

table which answers the purpose of stripping the said material from the feeding surface, and to cover and protect the mechanism which operates the feeder, as set forth.

I also claim imparting the feeding motion to the feeder, to present the material to be sewed to the action of the needle for spacing the stitches, by gripping the periphery thereof, or any equivalent thereof, by a gripping lever, substantially as described, in contradistinction to the action of a pawl or hand, catching on to ratchet teeth, whereby the extent of feeding motion may be adjusted and varied to any degree instead of being restricted by the size of ratchet teeth, and whereby also I avoid the wear and liability to derangement incident to the use of a ratchet motion, as set forth.

And lastly, I claim in combination with the feeder attaching the presser for controlling the material to be sewed, and holding it to the surface of the feeder to a slide or equivalent thereof, substantially as described, so that the plane of its under surface shall always bear the same relations to the plane of the table in a line at or nearly at right angles to the line of the seam, whether the material to be sewed be thick or thin, and for the purpose set forth.

HEATING OR COOKING BY GAS.—Wm. F. Shaw, of Boston, Mass.: I claim combining with the wire gauze or perforated tube, D, and the air and gas burner, A, an air guide or concentrator, G, applied thereto, substantially in the manner and for the purpose specified.

SELF-ACTING HEAD AND TAIL BLOCKS FOR SAWING MILL.—A. S. Walbridge, of Burlington, Vt. Patented in Canada, July 20th, 1853. I claim the combination and arrangement of the T-shaped carriage blocks, B, B, connecting rack, C, and setting off shaft, E, substantially as specified, whereby a self-operating carriage of any desired length or compactness is produced.

I also claim the self-setting-off device, composed essentially of the ratchet, I, disks, V, W, adjusting stop, O, and stationary catch, U, arranged and operating substantially as described.

DRAIN TILE MACHINE.—Thomas Maycock, (assignor to himself and Henry Rice,) of Buffalo, N. Y.: I claim the combination of the annular ring, I, with the plunger the latter having a smaller diameter than the ring and cylinder, constructed arranged and operating substantially in the manner and for the purpose set forth.

FABRIC FOR UNDERLAYING CARPETS.—William S. Pratt, (assignor to J. S. C. Thursty,) of Brooklyn, N. Y.: I claim the described cellular paper or paper board, for the purpose of underlying carpets on floors.

[The fabric which forms the subject of this patent consists of thick paper or paper board, made cellular by perforating it thickly. When it is laid between a carpet and a floor, the dust, which is always driven in greater or less quantities through the carpet by sweeping, is forced and retained in the holes or cells, leaving the carpet much cleaner than if placed on the bare floor, or with straw under it, in the common way. It also obviates the necessity of taking up the carpet so frequently to beat and shake it, as it keeps quite clean until all the cells are filled with fine dust. This fabric lying under carpets, by securing the dust underneath not only makes the colors appear more fresh, but also serves to make the carpet wear longer. This invention is a simple one, but very useful and good, and will, no doubt, come into general use. It has been assigned to J. S. C. Thursty, rope manufacturer, of Brooklyn, Eastern District.]

POWER LOOMS.—Alexander Smith & Halcyon Skinner, of West Farms, N. Y. We claim, first, mounting the yarns for forming the ranges of tufts in parcels on a series of spools, or equivalents thereof, in the order required for producing the design or pattern required, so that each spool, or the equivalent thereof, may be brought in succession to the required position for each range, substantially as described.

Second, the mode of operation substantially as described, by which the spool frames required at each operation is brought down in close proximity with the tufting warps and then carried out of the way of the lay when performing its operations, as described.

Third, the mode of operation by which the tufts of yarn are introduced and applied to the tufting warps, substantially as described.

Fourth, the mode of operation by which the tufts are cut off from the yarns after they have been introduced and applied to the warps, substantially as described.

Fifth, the mode of operation by which the tufts are carried to the required place in the fabric by the combined action of the reed and plate, or any equivalent thereof, as described.

