

HARDENING FATTY SUBSTANCES.—Benjamin C. Tilghman, of Philadelphia, Pa. Patented in England May 2, 1867: I do not claim, generally, the process of hardening fatty substances by sulphuric acid, as I am aware that this has been before proposed; but in such cases, the heat employed has been under or above 212° Fah. Now, I have found that the hardening effect of sulphuric acid is very greatly increased by causing it to act upon the fatty substances at more elevated temperatures, preferring from about 350° to 550° Fah., but which may be varied from a little above 212° Fah. to above the distilling point of the fatty substance, and it is to this modification of the process that the part of my claim extends and is confined. I am also aware that it has been before proposed to decompose fatty substances and soaps into fat acids, and to purify fatty substances from melleage, gelatine, &c., by means of sulphurous acid, and also to subject fatty substances to the action of strong sulphuric acid, whereby sulphurous acid is generated in the fat itself, and I wish it to be understood that I make no claim to any of the above processes.

I claim the hardening of acid and neutral fatty substances, by subjecting them to the action of sulphurous acid at elevated temperatures, either with or without pressure, as described.

I also claim the use of oxide of copper, or its chemical substitutes, to remove from fat acids the sulphureted impurity, produced therein by treatment with sulphurous acid, as described.

I also claim the methods of preserving the color of white neutral fats, when treated by sulphurous acid at elevated temperatures, by using sulphurous acid entirely free from air or oxygen, and by using fats pure and neutral, and free from any mixture of acid, rancid or decomposed fats.

TEMPLES FOR LOOMS.—Jeremiah C. Tilton, of South-bornton Bridge, N. H.: I do not claim the mere application of teeth to the loom, or the use of a wedge, or temple lip or cloth bearer, by the action of a wedge, or its equivalent, at the time of beating up of the loom, as such is found in the well-known Stillman temple. Nor do I claim the application of a stationary spur plate to a temple, with the pins in the said plate inclined, at an angle, to the breast beam, and in the direction in which the loom beats up, the same being shown in the United States Patent, numbered 9,500, and for the purpose therein mentioned.

But I do claim the application of the cloth bearer carrier to its support by a hinge, arranged in a manner substantially as described, that is so as to allow the carrier and its bearer to be drawn backward under circumstances as described.

CORN SHELLERS.—Artemas B. Vant and Arlon M. Cook, of Milford, Mass.: We do not claim a convex wheel, as such, as a somewhat similar one has been used, but operating in a different way from ours.

But we claim the combination and arrangement of the smooth toothed wheel, B, and guard plates, I and J, with the convex toothed wheel, B, and guard plates, I and J, when constructed and operating substantially in the manner and for the purposes set forth and described.

HYDROFUGE FABRICS.—James Wansborough, of South-wark County of Surrey, England. Patented in England December 13, 1853: I do not claim the exclusive use of any of the materials, matters or substances mentioned and referred to; neither do I claim the coating or covering of a woven fabric with a flock material, as the same has already been done for many years, though without the desired result in point of durability and utility.

But I claim securing the flocks, or other finely divided substance, after it has been sifted or spread on to the surface, and calendered by applying to the surface thereof a solution of india-rubber, or allied gum, substantially as described.

And I also claim, in combination with the method of securing the flock substantially as described, the subjecting of the same to a steaming process, substantially as and for the purpose specified.

LOCOMOTIVE ENGINES.—Ross Winans, of Baltimore, Md.: I claim the blast equalizing pipe, proportioned to the chimney, and arranged substantially as set forth.

I likewise claim a blast pipe of less diameter than the smoke pipe, and having a bell mouth, in combination with an exhaust nozzle and the bottom on which the sparks lie, substantially as set forth.

SURVEYING INSTRUMENT.—Geo. Windle, of Eden-burgh, Va.: I claim, first, Attaching the adjusting weight of the magnet case directly to the universal joint on which said case turns and swings, substantially as and for the purposes set forth.

Second, The arrangement of the pointer which designates the number of degrees at which the movable frame and telescope stand, adjusted on an adjusting screw, which has the surface of its head graduated so as to indicate minutes, in combination with a stationary pointer and with an extension formed on the pointer which comes opposite the degrees on the magnet case, substantially as and for the purposes set forth.

