

Government, an account, however, being kept for the remuneration of the patentee. The power of the Crown has reference only to the granting of a privilege, and not to any right in the invention, having no knowledge of it, and it was very different from those grants where there was some prerogative right, or a presumed prerogative right, possessed by the Crown, such as a grant of a fair or market and franchises of that character. After referring to the several authorities quoted by the learned Attorney General, he said:—

"If the case is to be determined with respect to considerations of public policy, how can any officer of the State rise up in his place and say it is public policy, in all cases of munitions and implements of war, to drive every inventor to foreign countries, because the inevitable result, if their lordships' judgment should be in favor of the Crown, will be to do that."

Mr. Bovill hit the nail square on the head; and we do not see how any sensible man can adopt any other view of the matter. The Lord Chief Justice, however, intimated that judgment in the case would be rendered in favor of the Crown, on the maxim, we suppose, that "the king can do no wrong."

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:—

**Grain and Grass Harvester.**—This invention relates to an improved sickle-driving mechanism, whereby a requisite speed may be obtained by a very compact arrangement of parts. The invention also relates to a novel manner of applying the seat to the machine whereby the weight of the driver is made to act in the most favorable manner towards balancing the machine and in assisting in elevating the finger bar. The invention also relates to a lever applied and arranged in such a manner, relatively with the draught pole, as to cause the outer end of the finger bar to be elevated when the inner end of the same has been elevated a certain height. The invention also relates to a new and improved shoe arranged and applied in such a manner as to support the front part of the machine and partially sustain the finger bar so that it will run lightly over the surface of the ground, and at the same time serve to protect the pitman which drives the sickle. The invention further relates to a novel manner of attaching the finger bar to the main frame of the machine, whereby a strong and durable joint connection is obtained. Frederick Nishwitz, of Brooklyn, N. Y., is the inventor.

**Arrow Projectile.**—This invention consists in the application to a projectile of a telescope stem provided with wings in such a manner that when the projectile is prepared for use said stem can be contracted within the limits of the cartridge bag, but when the charge is fired, and as soon as the projectile leaves the muzzle of the barrel, the stem elongates by its own inertia and gives balance and steadiness to the projectile in its flight, thereby increasing the range, velocity, and also the certainty of striking the object fired at. The wings being secured to the tubular end of the stem do not interfere with the revolving motion of the projectile if the same is fired from a rifled barrel. The stem is secured to a cap which is perforated with holes, and from the outer surface of which rises a rim with an internal screw thread which screws on the inner end of the projectile, leaving a shoulder for the soft metal ring to rest on, in such a manner that when said cap, with the telescope stem contracted, is introduced into the cartridge bag, said bag can be readily filled with powder through the perforations in the bag, and by screwing the projectile down into the rim of the cap, the edge of the cartridge bag is clamped between the soft metal ring and the shoulder of the cap, and no further fastening is required for it. Capt. Thomas S. Orwig, 219 Broadway, New York, is the inventor.

**Rotary Engine.**—This invention consists in two revolving piston wheels connected together by cog wheels and placed concentrically in two adjoining cylinders in combination with a valve which occupies the channel leading from one cylinder to the other, and to which motion is imparted by concentric or other equivalent means, mounted on the shafts

of the piston wheels, in such a manner that said piston wheels and intervening valve are alternately acted upon by the steam passing through the channel connecting the two cylinders, and that by the action of the valve and piston wheels one cylinder takes steam while the other exhausts, and vice versa. The cog wheels which gear the two shafts of the pistons together are eccentric, the same as the pistons, so that their circumferential speed corresponds with that of said pistons. John P. Ellis, of 22d. Reg. Wis. Vol. Inf., Nashville, Tenn., is the inventor.

MARKET FOR THE MONTH.

The peculiarity in the trade during the month of February is the absence of fluctuations in the price of gold and other commodities. The prices of the leading staples on the 22d, compared with those on the last Wednesday in January, were as follows:—

|                                      | Price Jan. 25.  | Price Feb. 22.    |
|--------------------------------------|-----------------|-------------------|
| Coal (Anth.) 2,000 lb.               | \$12 00 @ 12 50 | \$14 00           |
| Coffee (Java) 1 lb.                  | 47 @ 38         | 47 @ 48           |
| Copper (Am. Ingot) 1 lb.             | 45 @ 46 1/2     | 44 @ 45           |
| Cotton (middling) 1 lb.              | 84 @ 85         | 83 @ 81           |
| Flour (State) 1 bbl.                 | \$9 20 @ 9 70   | \$9 80 @ 10 40    |
| Wheat 1 bush.                        | Nominal.        | 2 50 @ 2 80       |
| Hay 100 lb.                          | \$1 50 @ 1 90   | 1 70              |
| Hemp (Am. drs'd) 1 tun.              | 320 00 @ 390 00 | \$320 00 @ 390 00 |
| Hides (city slaughter) 1 lb.         | 11 @ 13 1/2     | 13 @ 13 1/2       |
| India-rubber 1 lb.                   | 72 @ 1 20       | 72 @ 1 15         |
| Lead (Am.) 100 lb.                   | 13 00           | 13 00             |
| Nails 100 lb.                        | \$8 50 @ 9 00   | 8 50              |
| Petroleum (crude) 1 gal.             | 45 @ 45 1/2     | 45                |
| Beef (mess) 1 bbl.                   | \$19 00 @ 24 00 | 18 00 @ 24 00     |
| Saltpeter 1 lb.                      | 30              | 30                |
| Steel (Am. cast) 1 lb.               | 19 @ 34         | 19 @ 34           |
| Sugar (brown) 1 lb.                  | 16 @ 22         | 15 @ 20           |
| Wool (American Saxony fleecce) 1 lb. | 90 @ 1 10       | 90 @ 1 10         |
| Zinc 1 lb.                           | 18 @ 19         | 18 @ 18 1/2       |
| Gold.                                | 2 05            | 2 01              |