Sixth, and in combination with the several modes of operation by which the tufts are introduced, the employment of the heddle motion, substantially as described, for binding and holding the said tufts by the warp threads.

SHUTTER FASTENER.—David M. Lawrence, of Cincinnati, Ohio: I claim a lock-plate, D, when constructed with a semi-circular flange, having a series of notches cut therein, in combination with the spring stop, E, and hinge, C, the whole being arranged substantially as and for the purposes described.

CRUSHING ROLLERS FOR ORES.—Wm. H. Plumb, of New York City: I claim the construction, combination, and arrangement of the stationary and movable roller adjusted to the work to be done, in the manner and for the purposes set forth.

CIDER MILLS.—Benj. Mackerley, of New Petersburg, Ohio: I am aware that round teeth whose sides are spirally and annularly grooved have been used on a cylinder, and within the concave combined therewith. I claim the combined use of flat-sided saw-edged teeth upon the cylinder and within the concave, substantially as set forth.

TOOL FOR TENONING, &c.—Alfred Tippett, of Washington, D. C.: I claim so making of the chisels adjustable in the stock as that they may be made to cut also a dovetail tenon with the same tool, and without reversing the same, and so that said tool may be used in any ordinary mortising machine, and thus avoid the expense of two machines, the whole being arranged specially as set forth and for the purposes described.

RE-ISSUES.

CUTTING SHOE PEGS.—Stephen K. Baldwin, of Guilford, N. H. Patented July 16th, 1856. Extended 7 years from July 16th, 1862. I claim the combination of the vibrating knife, C, or its equivalent, with the fluted roller, O, or its equivalent, operating in the manner described.

SEWING MACHINES.—Elmer Townsend, (assignee of Alfred Swingle,) of Boston, Mass. Patented July 22d, 1856. I claim the employment of a hook in connection with the looping needle, and arranging said hook so that it shall pass into the cloth or material from the same side of it on which the looping needle works or is situated.

I further claim the method of arranging the feed motion or mechanism, the feed wheel thereof being disposed horizontally, and its teeth made to engage with those of the rack situated on the vertical side of the clamp, the whole being substantially as specified.

DESIGN.

STOVES.—James J. Dudley, (assignor to Fuller, Warren & Morrison,) of Troy, N. Y.

A Patent Case.—Confusion Confounded.

Sickles' Cut-off.—On the 6th inst., before Judge Nelson, U. S. Circuit Court, this city, a very important case was decided respecting the infringement of the patent of Sickles' cut-off for steam valves.

The parties were Sickles against Wm. Borden, proprietor of the splendid steamboat Metropolis, running on the line between this city and Fall River. The complaint was that the cut-off used on the Metropolis, known as "Allen & Bell's adjustable cut-off," was an in-

fringement of Frederick Sickles' patent, granted May, 1842. The case was before the court for about two weeks, and was defended by Messrs. Stillman, Allen & Co., of the Novelty Works, this city, Mr. Horatio Allen, the inventor of the cut-off against which complaint was made being the principal witness. The defence rested mainly upon the ground that there was no infringement of the Sickles patent; that the cut-off on the Metropolis was essentially different from that of Sickles. The Court charged the jury in favor of the plaintiff, and after a very few minutes the jury returned a verdict against the defendants, assessing the damages at \$750, for sixty days use of the invention, for which period this action only covered. It has now been in use on this steambot for more than

two years, so that a new action would cover its use up to the 20th of May last, the date on which the patent expired. At the rate of \$750 for sixty days use, the amount for two years would be over \$12,000—a rather snug sum.

This case we hold to be a very remarkable one. Here we find a company sued for damages for infringing a patent which the Patent Office has declared was issued illegally, and for which an extension was refused, as set forth on page 309, of our last volume, on the grounds that it was not the invention of F. Sickles.

Mr. H. Allen, who is an experienced engineer and inventor, evidently considered his cut-off essentially different from that of Sickles'. The decision of the Jury was based upon quite a different opinion. Who is right?