STEAM VALVES.—John E. Wootten, of Philadelphia, Pa.: I claim the application of the anti-friction roller, L, in combination with a diaphragmatic piston, D, or an equivalent therefor, substantially as and for the purpose set forth.

APPARATUS FOR EVAPORATING.—Wm. S. Worthington, of Newton, N. Y.: I do not claim, broadly, any arrangement of fires and flues for heating the sides without heating the bottom of evaporating pans.

But I claim the arrangement of a series of two or more graded fire places, a, b, c, and communicating passages, r, and flues, h, in a casing, c, on each or either side of a pan or train of pans, substantially as and for the purpose set forth.

[The objects of this invention are the economical use of coal as fuel for heating evaporating pans, and the application of heat in such a manner as to prevent the burning of the salt, or substance, precipitated on the bottom of the pan, and the burning out of the pan.]

ELECTRO-MAGNETIC APPARATUS FOR SETTING WATER ENGINES IN MOTION.—Moses G. Farmer, of Salem, Mass.: I claim, first, The combination of an electro-magnetic equipment with the cock or water valve, k, and with the detent, Q, of a water engine, separately or conjointly, for the purpose of controlling its motion from a distance, especially in its application to a fire alarm telegraph.

Second, I claim the employment of two or more arms, of progressively increasing weight, in combination with a water engine and with an electro-magnet, or its equivalent, for the purpose of releasing machinery, as set forth; the first of the weighted arms being liberated by the electro-magnet, while the last one of the series releases the machinery, each of the weighted arms being returned to its normal position by the action of the water engine.

GAS BURNERS.—Wm. Wright (assignor to himself and Frederick Wright, of New York, N. Y.): I do not claim the reduction of excessive pressure in gas burners by so constructing the burners as to cause the gas to be intercepted and divided into small streams, and to pass in a circuitous direction, as I am aware that there are many gas burners so constructed.

But I claim, as an improved article of manufacture, a gas burner provided with a double-flanged cup, C, having openings, d, e, e, and otherwise constructed, substantially as shown and described.

[This invention consists in a double-flanged cup of peculiar construction, and containing a peculiar arrangement of passages applied within a gas burner, for the purpose of checking any excessive pressure of the gas before its arrival at the tip of the burner, and causing it to burn with a more uniform flame than when such cup is not used.]

AUTOMATIC GRAIN SALES.—Joseph R. Gates, of Indianapolis, Ind., assignor to himself and Alex. Corey, of Shelbyville, Ind.: I claim, first, The lever, b, and spring, g, when used for the purpose of operating the cut-off gate, r, discharging or loosening the bottom valve, l, and preventing the weights, a and f, from raising the scale-box, C, and drawing the slide, f, until the bottom, l, is closed, thereby regulating the cut-off and flow of grain, without using the weight of the grain while the same is being weighed.

Second, The combination and arrangement of the spring and weight, m, with the elbow lever, k, connecting rod, j, and lever, i, when constructed and operated substantially as and for the purposes described.

MORE OF AUTOMATIC TRILLS TO AXLES.—George Kenay, of Milford, N. H., assignor to himself and Josephus Baldwin, of Nashua, N. H.: I do not claim, in and of itself, the bolts, D, in elastic tubes, irrespective of the particular arrangement shown and described. But I claim the combination of the pressing and locking India rubber tube, G, with the eyes, a, b, and bolt, D, with the nut, e, substantially in the manner and for the purposes described.

MACHINE FOR SAWING MARBLE.—James Lyon, of New York, N. Y., assignor to Jesse J. Davis, of said New York, N. Y.: I claim the arrangement of the reciprocating bar, d, adjustable rollers, f, f, adjustable frames, g, g, and diagonally slatted sides, h, h, in relation to each other, and to parts that connect with and guide the saws, for the purposes and substantially as specified.