ISSUED FROM THE UNITED STATES PATENT-OFFICE FOR THE WEEK ENDING FEBRUARY 21, 1865. Reported Officially for the Scientific American.

Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying size of model required and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

**46,435.—Horse Rakes.**—Hubley Albright, Lewisburgh, Pa.: I claim, first, The arrangement of the teeth bars, H, and bent rod, E, the latter being attached to the axle, A, as shown, and in such a relative position with the rake teeth, I, to operate as and for the purpose set forth. Second, The lever, F, in combination with the bars, H, F, L, and the springs, O, all arranged and for the purpose specified.

**46,436.—Rotary Engines.**—Wm. Avens and Frederick Fradley, Brooklyn, N. Y.: We claim the wheel, A, with one or more sets of chambers, B, which are provided each with two channels, d, d', situated at opposite corners, in combination with ports, e, e', valves, J, and cylinder, F, all constructed and operating substantially as and for the purpose set forth.

[This invention consists in a wheel provided with two sets of chambers, to each of which access is had by two channels situated on the opposite ends of the chambers, and tapering off in opposite directions, in combination with a cylinder fitting closely to the circumference of the wheel, and with valves which open and close the steam ports in such a manner that by admitting steam to the chambers of the wheel a rotary motion may be imparted to the same in either direction, and by a simple movement of the valves the motion of the engine can be reversed at any moment.]

**46,437.—Bomb Lance for Killing Whales.**—Silas Barker, Hartford, Conn.: I claim, first, The arrangement of the mode of separation of the lance head, C, and fast tube, F, from the shaft of the lance, substantially as described. Second, The arrangement of the adjustable hollow exploding lance head, C, in the manner and for the purpose substantially as herein set forth and described.

**46,438.—Adjustable Tool Holder.**—Charles Petit Benoit, Detroit, Mich.: I claim the adjustable holder, B, swivelled in the end of the stock, A, so as to adapt the tool for various kinds of work, substantially as set forth. Second, In combination with a tool-holder, constructed and mounted as above specified, I claim the washer, E, having grooved or roughened surfaces, and employed in connection with the nut, C, for retaining the tool-holder in position, as explained.

**46,439.—Machine for Riving Hoops.**—George J. Bentley, Michigan City, Ind.: I claim the combination of the grooved wheel, D, with the discs, F and F', the latter being suspended in hanging bearings, substantially as set forth.

**46,440.—Churns.**—Edwin L. Bergstreser, Berrysburg, Pa.: I claim the double-acting dashers, with the steam reservoir and pipe, arranged and combined as herein described.

**46,441.—Brushes for Cannon.**—Paul Birchmeyer, Syracuse, N. Y.: I claim as an article of manufacture an artillery sponge, constructed as described, that is to say, by laying a mat of horse or horned-cattle hair around a central hollow stock or head, and fastening it by a wrapping wire into the spiral groove, the semi-globular end being made by looping in a portion of the mat, as described.

**46,442.—Weft-feeding Device for Hair-cloth Looms.**—John Blanchard, Pawtucket, R. I. Ante-dated Feb. 16, 1865: I claim the improved feeder for a hair-cloth loom described, constructed and operated substantially as herein specified.

**46,443.—Leather and Process of Manufacturing the same.**—Giuseppe Bottero, Boston, Mass.: I claim the process above described, as well as the material or manufacture produced thereby.

**46,444.—Street-lamp Posts.**—Phillip H. Branson, St. Louis, Mo.: I claim as a new manufacture a lamp post, constructed in two parts, substantially in the manner and for the purpose herein set forth. Second, I claim the employment of the clipping strips, C'', substantially as and for the purpose set forth.

**46,445.—Variable Exhaust Nozzles.**—Myron E. Brown, Buffalo, N. Y.: I claim, first, Making a conical nozzle in two parts or halves, the said halves being hinged at the base, and so constructed that they lap past each other, so that when expanded by being moved upon their hinges, the lapping parts will prevent any break or opening between the halves, substantially as described and for the purposes set forth. Second, I claim the flange, C', projecting inwardly inside the nozzle, for the purpose of locking joints between the seat and base of the nozzle, and thus, by carrying the flange above the joint, prevent steam from escaping at the bottom of the nozzle, substantially as described.

