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:—

Curing Goods of India-rubber and Allied Gums.—This invention relates to an apparatus composed of two plates, or heaters, one of which is stationary, and the other suspended from suitable screws, in combination with a jacket, the lower part of which is stationary, whereas the upper part is made to rise and fall, and which surrounds the pressing plates, partially or wholly, in such a manner, that, by admitting steam, or other suitable heating medium, to the jacket, the goods between the plates can be heated to any desired degree without coming in direct contact with the heating medium, and the operation of curing goods of india-rubber or allied gums can be effected with ease and facility. For goods the length of which exceeds that of the pressing plates, said plates are provided with longitudinal grooves, to receive suitable packing strips, which prevent the heating medium from coming in direct contact with the goods to be cured, and at the same time, by means of said packing strips, the thickness of the goods is determined. J. B. Forsyth, of Roxbury, Mass., is the inventor.

Loom for Embroidering.—This invention consists in the arrangement of one or more needle bars, and furnished with a series of needles to carry threads for embroidering, in combination with the batten of a loom, and with one or more pattern wheels, in such a manner, that, by the action of said pattern wheel, or wheels, the position of the needle bar, or bars, is automatically adjusted, and the embroidering threads are introduced in accordance with the pattern represented by the pattern wheel, or wheels. The invention consists, further, in the use of a series of rising and falling pins, in combination with the oscillating batten, and with suitable cams, in such a manner, that, by the action of said pins, the embroidering threads are protected, and the shuttle is prevented from running into them. The invention consists, finally, in a pattern wheel composed of a series of adjustable pins inserted into the periphery of a disk, in combination with oscillating spring arms, to which the needle bar is secured, and with a suitable mechanism for turning the pattern wheel, in such a manner, that, by the action of the pins in the pattern wheel on the spring arms, the required position is given to the needle bar and needles, and, by screwing or pushing the pins in or out, the pattern wheel can be adjusted for different patterns. J. G. Spitzli, of Millville, Mass., is the inventor.

Machine for Cutting Straw, Etc.—This invention relates to certain improvements in that class of machines for cutting straw, tobacco, or other similar products, in which the knives are attached to a rotating wheel, and hung upon pivots in such relation to the throat of the box that a regular shear cut is produced. The knives in this improved machine are hung on pivots, and they are governed by an eccentric disk in such a manner that the cutting edges preserve the most favorable position toward the material to be cut. A compound pressure plate, consisting of a semi-circular, self-adjusting cap and vertically sliding weight, prevents the possibility of choking: and, finally, the material to be cut is straightened out and fed to the knives in the proper direction, by the action of grooved rollers, which send the separate straws, or fibers of the material to be cut, through the mouth of the box, at right angles to the plane in which the knives revolve. Robert Leggett and Robert Gittus, of Mildenhall, Eng., are the inventors.

Let-off and Take-up Motions for Looms.—This invention embraces several particulars, one of which relates to the use of a balanced, adjustable lever, resting against the yarn beam for the purpose of governing the let-off motion; another relates to the manner of actuating the let-off pawl lever by means of a revolving wiper; another relates to the construction of the let-off and take-up pawl levers; another relates to the manner of adjusting those levers so as to determine their extent of motion; another relates to actuating the take-up pawl by means of a shoe on the sword; another relates to the mode of transmitting motion to the cloth beam from the ratchet wheel, which is driven by the take-up pawl lever. D. Bassett, of Killingly, Conn., is the inventor.

Pots for Corroding White Lead.—The object of this invention is the improvement of pots for corroding white lead, and it consists in forming, at a suitable hight within the pot, an uninterrupted circular ledge, whereon the buckles of lead are allowed to rest. This ledge is made by contracting the diameter of the lower part of the pot, or, in other words, increasing the diameter of the part above the part which forms the basin for the acid, so as to make a horizontal circular shelf, which divides the basin reserved for the acid from the space above, which is reserved for the buckles of lead. The pots are, in consequence of this construction, stronger than when made after the form in ordinary use, and they are more easily cleaned. The buckles rest upon the ledge, which furnishes a broad surface for them to rest upon, so that they cannot easily be displaced, or be crushed, and broken down, and forced into the acid. J. H. Chadwick, of Boston, Mass., is the inventor.

Knitting-machine Needles.—This invention consists of an improved form of the parts of a knitting-machine needle, by means whereof compactness, effectiveness, and durability are secured in a profitable degree. One point relates to the manner of attaching a latch or caster to a knitting needle, by which the operation of the caster is simplified. Another relates to the construction of the hook of the needle, and the manner of combining the caster therewith, by which an easy adjustment of the device for operating the caster is permitted. Another relates to the peculiar construction and combination of the parts, by means of which the caster may remain in the same position from the time it closes the hook until the needle has completed its backward movement, and moved forward again far enough to cause the front point of the caster to enter the loop. Isaac Wixom Lamb, of Rochester, N. Y., is the inventor.