MANUFACTURE OF EMERY-WHEELS AND STICKS.—Thos. J. Mayall, of Roxbury, Mass., assignor to himself and Geo. M. Davis, of Boston, Mass.: I claim the employment of vulcanized rubber, tempered with olive oil, as set forth, in combination with powdered emery, or its equivalent, for the manufacture of polishing wheels and sticks, as specified.

ELASTIC DRAW-BAR AND BUMPER.—Thos. J. Mayall, of Roxbury, Mass., assignor to himself and Benj. E. Cook, of Boston, Mass.: I claim the described combined draw-bar and bumper, consisting of the elastic cylinder, E, the heads, A, A', bars, B, spring, d, and bolt, K, constructed and operating in the manner substantially as set forth.

MOWING MACHINES.—Thos. Windell (assignor to J. B. Ford, James W. Shield and H. L. Bridwell), of New Albany, Ind.: I claim, first, The employment, in connection with a single frame-piece, A, of the box, D, which is cast in the manner specified, with axle, P, journal bearings, t and u, and flanges, s, s, in one piece, for the purpose of connecting and securing all the gearing necessary for the operation of the machine, as fully set forth.

Second, The spring, c, secured at one end to the front of the outer guard, and playing freely in the opening of the rear of said guard, in combination with the adjusting screw, o, whereby the convexity of the spring shoe is increased and diminished with the elevation or depression of the cutter, in the manner and for the purpose described.

METHOD OF ENABLING MOVING RAILROAD TRAINS TO TELEGRAPH THEIR OWN PASSINGS AT CERTAIN STATIONS.—Ernest Otto Kohl, of Philadelphia, Pa.: I confine my claim to the particular apparatus described in this specification, and illustrated in the accompanying drawings, and I claim the use of a self-acting electro-magnetic Railway Alarm Telegraph, acting reliably of itself without the necessity of human intervention, and arranged and operating in the manner and for the purposes substantially as described.

PRINTING PRESSES.—F. O. Degener, of New York, N. Y. Ante-dated July 11, 1858: I claim so arranging or hanging an oscillating bed, with an oscillating platen, in such manner that the motion of one will control the action of the other, so that by their forward movement they shall close and give an impression, and upon their reverse movement the form shall be inked, and the platen be brought into the proper position necessary for the reception of the sheet, and thus alternate from one of their positions to the other.

Second, I claim the arrangement of an oscillating bed and platen, as described, with the cam to hold the friction to a desired position, so as to cause the sheet of paper while it is being conveyed from one position to the other, all of which is described.

NURSERY BOTTLES.—W. B. Potter, of Boston, Mass.: I claim a nursing bottle of glass, having a metallic cap screwed upon it, and a metallic lactal tube, when said cap is pivoted, and arranged in a position of the elastic nipple, and the whole is made and put together, substantially as set forth.

GRINDING MILLS.—Alfred Proseus, of Philadelphia, Pa.: I claim placing the desired water level, by the teeth of a bevel gear, or those of the burr, or of both, of conical grinding mills, any convenient number of obstructing strips, as and for the purpose set forth.

MACHINE FOR DRESSING HOOPS.—Augustus Prenatt, of Haddonfield, N. J.: I claim placing the cutters, c, in the cutter head, B, for the purpose of dressing the edge of the cutting edge will cross their axis of motion at an angle of 45° (or nearly so), and also stand inclined to the horizontal plane of their axis, at an angle of 45° (or nearly so), substantially as set forth.

Second, I claim the arrangement of the cutter, g, in the vertically moving grate, F, including the adjustable roller, H, for the purpose of dressing the edge of the hoop, and for giving the hoop any required width, as described.

RE-ISSUES.
SAFETY INDICATOR FOR STEAM BOILERS.—Lucius J. Knowles, of Warren, Mass. Patented Feb. 10, 1857: I claim a feed apparatus, controlled by expansion and contraction, in combination with an expansion tell-tale, placed below the desired water level, and above the level to which it would not be safe for the water in the boiler to descend, substantially as set forth.

Second, I claim the described arrangement of the vessels, and as applied and connected with the feed pumps and steam whistle, for the purpose of regulating the pump and sounding an alarm as set forth.

