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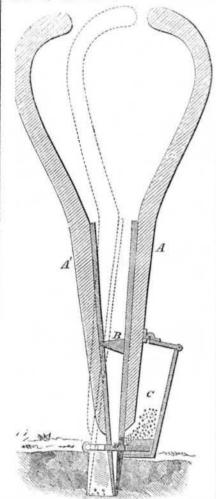
# Scientific American.

the period of every patent to twenty or thirty years than to make these grants to a favored few.

## Recent American Patents.

Improved Corn Planter-By D. W. Hughes, of New London, Ralls Co., Mo .- This invention belongs to the class known as the hand planting machine-a contrivance that is carried somewhat like a cane in the hand of the operator, who thrusts the lower end into the ground as he walks over the field, and deposits seed at each thrust.

The nature of the invention consists in having two blades connected by a joint or pivot, like a pair of tongs. A seed box is attached to the lower part of one blade, and a perforated slide, which fits the seed box, to the other; the slide works in the lower part of the seed box; the various parts are so arranged that by shutting the lower ends of the blades, placing them in the ground, and then forcing them apart by means of the handles the necessaryhole will be made, and the corn or other seeds deposited therein.



Our engraving is a sectional view of this invention. A A' are the blades, B the fulcrum or pivot, C the seed box, and D the seed slide; the latter contains a cavity or perforation, into which the seeds drop; when the blades open their lower ends spread, and widen the hole in the ground, while the slide, D, being attached to the moving blade is drawn out sidewise, and the seeds contained in the cavity just mentioned drop into the ground between the blades. This is an extremely simple and cheap corn-planter. It will, no doubt, find a very extensive introduction. Patented Nov 20, 1855. Address the inventor for further information.

Improvement in Pile Drivers .- By J. W. Hoard, of Providence, R. I .- The large weights used in pile driving are apt to split and crush the head of the pile, owing to the sudden and tremendous force with which they descend. Great difficulty is experienced from this source in driving piles where the soil is hard; the heads of the timbers becoming so muc's injured that the workmen have to stop and saw them off: thus there is a waste of time and material.

These evils are remedied in the present improvement by dividing the weight into two or more parts, and placing them one above the other, with a layer of india rubber between The weights are then bound together by a spindle, and in use are raised and discharged together, the same as a solid weight. This inches apart. The two frames are joined to-

crushed or split.

Butter Worker-By James H. Bennett, of Bennington, Vt.-Consists of a bowl placed on the top of a vertical spindle. The attendant holds a spatula in one hand, with which the butter is worked while the bowl rotates. A foot pedal may be employed to turn the spindle. This is a cheap and simple device.

New Rat Trap-By Samuel Beaumont, of New York City .- This contrivance is so arranged that the rat is obliged to venture on to a platform in order to get a nibble at the cheese. The first bite pulls a bolt and down falls the platform, tumbling the poor rat into a separate compartment, and leaving him a close prisoner. A spring throws up the platform and sets the trap again, ready for a new customer. This is quite an ingenious invention. We hope to illustrate it hereafter by engraving.

Marble Saw-By J. A. Bailey, of Detroit, Michigan .- This is for sawing monuments on a taper, or straight, two sides at once. The saws arc spread to the required angle by means of right and left screws, on which they are strained; the screws are operated through a connection with the pitman. The taper or angle at which the saws cut may be adjusted at pleasure.

Fan Rocking Chair-By Konrad Kiefer, of New York City .- The nature of this invention consists in applying to a rocking chair a number of fans connected with mechanism so that by the rocking of the chair the fans will be put in motion and fan the occupant. What a luxury, for warm weather, is this invention.

Marble Saw-By I. A. Heald, of Springfield, Mass .- The invention consists in having two saw frames attached to a reciprocating frame in such a manner that the saw frames may vibrate laterally while working longitudinally. The degree of lateral vibration is easily adjusted, so that the saws will cut at any angle desired. A further improvement consists in having saw frames thrown up at the end of each stroke or at the termination of their forward and backward movement, so that sand, which is always employed in sawing stone, may pass into the saw kerfs underneath the stone. The use of ropes, windlass, and other gearing, to swing the saw, is thus obviated.

