parts substantially as described and represented, or in any equivalent manner, for the purposes and effects set forti-irrespective of the method by which alcohol is supplied to the chambers, A and I. I also claim the internal pipe, B, or its equivalent, ar-ranged as described in relation to the tube, H, and for the purpose and effect set forth.

BOXES AND AXLES, JOURNALS, &c.—David Cumming, of Sorrel Horse. Pa: I claim the V-collar or bearing, a 'h, running in a V-groove, as described, and the construc-tion of the box in i wo separate parts, with the oil recep-acles, as described.

BACKGAMMON AND CHECKER BOARDS.-Edwin O. Goodwin, of Bristol, Conn. I claim the construction of draught boards with the indentations on the face, the raised divisions in the backgammon part, and the draw. ers for the pieces, all in combination, in the manner and for the purpose substantially as set forth.

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POLISHING LEATHER AND HARNESS—William Crane, of Brooklyn, N. Y.: I claim the suspended triangular swinging frame, C, having a socket or receiver. D, at-tached at one end, and a piman or connecting rod, F, at the opposite end, substantially as shown, the whole form-ing an equal balance, giving a steady motion to the ma-chine in operation. [A great amount, if not most of the morocco manufac-tured in our country is still fuithed by hand how which

tured in our country is still finished by hand labor, which is tedious and laborious. The tool used is a small creased ball of hard wood, held in the workman's hand, and rolled over the skin, which is placed on an inclined bench. This improvement is designed to supersede the hand ball; it is a machine, which, by rotating a pulley, moves the creasing tool over the skin, and gives it the finishing trade mark. The improvement appears to be a good one, and is designed to effect an important object.]

CURRY COMBS-Evan L. Evans, of Providence, R. I.:

CURRY COMES-Evan L. Evans, of Providence, R. I.: I do not claim simply constructing curry combs with flex-ible backs, for this has been previously done. But I claim constructing the curry comb with an elastic or flexible back, A, formed of india rubber, and securing the teeth, a, permanently in the back, by having the in-flar uube ' which encompasses the teeth project from the face of the back in the form of ridges, b, and concs. c, projecting to the point of the teeth, substantially as shown and described. By this improvement in curry combs the teeth are

firmly secured in the comb by the india rubber back, and they are not so liable to work loose. like those of the common combs. Combs thus made are, therefore, more durable.]

durable.] MANUFACTURING COTTON YARNS-George G. Henry, of Moölle, Ala. : I do not wish to be understood as limit-ing myself to any precise sequence of machinery after the combined gin and lap machines, for it is obvious that myinvention may be applied to any preferred machinery for manufacturing cotton yarns. I am aware that it has been proposed to spin cotton yarns directlyfrom the gin, as in Barat's patent of 1823, and by other modes. This I do not claim. But I claim the combination of the gin and preparation, substantiate connection with, and to operate in combi-nation with the spreader or lap machine of any desired construction, so that the gin and spreader combined shall operate in a regular sequence with the carding and draw-ing, and other spinning machinery, substantially as set forth.

LATHES FOR PLANING MEFAL—William W. Hubbard, of Boston, Mass. : I claim arranging the tool carriage slides or supports on the vertical sides of the frame or bed, in combination with arranging above such slides, and so as to project from the sides of the frame, and over the slides, substantially as explained, coverers or guards, whereby the slides are protected from dust, chips. or other matters as specified other matters, as specified.

STITCHES FOR SEWING MACHINES—A. F. Johnson, of Boston, Mass.: I claim making a stitch of a single thread by throwing a shuttle and thread through a loop formed from the shuttle thread, as described, thereby tying or knotting each stitch, for the purpose of uniting pieces of cloth or other material to be sewed.