Third, I claim connecting the pipe with the boiler, by means of the feed pipe, as set forth for the purpose described.

LAMPS.—Edward F. Jones, of Boston, Mass. Patented May 4, 1858: I claim securing the chimney to the removable deflector, and both of them to the lamp cap, by means of a spring operating in the manner substantially as set forth.

Second, I claim a detached deflector in combination with a chimney, when the chimney is secured to the cap independently of the deflector, as set forth.

DESIGNS.
PENCIL STOVE.—S. W. Gibbs, of Albany, N. Y., assignor to Evan Backus, of Stuyvesant, N. Y.

INK BOTTLES.—Thaddeus Davis, of New York City.

ADDITIONAL IMPROVEMENT.
CROSS-CUT SAWING MACHINE.—Albert Heith and Gay-lon Hall, of Adams Centre, N. Y. Patented Aug. 24, 1856: We claim attaching the bar or beam to the vertical bar by a pivot, and securing the bar or beam to a beam in a proper relative position with each other, by means of the rod, loop, and nut, or their equivalents, so that the bar or beam may be more or less inclined according to the thickness of the log, and the bar always retained in a vertical position.

We further claim, in combination with the oscillating platform, lever and saw-bar, the bar provided with an adjustable weight, and arranged substantially as shown to operate, as and for the purpose set forth.

[This invention relates to certain improvements in a cross-cut sawing machine, for which Letters Patent, bearing date Aug. 24, 1856, were granted to these inventors. The object of the present addition is just to render the frame of the machine adjustable in such a

manner that the machine may be applied to logs of different thicknesses, and the fulcrum of the lever and platform always retained in a vertical plane; and secondly, to add by a very simple means the gravity of the saw in feeding itself to its work.]

American Dentists Doing Business in Europe.

The Paris correspondent of the *New York Daily Times* gives some of the persons connected with the American dentistry market in Europe. It may well puzzle one to explain why dentistry in Europe is so far behind that in the United States, and it is singular that, in France, where surgery and the accessories of the toilet are brought to the highest perfection, the art of the dentist should have been left so completely in the rear. Until very lately, the art was ranked among the very lowest of trades; a dentist was in fact but a puller of teeth, and one of the commonest expressions in French is, even to this present day, "*il ment comme un arracheur des dents!*" (He lies like a dentist, or a tooth-puller.) It was not until American dentists settled in France that the art was at all respected, or indeed deserved to be respected. But now we read that—

Mr. Brewster was the pioneer of American dentists in Europe. He settled in Paris in 1836, and soon became the dentist of Louis Philippe, the Czar Nicholas, and other monarchs. He was bought out by Mr. Thomas W. Evans, of Lancaster, Penn., in 1850, who, with his brother Theodore, now continues the business. These gentlemen not only maintain the position ceded to them by Dr. Brewster, but they have extended it. They are the dentists to the Courts of France, Russia, Bavaria, Wurtemberg, and I think of Belgium and Saxony. Besides the Legion of Honor, granted to the elder brother by the Emperor of France, both the brothers have received decorations and rich gifts from other monarchs. They have just built on the Avenue de l'Imperatrice a private residence, which is an ornament to that new and elegant thoroughfare.

James Fowler, formerly a partner of Harvey Burdell, came to Paris four years ago, and went into business with a French merchant as a dentist on the Boulevard des Italiens, the latter furnishing the funds for the establishment of the house. At the end of three years, however, Mr. Fowler sought and obtained before the tribunals a dissolution of the partnership, and at once established a new house in the Place de la Madeleine. Since his residence in Paris this gentleman has made several pieces in gold for the replacement of lost parts, which excited the astonishment and the admiration of the Academy of Medicine and of the entire faculty of Paris. Among these were an entire lower jaw in gold with the teeth affixed, several upper jaws, obturators, &c. Although not new in America, it was the first time any successful attempt of the kind had been made in Europe; and Mr. F. is now in the enjoyment of a first-rate reputation and practice. M. Preterre, his former partner, obtained a workman from the United States of the name of Fowler, and is continuing the business at the old place under the name of Fowler & Preterre.