Dessicating Eggs.—The object of this invention is to dessicate eggs, tomatoes, and other substances, for preservation, and also for transportation to distant places, and in climates and under conditions which are unfavorable for their preservation in their natural state. It consists in the use of rotating surfaces, heated by hot water or other liquids, or by fluids, on which surfaces the substances are received and dried, and from which they are removed, dessicated, before the revolution of such surfaces is completed; the selection of the heating medium being determined in part by the degree of heat which the substance to be dessicated can bear without injury to its character and quality. Thomas H. Quick, of New York City, is the inventor.

Tanning Apparatus.—This invention relates to a new apparatus by which the time required for tanning leather has been reduced from months to hours; that is to say, a calf's skin may be thoroughly tanned in an hour, and an ox's hide in twenty four hours. And it consists in passing the skins through a series of pairs of rollers placed beneath the surface of the tanning liquor, within the vat; by the action of which rollers the spent liquor is squeezed out of the hides to be replaced by fresh liquor during the automatic passage of the hides to the next pair of rollers, by which, after having imparted its tannin to the hide, it is in turn expelled. By an ingenious and simple arrangement of machinery the inventor is enabled to carry his invention into practical effect in a convenient and satisiactory manner. Prof. H. W. Adams, of Irvington, N. J. is the inventor.

FISH IN ARTESIAN WELLS.—M. Desor, a Swiss naturalist, has investigated and confirmed the statement that small fish have been found in Algerian artesian wells two hundred feet deep. These fish belong to the carp species. They are healthy, and have fine, large, and perfect eyes. Subterranean fish are usually blind, on account of the uselessness of eyes to such creatures.

AN immense deposit of black marble, equal to the Belgian, and superior to the Irish, has been found near Williamsport, Pa. It is the only one known in America, and a company has been formed to work it upon an extensive scale.

AN INVENTION WORTH TEN THOUSAND DOLLARS A DAY.

Mr. J. ●. Woodruff, of Albany, N. Y., has invented a method of saturating barrels with solutions, to make them retain their contents, which is so effective in its operation, and which so cheapens the cost of barrels, that it has been pronounced by one of the large petroleum dealers of this city worth $10,000 per day to the county of Venango alone, a county that furnishes 10,000 barrels daily for the petroleum district of Pennsylvania. Mr. Woodruff, being offered a large fortune, cash in hand, for his patents, by a company of shrewd, practical men, could not resist the temptation to accept it, leaving to the company the great revenues which the invention is expected to yield.

It is well known that petroleum has greater facility for passing through capillary pores than any other liquid; if put into an ordinary wooden barrel it quickly runs out through the heads and staves. Many efforts have been made to prevent this waste. The common plan is to line the barrel with a thin coating of glue, or a composition of glue and other substances; but this plan is only partially successful. The leak is still so great that the cars which bring the petroleum are saturated with the oil, and the cellars in which it is is stored become filled with vapors, giving rise to fears of explosions and conflagrations.

Mr. Woodruff's method is to heat the barrels in order to expel the sap and open the pores; then, while they are hot, he pours in a sufficient quantity of the saturating liquid, and subjects the interior to the action of compressed air, at the same time revolving the barrel so as to spread the liquid completely over the interior surface. The heat keeps the saturating material very fluid, and the compressed air forces it into the opened pores. As the wood shrinks on cooling it closes upon the hardened material, making the cask not only liquid, but air tight.

The great value of this invention is in reducing the cost of barrels. At present, petroleum and alcohol barrels are made of rived staves only, but extensive trials have shown that when Mr. Woodruff's saturating process is employed, perfectly good barrels can be made with sawed plank. As a barrel made of rived stuff costs $1 70, while one made of sawed plank costs only 60 cents, the saving in expense is $1 10 on each barrel—a saving for a single county of more than $10,000 every day. The patents for this invention were obtained through the Scientific American Patent Agency, and we shall soon publish full illustrations of the apparatus employed.

Pharaoh's Serpents.

Messrs. Olden & Sawyer, of No. 246 Canal street, have sent us a few of the serpents' eggs that they are making. On placing one of the little cones on our safe, and setting fire to it, the snake began to crawl out amid the wonder of the whole office, and it seemed as if the viper would never stop rising. We give the chemistry of these in another column. They are put three in a box, and sold for fifty cents per box.

A FORMIDABLE TITLE.—Our co'emporary—the *Lon-Mining Journal*—mentions a fine 6-inch center self-acting screw-cutter foot lathe, with patent double treddle and improved anti-friction external crank and chain rolling motion. Also, a new reversing motion to tail pin, for the purpose of cutting screws left or right, without changing wheels or stopping the lathe. The compound sliderest, moreover, is fitted up with an ingenious contrivance for drawing out the tool quickly, which is a very important advantage in screw cutting.

IN casting a large fly-wheel at the Fort Pitt Works, Pittsburgh, the molten iron was conducted from the furnace across one of the streets of the city, a distance of one hundred and sixty-three feet, to the mold. The diameter of the wheel is twenty-five feet, and its weight forty-two tuns.

IT is said that when the deaths by cholera in Paris were at near a hundred a day, the total bill of mortality was not increased. The reason for this was that people were frightened and took good care of their health, so that ordinary maladies in the system were not developed.