**46,446.—Tanning.**—Church Burton, Union, Maine: I claim the tanning of hides and skins with evergreen boughs, such as spruce and fir.

**46,447.—Revolving Hay Rakes.**—Ezra Calderwood, Portland, Maine: I claim the combination with the thill, A', of the box, D, movable cap, c, and spring bolt, G, the latter engaging with the notched or recessed wheel, E, upon the rake head, all as herein described. [This invention relates to a new and improved revolving rake, to be drawn either manually or by a horse, and it consists in a novel and simple means employed for holding the rake in working position, and which will admit of being readily actuated to liberate the rake, so that it may revolve and discharge its load when necessary.]

**46,448.—Machine for Cutting Pasteboard.**—Ellisur E. Clarke, New Haven, Conn.: First, I claim the method herein described of cutting pasteboard, by combining with fixed cutters and revolving cylinder a mechanism for raising and lowering the said cylinder to and from the cutters at given intervals of space, to more or less or not at all indent the pasteboard, or to produce a through cut at pleasure, substantially as set forth. Second, I claim combining in one machine two cutter bars, provided with adjustable or fixed cutters, with two cylinders geared so as to revolve with equal velocities, one of the said cylinders revolving in fixed bearings, while the other, actuated by suitable mechanism, is raised or lowered from the cutters, as herein described. Third, In combination with adjustable or fixed cutters and revolving cutter cylinder, I claim a cam cylinder, or wheel revolving in unison with the cutter cylinder, and actuating it to more or less impinge against the cutters at given intervals of space, substantially as set forth. Fourth, I claim the combination with the cutters, cutter cylinder and cam wheel, a feed bar, actuated by the cam wheel, or any part, moving in unison therewith, in such manner as to feed the sheet to the cutters, automatically and at proper intervals of time during the revolution of the cam wheel, to receive the through and score cut between given points, substantially as set forth. Fifth, I claim the combination of the grooved and flanged disk, with detachable cams and clamps and screw bolts to fasten the cams to the periphery of the wheel, substantially as set forth. Sixth, In combination with a machine for cutting pasteboard, I claim a sliding and adjustable platform, a table for receiving the scored and cut sheets, the arrangement being such that the said table may be slid under the main cylinder, so as to admit of the operator approaching the cutters to adjust them, substantially as set forth. Seventh, I claim the combination of the cutter-holder and stock, fitted together by means of a vertical tongue and groove, with one or more horizontal guide tongues on the back of the stock, and fitting and sliding in a corresponding groove or grooves in the cutter bar, or the projecting studs on the cutter stock passing over and under the cutter bar, together with a binding bolt passing through the central guide tongue, substantially as set forth. Eighth, I claim the forked arm and grooved screw nut, working in combination with the inverted T-groove in the side of the cutter bar, with the binding screw bolts and nuts, substantially as described, for the purpose specified.

**46,449.—Medical Compound.**—Alfred P. Coryell, Janesville, Wis. Ante-dated Feb. 16, 1865: I claim the use of a compound made of the ingredients above specified, mixed together in about the proportion, and substantially in the manner set forth.

**46,450.—Horse Hay Forks.**—James A. Cowles, Chicago, Ill.: First, I claim the combination of the key or right-angled lever, f, with the ball pivoted at the eye, p, when said ball is located in the described situation, with the handle, c, and head, a, a, as and for the purpose herein set forth. Second, The combination of the head, a, handle, c, key or right-angled lever, f, catch, o, o, and bail, in the manner and for the purpose described.

**46,451.—Door Fastener.**—Elliott H. Crane, Jonesville, Mich.: I claim the combination of the segmental latch piece, B, vibrating on a pivot within a slot of the plate, A, and actuated by the spring, C, by which the plate being fastened in position the closing door forcing back the latch piece, which is forced to return when the edge of the door has passed it. [This is a pocket contrivance, designed for use wherever a convenient temporary door lock is wanted. The improvement relates to a peculiarity of construction, by which a spring bolt is employed in such a manner as to have an automatic action, so that by the act of closing the door the latter becomes locked. This is a device that everybody wants, for it can be instantly applied to any door, without screws or nails.]

**46,452.—Clothes Dryer.**—Ephraim Culver, Shelburne, Mass.: I claim the combination of the slotted and movable arm, c, the movable brace, d, and hub, l, and the screw and nut, e, substantially as and for the purpose described.

**46,453.—Fishing-line Sinkers.**—Ebenezer F. Decker, Southport, Maine: I claim as my invention the combination of the guard ring, the line, the swivel, the sinker and the arms, D B, the whole being arranged substantially as specified.

**46,454.—Plows.**—John Deere, Moline, Ill.: First, I claim the combination of the landside side, A, with the solid bars, 3 3 3, and the perforated ear, 5, substantially as and for the purpose set forth. Second, The lug, 3, cast on the landside, substantially as and for the purpose set forth. Third, The guide and fastening ear, 5, in combination with the movable standard, substantially as and for the purpose set forth. Fourth, The combination of the landside standard and mold board, by means and in the manner substantially as described. Fifth, The construction of the shear, C, with the perforated ear, 5, substantially as and for the purpose set forth.