Saw Mill-By Jesse Gilman, of Nashua, N H.-In ordinary saw mills after a board has been sawed the carriage on which the log is fed must be gigged or run back for a new cut; to do this the attendant presses a lever, which brings a wheel in contact with a rack on the carriage, and moves the latter to the desired position. In the present improvement the carriage is moved back as soon as the board is cut by an automatic device, so that the presence of an attendant is unnecessary. Mills thus arranged are not new in themselves. The invention of Mr. Gilman consists in a novel and peculiar device for accomplishing the purpose named.

Self-Loading Hay Cart-By D. H. Thompson, of Fitchburgh, Mass.-This invention consists in the employment of rakes applied to a cart or wagon, in connection with an inclined frame, operating in such a way that the hay will be raked up and loaded into the cart or wagon by merely drawing the vehicle over the meadow. Truly the march of improvement is onward. The next contrivance, perhaps, will be a self-moving barn, that goes out into the field, fills itself with hay and then returns to its foundation.

Improved Punching Press-By Corliss and Harris, of Providence, R. I.-This invention consists in the employment of an oscillating box working in a yoke of peculiar construction attached to the plunger or follower to transmit from an eccentric the force to produce the pressure. The principles of construction are such as to obviate friction to a great extent at the moment of punching, and thus render the press easy of operation.

Recent Foreign Inventions. Interior Sun Blinds—J. Jeffreys, of London, patentee .- Two frames are made of wire, with strong side wires and cross wires, and the one is placed horizontally above the other a few method is said to divide the blow of the weight, gether by diagonal cross bars at the sides, and

would it be to pass a general law extending and to save the heads of the piles from being strips or pieces of cloth are stretched from one cross wire, in the inside, to the other cross wire, a little above it on the outside frame. Each strip of cloth thus placed is inclined like a Venetian slat, and the two frames are parallel to one another. The wires on which the cloth is stretched may be made to turn on their ends, to incline them more or less. The inventor terms these blinds "Solar Screens." They do not answer as substitutes for Venetian blinds, but they will screen off the rays of the sun without interfering much with the view from within an apartment.

Preserving Meat and Fish .- J. Bethel, of England, patentee.-This invention consists in slowly drying meat, fish, and vegetables within kilns, in a dry atmosphere, ranging from 90° to 130° Fah.—never being heated above the latter. The object of the invention is to evaporate all the moisture in these substances without coagulating the albumen, so that the juices of the meat, fish, or vegetables, as dried, will remain in a soluble state. If the meat were dried at a higher temperature than 130 Fah., the albumen would be coagulated, and the juices rendered insoluble.

Roasting Coffee .- T. Pougereau, of England, patentee.-This improvement consists in roasting coffee in a globular instead of a cylindrical roaster, and giving it two motions over the fire-one round a horizontal, and the other round a vertical axis. Coffee beans are roasted more uniformly in this than they can be in the common cylinder roaster.

Milk Soap-D. Pallier, of England, patentee.-The claim of this inventor is for the use of a mixture of milk and flour, or farina, in soap. Bran, we know, has been used in the manufacture of soap ; it is much cheaper than flour, and will answer as good a purpose.

Bleaching Straw Pulp-In the specification of the patent, lately granted, of J. Cowley, and D. P. Sullivan, of Quennington Paper Mills, Gloucestershire, Eng., it is stated that in bleaching straw pulp, the liquor (chlorine) used is about one and a half to two degrees in Twaddle's hydrometer, in strength; that a lower strength will not bleach the pulp, and a stronger liquor will injure it, and not produce so good a color. When the straw is undergoing bleaching, it is carefully watched, and as soon as it assumes a reddish color, just merging on the white, a jet of steam is cautiously let on and continued for two hours, until the liquor has attained to a blood heat, or about 90°, at which temperature it is maintained for about two hours longer, when the straw will be completely bleached, and fit for the beating engine. Unless the steam is gradually introduced, the color will not be good.

Bleaching Rosin for Soap-J. Buncle, of Eng., patentee.-This improvement consists in melting the resinous substances by a jet of steam, and boiling the same with caustic alkali, adding a little salt when boiling, and then passing currents of air through the resin or colophane, which is then allowed to stand for a little while until all impurities settle to the bottom of the vessel. The clear is thenrun off and used in the soap boiler, and as resin is now used, and for the same purpose. Soap made with bleached colophane is much lighter and handsomer in color than if made with the crude resin.