Mr. Horner, of Philadelphia, is a partner in the long-established English house in the Rue de Luxembourg, which now bears the name of Stevens, Watson & Horner. This is the largest and richest dental establishment in the world, its income reaching \$60,000 a year. Gold work, however, has only been introduced into the house since the entrance of Dr. Horner; previously, their artificial pieces were made of hippopotamus entire, and decayed teeth were filled with amalgams—the ancient French and English systems.

Mr. Gage, formerly of Mobile, has also established himself in Paris as a dentist, and like the other, is doing a good business. Mr. Potter, an American dentist, who has practised in Bombay and in Lisbon, has been for some years established in Paris, and lately took into partnership a dentist of New York, Mr. Crane.

Dr. Parmly, formerly of New Orleans, an

elder brother of Dr. Eleazer Parmly, of New York, has been practising dentistry for three years past, upon the children in the schools of London and Paris, till an attack of typhoid fever, followed by partial paralysis, disabled him from the active pursuit of his profession. He continues to reside in Paris, however, and gives advice to families and schools in regard to the care of the mouth in young people.

A gentleman who announces himself to the public as an American dentist, Dr. Koth, "formerly of the United States, late dentist to her Majesty the Queen of Spain," has established himself in Paris, within a month.

As I was passing rapidly in a carriage, a few days ago, through an obscure quarter of the Faubourg de St. Germain, I had a hasty glance at a sign which had evidently just come from the painter's hands, and which bore the words, "*Dentiste Americain,*" preceded by a name of the purest Gallic origin. So, you see how the current is running.

So wide-spread is the reputation of the American dentistry, that the teeth of nearly every monarch in Europe are filled, drawn and replaced by Americans, or *soi-disant* Americans. Thus, as I have before mentioned, the Evans' of Paris are the dentists to the Courts of France, Russia, Bavaria, Wurtemberg, and some other smaller States. At Rome, Dr. Burgess, an American, is the principal dentist; at Madrid, it is Dr. McKeehan, another American. The principle dentist of Berlin is Dr. Abbott, of Bangor, Maine, while the Court dentist is a German who studied in America, and who calls himself in consequence an American dentist. At Vienna, where it is almost impossible for a foreigner to get permission to do business, Dr. North, also of Maine, has rapidly gained the first position among the aristocracy. When he first went to Vienna, Mr. North was obliged by the police restrictions to avoid giving any publicity, either by advertisements or by a sign at the door. While stowed away privately in the upper part of a house, continually wondering whether his enterprise was going to fail or succeed, he was one day surprised at receiving a visit from Prince Lichtenstein, who came to get some work done. The American complained of the rigors of the police, and the prince said to him, "Never mind the police; take a house to suit you, put your sign out and if they trouble you, come to me." Mr. North did as the prince advised him, the prince sent his daughters and other relatives and acquaintances, and from that day the fortune of Dr. North was a fixed fact. He numbers in his protectors not only the Lichtensteins, but also the Metternichs and the Scharzenbergs.

In St. Petersburg, the aristocracy employ two Irishmen, brothers, who studied their profession with Dr. Brewster at Paris, and who call themselves American dentists.

The principal dentist at Hamburg is Dr. Cohen, who studied in America, and calls himself an American dentist.

The brothers Tetlander, who studied dentistry in New York, do the Court and principal business in Stockholm and Christiana, the capitals of Sweden and Norway.

There are a few other dentists scattered through the German Confederation, Germans by birth, who received their professional education in the United States, and who call themselves American dentists.

At London, Mr. Rann, an American dentist, has rapidly reached a large practice, in exclusively aristocratic families. Another American, whose name I forget, has also arrived at a large practice in London. At Manchester there has been an American for a good many years. This closes the chapter on dentistry.

Two American physicians are in practice in Paris, Dr. Bigelow, of Boston, and Dr. Beylard of Philadelphia, both graduates of the School of Paris. The latter gentleman, however, is of French origin, he was two years house physician in the wards of Dr. Trousseau, at the Hotel-Dieu. Both these gentlemen are doing well, and fortunately for the small American colony in Paris, their business is not confined exclusively to their countrymen.