MAKING SPOKES BY HAND-Edward Julier, of Sharon, O.: 1 claim the construction and arrangement of the pattern cam gauge device, ess 22, the jointed lever device,  $m_2 m_2 k_2$ , the collar shank, f2 H2, and spring pawl, 12, when operated by the pedal, F2, or its equivalent, to gether all with the stop or dog, f2 g2, and ratchet, K, in the manner substantially as described, or in any equiva-lent manner.

the mather sustaining as described, of in any equiva-lent mather. I also claim the graduating straddle gauge, w w w w2, and hinged or jointed, forming gauge rest, z 22, with the graduating set plate and yoke devices, a<sup>2</sup> b<sup>2</sup>, & c., with the knife shields or buffer heads, g g u u, substantially as described and shown.

described and shown. TURNING CIRCLES FOR CARRIAGES-George Kenny, of Milford, N. H.: I claim an annular box plate com-posed of two circles, one attached to the head block or rocker, and the other to the axle, andso constructed as to form a box for excluding dirt and grit from the bearing surfaces of the circular plates, in which box is inserted a washer of oiled leather, the box joint serving to exclude all dirt and grit from the bearing surfaces, and thereby preventing their rapid wear, and the leather washer preventing the squeaking noise and friction common to all other modes of connecting turning circles, and pre-renting the jar which would otherwise be occasioned by two metallic surfaces striking together, as set forth. I also claim combining with a circle a rubber or other eleasic friction roll, upon which the sald circle turns, to leasen the friction and noise, and diminish the wear, as set forth.

TURNING BOOT LEGS-M. C. Chamberlin and W. Fil-kins, of Sheldon, N. Y. We claim the expansion tube, g the rim follower, h, encircling said tube, the disk plunger, J, provided with hooks, i i, and operated inside of said tube, g, as described, in combination with racks, E and f, and pinion, o, for the purpose of imparting adverse lon-gitudinal motion to said rim follower and disk plunger, as set forth.

set forth. TUBULAR CONDENSERS AND HEATERS—Uel West & Abner Mills, of New York City: We claim the connec-tion of the ends of the tubes, B B with the conductors, C C, by squaring the ends of the tubes fitting the squared ends of the tubes of each row close together, and making tight joints between them, and inserting the whole united row direclly between the two parallel sides or portions, g c, of the conductor, and securing each tube closely to the said sides or portions, g g, substantially as described.

[It has always been very difficult to construct steam ondensers, because they are subject to a vibrating action of expansion and contraction, which, in the course of time, loosens their joints, and destroys their usefulnes completely. This improvement is designed to dispense with tube sheets in tubular condensers, and at the same time preserve the joints around the tubes perfectly tight.]

FIRE ARMS—Alex. Le Mat, of New Orleans, La. I claim the combination and arrangement of the hammer and finger with the mechanism as described, whereby the retrograde movement of the hammer, after the igni-tion of the primer, produces an automatic closing of the vent by the finger.

TRAVELING TRUNKS—S. W Phelps, of Cincinnati, O. I claim the arrangement, substantially as described o drawers, partitions, and side lidsor doors for the combine-purposes of security, orderly arrangement and accessibil ity of all the contentism a traveling trunk, asset forth.

EXHAUSTING AIR FROM AND HERMETICALLY SEAL ING CANS AND VESSELS—A. M. Purnell, of Washington, D. C. I. I claim the apparatus constructed and operated as and for the purposes described.

DISK FOR SHELLING CORN-J. P. Smith, of Hummels-town, Pa. : I claim the annular concave shelling surface, N, on the face of the shelling disk, when employed in combination with the other parts of the machine, sub-stantially in the manner and for the purpose described.

EDGLEEYS FOR MAKING AND POLISHING THE EDG-ss or BOOT AND SHOE SOLES-G. C. Todd, of Lynn, Mass. I claim a turned orcircular edge key, constructed substantially as described and for the objects specified.

substantially as described and for the objects specified. GAS COCK AND SWINGING JOINT-C. F. Thieme, of Philadelphia, Pa.: I Claim making a swinging joint for gas brackets, substantially as described, the same consist-ing of the tubular plug, b, and its cap, B,' with the leath er washer, k, and spring, i, or their equivalents, in com-bination with the barrel, A, constructed as set forth and described, so as to produce a gas tight swing joint without the usual boring and grinding required as described. I also claim the combination of the key with the lower end of the plug, when the same is used as a gas cock, so as to dispense with a distinct barrel heretofore required for a cock, the said key being constructed, combined, and operating substantially in the manner set forth and de-scribed.

HOISTING COAL-J. C. White and Robt. Hay, of Tuck. erville, Pa.; We claim the bucket, K. with its inclined base, its doors, b and d, and spring latches, h and h', in combination with the chute, L, and inclined planes, i i', the whole being arranged substantially in the manner set forth, and for the purpose specified.