Notes on Ancient and Curious Inventions.-No. 1 We purpose, in a series of articles, to describe a number of American inventions, respecting which there is an absence of general information. The Colonies, prior to the Revolution, appear to have had, and did exercise the power of sometimes granting patents by special acts, for new inventions, and the introduction of new manufactures : the crown also granted patents for the Colonies for new inventions, but it appears that these had to be recorded in the archives of the Colonies by special acts, before they became effective, and legal. After the Revolution, prior to the Federal Union, the original States, inherited the power of granting patents; this power, they surrendered to Congress by the Act of Union. Massachusetts and Connecticut, of all the Colonies, did most by premiums and bounties to encourage new inventions and new arts, and it is a fact, that now, in proportion to their inhabitants, more patents are granted to

residents of these States every year, than any of the others. This we attribute to the early encouragement given to inventors by these States; the impulse early given is still felt.

Saw Mills in Virginia-The abundance of timber in the Colonies; the demand for it in Europe, and by the colonists themselves, for the building of their houses, ships, &c., led them early to erect saw mills driven by water. In 1621, in a tract published by E. Williams, London, the description of an old saw mill used in Virginia is given. The wheel was an undershot, with a large pin wheel (sometimes called a bull-wheel, by millwrights,) onits main shaft, gearing into a wooden cog wheel secured on a second shaft, placed between two upright beams. This shaft had a crank on it, to which was secured a connecting rod attached to the foot of the saw gate, in which were three upright saws-a gang. Excepting in the use of more iron in their construction, there are many saw mills now in various parts of our country which differ but little from this old one.

Massachusetts-In 1652, the General Court of Massachusetts allowed John Clark to charge every family ten shillings for the use of his inventionfor sawing wood and warming houses -this privilege was granted to him for life. In 1641, the same court granted S. Winslow a patent for ten years, to manufacture salt by a new method discovered by him. In 1656, J. Winthrop, son of the Governor, was also granted a patent for twenty years, for manufacturing salt by a new process. In 1671, R. Wharton & Co., of Boston, were granted certain exclusive privileges for making tar, pitch, and turpentine.

In 1701 the Legislature offered a bounty of one farthing on every pound of hemp purchased and raised in the Province, and in 1722 it also offered premiums on linen-duck made in the Province.

Pasteboard-In 1732 a pasteboard papermill was erected at Ivy Mills, Pa., by a Mr. Wilkinson, from England. The pasteboard made was principally used in the cloth presses of woolen factories.

Making Straw Hats—Dressing Indian Corn. -On July 18th, 1717, Thomas Masters, of Phil adelphia, petitioned Lieut. Governor Keith, of Pennsylvania, to be allowed to record two patents which had been granted by the king on the petition of the inventor's wife, Lybella, (a thrifty wife no doubt) ; one was for cleansing, curing, and refining indian corn grown on the plantations, to fit it for shipping;" the other was for for "weaving, by a new method, palmetto, chip, and straw hats." The petitioner stated he had projected these inventions at vast expense. His petition was granted.

Tidal Mills .- Wheels moved by the rise and fall of the tide are of very ancient date John Manson, a carpenter, petitioned the Governor of New York, 11th of February, 1700, for a patent to erect a mill to go with the tide. It is not known if this petition were granted. This inventor also stated he had invented a new method of making "a small vessel sail faster than any other," and that he had also invented a new engine.

### Decay of National Health.

A correspondent of the Tribune has been writing a series of articles on the above subject. He states that American women are not so healthy nor robust as those of Europe, and attributes this to the use of stoves, ill ventilated apartments, and the manner of clothing themselves.

If an evil is found to exist in a nation, it never can be eradicated without destroying the cause, and until the cause is really discovered, it is wrong to speculate at random. It is our opinion that the houses of our people are as well ventilated as those in Europe; also that stoves are used in Europe as well as in the United States; and that the dress of the females on both continents do not differmuch.

## Stone Cement.

A cement of three parts fine coal ashes, one of red lead, three of sand, and two of chalk (by weight) made into a putty with oil, is excellent for filling up the exposed joints of stones, bricks, &c. It becomes as hard as marble.