Table of Patents Issued to Each State, in the year 1855.

Table with columns for various patent classes (I. Agriculture, II. Metallurgy, etc.) and rows for each state (Me., N.H., Vt., Mass., etc.) showing the number of patents issued.

Grand Total, Patent 13,892, entered twice in Class II. Correct number, Number as by Commissioner's Report, Difference.

REMARKS.—New York and Pennsylvania are the only States that have patents in every class. The greatest number of patents in any one class was for class 1; the next for class 14.

Harvesters, seed planters, looms, sewing machines, pumps, saws, and fire-arms seem to have employed many inventors the number of patents for those articles being:—Harvesters, 58; seed planters, 39; looms, 33; sewing machines, 39; pumps, 35; saws, 40; and fire-arms, 34. Total, 278. If we reflect on

High Railway Velocities. The London Mining Journal states that M. Jobard, of Brussels, is of opinion that no insurmountable difficulties would be encountered in raising the ordinary speed of railway trains to 500 miles per hour.

The Richmond, Va., Whig has seen several beautiful white silk handkerchief, made by the Misses Willis, of Rappahannock county from the product of silk worms fed by themselves.

Patents Extended During 1855. The following is the list of the patents which were extended during 1855. These are never made public until the Commissioner's Report is published, and this is the reason why they do not appear in our regular weekly lists.

Working the steam valves of steam engines when the steam is cut off and allowed to act expansively.—Robert L. Stevens & Francis B. Stevens. January 25th, 1841.

Applying Water to Fire-Engines.—Franklin Ransom & Uzziah Wenman. February 13th, 1841.

Seed Planters.—Moses Pennock & Samuel Pennock. March 12th, 1841

Cutting Square Joint Dovetails.—William Perrin. March 24th, 1841.

Construction of Iron Truss Bridges.—Squire Whipple. April 24th, 1841.

Form of the Screw Propeller.—Ebenezer Beard. April 10th, 1841.

Pumps.—Jesse Reed. April 16th, 1841.

Constructing Screw Wrenches.—Loring Coes. April 16th, 1841.

Constructing Railroad Carriages to ease the Lateral Motion of the bodies.—Charles Davenport & Albert Bridges. May 4th, 1841.

Dredging Machinery.—J. R. Putnam. May 6th, 1841.

Machine for Riving and Dressing Shingles.—Wm. S. George. May 29th, 1841.

Marine Steam Engine.—Charles W. Copeland. June 11th, 1841.

Endless Chain Horse Power.—Alonzo Wheeler & Alexander F. Wheeler, Executors of this last will and testament of Wm. C. Wheeler, deceased. July 18th, 1841.

Portable Circular Saw Mill.—Wm. W. Calvert & Alanson Crane. July 16th, 1841.

Constructing Gins for Ginning Cotton.—Joseph T. Pitney. July 23d, 1841.

Machine for Removing Buildings, &c.—Lewis Fullman. August 21st, 1841.

Machine for Sticking Pins into Papers.—Samuel Slocum. September 20th, 1841.

Making Pipes or Tubes of Lead, Tin, &c.—George N. Tatham & Benjamin Tatham, Jr. March 29th, 1841.

Wire Heddles for Weavers' Looms.—Abraham Howe & Sidney S. Grannis. October 11th, 1841.

Saw Mill for Re-sawing Boards, &c.—Pearson Crosby. November 3d, 1841.

Spark Arresters.—Wm. C. Grimes. February 12th, 1842.

Thrashing and Winnowing Grain.—Andrew Ralston. Feb. 21st, 1842.

Now that the Presidential Election is over, we hope our inventors and mechanics will turn their attention more earnestly to the practical wants of the country. We must go on from one step of progress to another in the practical arts. There is no stand-still policy. The demands of the age are not met.

Table with columns for trial of portable corn mills, listing names like Excelsior Young America, Star Mill, Brant's Mill, Little Giant, Eagle and Troy Mill, and their respective power and meal output.