ADSUSTABLE CUT-OFFS FOR STEAM ENGINES-Wil-liam Wright, of Hartford, Conn. : I claim the construc-tion and arrangement of the adjustable cut-off, consisting of the cylindrical hubs, disks, and their adjustments, sub-stantially as described. I also claim the flapvalve checks constructed and com-bined with the drop valve, as described.

FINGER BAR ARRANGEMENT FOR HARVESTERS-J. A. Moore and A. A. Patch, of Louisville, Ky.: We claim on folded sheet metal finger bars the combination and arrangement, substantially as shown and described, of the folded sheet metal bar. A, with fingers, B, when the lat-ter are inserted through holes in the front and rounded folded portion of the bar. and griped and pinched be-tween and by the lips of the bar in the rear, and secured essentially as specified.

HAND CORN PLANTER-T. A. Chandler, of Rockford, II., assignor to Harlow Herrick, of La Grange, Ohio, and T. A. Chandler i e lain the slides. O E, diggers, R. W., and rod, I, substantially as set forth, and operating in the manner and for the purpose described. Second, I claim the jaws, K K, cut.off, S, and arm, L, when constructed and arranged as described, and oper-ating substantially in the manner and for the purpose set forth. atings forth.

RAKING ATTACHMENT FOR HARVESTERS—William Whiteley, Jr., of Springfield, Ohio, I claim the combi-nation of the balance lever, K, with plate J, for operating the rake, H c, in its forward motion, in the manner and for the purpose set forth.

[This is a very simple self-raking attachment for har vesters. The teeth of the rake extends across the plat. form, and receive a reciprocating motion through a connecting rod and crank, operated by connecting devices from the main axle. The pitman or connecting rod of therake can also be adjusted so as to rake off gavels or bundles of different sizes. All the parts of this raking apparatus are simple, and not liable to get out of order.]

SERVING MACHINES-WM. C. Watson, assignor to him-self, Geo. H. Wooster, and Morris Knight, of New York City: I claim the revolving and reciprocating looping-book, constructed and operating substantially as de-scribed. I also claim the inclined and grooved brace plate, i, so placed beneath the cloth, as to deflect the lower end of the needle to one side of its path, whereby its vibrations are prevented, and it is secured from breakage by the lateral pulls, as set forth.

[This patent is for a neat, small sewing machine for family use, which can be constructed and sold for about ten dollars. It will be illustrated in our next number.] RE-ISSUE.

RE-1890E. NUT MACHINES-Robert Griffiths, of Philadelphia, Pa. Patented Oct. 30, 1855 : I claim a combination sub-stantially as described, of tables, boxes, and punchers, the same being arranged and operated in the manner set forth, or any equivalent thereto, for the purpose speci-fied

# ADDITIONAL IMPROVEMENTS.

ADDITIONAL IMPROVEMENTS. ROTARY BRICK MACHINE\_GEO. Crangle of Philadel-phia, Pa. Patented June 3, 1836. First additional im-provement Sept. 9, 1856; second, Nov. 25th, 1856: I claim the application of the cut-off slides, E E', so as to slide up and down in contact with the plunger, B B, respect-ively, as described, and so as to produce, in combination with the lower guide piece C, the alternately open and close chambers, beneath the plungers, substantinlly in the manner and for the purpose setforih.

HARVESTING MACHINES—Geo. Esterly, of Heart Prai-rie, Wis. Patented Oct. 22, 1854 I claim the method of constructing the arm of the axle, A, in combination with the metallic box, Z , and the socket and yoke, b', as shown, whereby the adjusting apparatus is placed be-neath the body of the carriage the whole being sub-stantially combined and arranged as set forth. DESIGN.

KITCHEN STOVES-S. W. Gibbs, of Albany, N. Y., as-signor to T. H. Wood, H. & Hubbell, and J. E. Roberts of Utica, N. Y.

## Negative Wells.

The Society of Arts have published Herr Bruckmann's paper on "Negative Artesian Wells,"-that is, wells which take in instead of giving out water. Such wells serve as permanent drains; they are sunk in loose strata, or where communications exist with fathomless fissures or with deep lying streams. Mr. Bruckmann, who is a native of Wurtemberg, states that they may be established "in all the so-called normal or sediment formations; diluvium; tertiary deposits; chalk, Jurrassic rocks," and others. And he brings forward examples of the benefits that have followed the sinking of negative wells in towns or in swampy country districts. The drainage becomes at once perfect and constant; fiuid matters of all kinds find their way to the mouth, and flow away, while solid matters may be stopped, and used in fertilization. We should like to see this project brought to the test of fair experiment. What an enormous expense would be saved in the drainage of London, if the sinking of a few negative wells would really suffice for the discharge of all its fluid waste!

[The above is from Chambers' Edinburgh Journal; our readers will perceive that these negative wells are nothing more than the cesspools so common in many parts of our country, for draining off surplus surface water from cellars in sandy soil, where there are no drains. But no person here would ever suppose they could be employed as substitutes for drains in cities-they cannot be.

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Fox & Henderson, the engineers and great contractors, whose names will no doubt go down to posterity, as the builders (not designers) of the London Crystal Palace, have failed. It is stated that they will be able to pay all their debts, if they are allowed time to do so, and their creditors have manifested sympathy for them.

There are annually manufactured in the United States 2,160,000 shovels, or about six undred dozen per day.

# A Copyright Trial.

A peculiar trial for alleged infringement of a copyright, recently took place in the U.S. Circuit Court of Boston, and as this case has some relationship to a patent trial, we present the following summary of it from the Boston Telegraph. The parties were E. C. Rogers, against J. P. Jewett and others :---

"The sixth section of the Act of the United States, respecting copyright passed in 1831, provides that after the copyright of any book has been secured, any person who publishes any copy of such work," without the written consent of the proprietor of the copyright, shall forfeit every copy of such book so published to the proprietor of the copyright, and shall also pay fifty cents for every sheet found in his possession, half to the owner of the copyright, the other half to the United States. Rogers published a book called the "Philosophy of Mysterious Agents," of which he secured the copyright. The defendants published a book written by Rev. Dr. Mahancalled "Modern Mysteries Explained and Exposed." Rogers brought a qui tam action on this statute to recover the fifty cent penalties# alleging that a part of his book was copied into Mahan's. The defendants demurred to the declaration. The court (Judge Curtis) held that the penalty given by this section could only be incurred by publishing the whole book, that it could not be incurred by an infringement of the copyright by publishing extracts, the only remedy for which would be a civil action. The demurrer was accordingly sustained, and the Courtheld that the defendants were entitled to judgment in their favor."

### Pats on the Shoulder.

We are under many obligations to the Editor of the Gazette, Dover, N. H., and the Eagle, Grand Rapids, Mich., and the Vinton Eagle, Iowa, and especially to J. C., Rogers, of Wyoming, Mich., for courtesies and highly complimentary notices of the SCIENTIFIC AMERI-CAN. Gentlemen, we hope you will all grow rich and enjoy a long life of substantial happiness.

# A Diamond Mistake.

The New York Mining Magazine states, that during a lecture on Mineralogy, at the Truro Institution, Eng., Capt. Mahmoud, as an instance of the practical importance of being able to ascertain the scale of hardness of minerals, related a circumstance that occurred to a gold-digger. When working at the diggings he found a rock crystal, and thinking it was a large diamond, he immediately left his work and went home. He invited a friend to take tea with him, and produced the supposed diamond on the tea-table. His friend offered £200 for it, which the digger refused to take. He made his voyage to England, and on arriving in London went to a mineral dealer, and offered him the precious stone for sale. The dealer, however, on trying its hardness, found that it was only common quartz, and after convincing the digger of his mistake, he gave him a few shillings for it on account of its beauty.

# Making Rifles of Old Muskets.

At the U.S. Armory, Harper's Ferry, A. M. Ball, foreman, of the millrights, has invented and introduced a machine for riflegrooving old muskets, so as to render them, when fitted with the proper lock, identical with the Minie gun. Each machine turns out daily from fifteen to twenty Minied muskets. He has also invented a breech-tapping machine for cutting the thread into which the barrel is screwed—an operation formerly done by hand. In economy of time and labor, and of course money, Government derives from these two inventions great advantage.

### How Beans Climb.

A correspondent, "M. S.," of Brooklyn, inquires of us if we can tell "why lima bean vines always turn round their poles in one direction ?" If our correspondent means their spiral direction round the pole, we answer, "how is it possible for them to turn in any other direction ?" If he means a direction from East to West, or West to East, we answer, they cannot have any such a direction, when their path up the pole is a spiral.