

No. 20,481. System of Writing Music.*(Système d'Ecriture de la Musique.)*

Noah Drew, Fowlerville, Mich., U.S., 3rd November, 1884; 5 years.

Claim—Blank music paper having a series of seven staff lines, provided with two columns or divisions at one end thereof, containing respectively the letters from C to C and numerals from 1 to 12, and a blank column adjacent to that provided with the numerals adapted to receive a character or symbol to indicate the base or key note, substantially as set forth.

No. 20,482. Boiler Ash Pan.*(Cendrier de Chaudière.)*

James C. Anderson and Frank H. Latimer, Winnipeg, Man., 1884; 5 years.

Claim—1st. In a boiler ash pan, air chambers having at their inner openings bevels either adjustable or stationary, substantially as described and for the purposes set forth. 2nd. In a boiler ash pan, the combination, with a supporting frame, of a series of slats journaled in the sides of the pan, having their pivots in a line close to one side of the slat and being opened or shut by rockers attached to a rocking rod, said rocking rod being moved by a series of arms attached to a rocking shaft, one of which arms is counterweighted, substantially as described and for the purposes set forth. 3rd. In a boiler ash pan, the combination of air chambers having hoods or covers, with a false bottom, substantially as described and for the purposes set forth. 4th. In a boiler ash pan, the combination of the rocking rod *e*, with rockers *b*, the slats *f*, the rock shaft *g* having at one end thereof the weighted arm *k* (and the arm *d*, as most convenient), substantially as described and for the purposes set forth.

No. 20,483. Iron Board and Frame.*(Table et Métier à Repasser.)*

Trayton F. F. Baker, Oakville, Ont., 3rd November, 1884; 5 years.

Claim—1st. An ironing board *A*, having a rounded surface, in combination with a frame *B*, having a slide-board *a* actuated by a spring, substantially as and for the purpose specified. 2nd. A rectangular frame *B*, arranged to receive the ironing board, and having in its head a slide board *a* held to the frame *B* by pins passing through it, and oblong holes *b* in the board *a*, and the shank *d* projecting beyond the end of the frame *B*, in combination with the spring plate *C*, secured to the end of the frame *B* by pins or screws *e* passing through oblong holes made in the plate *C*.

No. 20,484. Armature and Tube Coupling in Apparatus for Manufacturing Cellulose. *(Armature et Joint de Tube pour Appareil de Fabrication de la Cellulose.)*

Alexander Mitscherlich, Hanov-Munden, Germany, 3rd November 1884; 5 years.

Claim—1st. A pipe-connection for a boiler, consisting of the combination of tube *a* having head or flange *p*, with nut *b*, screw cap *c*, packing *i* and pipe *d*, whereby, upon screwing up the cap *c*, the packing is compressed against the end of tube *a* and is caused to embrace the pipe *d* and thereby make a tight joint, substantially as set forth with reference to Fig. 1 of the drawing. 2nd. An armature-connection for a boiler consisting of a tubular armature *A* clamped to and projecting into the boiler, a thermometer projecting into its interior and openings *B* and *M* into its end interior to the boiler for the connection of manometer and test-cock or gauge tube, substantially as set forth, with special reference to Fig. 2 of the drawings. 3rd. The combination, with the boiler, of armature *A* projecting into it having tubular extension *a*, internal thermometer-tube *g*, thermometer *T*, with its prolonged bulb extending into said tube, so as to be entirely surrounded by the liquid, and openings *o* or *M*, or both communicating with the space within said armature for the connection of test devices, substantially as set forth with reference to Fig. 1 of the drawing.

No. 20,485. Car-Coupling.*(Accouplage de Chars.)*

John C. Bryan, Holly Springs, Ark., U.S., 3rd November, 1884; 5 years.

Claim—1st. The combination of the frame *E* having cross-bar *F*, the apron *L* having adjustable arms hinged on said bar, the spring or lever *O* loosely mounted on said bar, and the chain *Q* for holding one end of the spring or lever, substantially as shown and described. 2nd. The combination of the frame *E*, the apron *L*, the spring *O*, the chain *Q*, the hangers *S*, the forked and slotted bar *G* and clip *H*, substantially as shown and described. 3rd. The combination of the frame *E*, carrying the pin *D*, the spring-actuated plate *C* for supporting the pin, and the swinging arms *U* and hangers *S*, substantially as shown and described.

No. 20,486. Spring Bed. *(Sommier Elastique.)*

Robert Swayze and Joseph Gauntlett, Milan, Mich., U.S., 3rd November, 1884; 5 years.

Claim—1st. A bed spring, constructed substantially as described, having a rectangular loop at its lower end to embrace a bed slat, and a compound arm formed integral with the spring by means of which it is locked to its fellow springs on two sides, substantially as described. 2nd. In a spring bed bottom, the combination of the slats, with the spring having a rectangular loop at its lower end to embrace said slat, and means, substantially as described, for locking the upper ends of such springs together, substantially as and for the purposes specified.

No. 20,487. Curd Agitator Implement.*(Menole de Fromagerie.)*

David M. Macpherson, Lancaster, Ont., 3rd November, 1884; 5 years.

Claim—1st. In a curd mill, in combination with frame *A*, feed chute *H* and shaft *B*, the rotary cutting wheel *D*, with radial slots each having a longitudinal cutting edge projecting from one face of the wheel, and on the opposite side knives *f* set transversely to the slots, as and for the purpose set forth. 2nd. In a curd mill, in combination with the frame *A*, feed chute *H* and shaft *B*, the rotary cutting wheel *D* provided with radial and transverse cutting knives and a rim or flange *E* to steady and increase the cutting power of the wheel, as set forth. 3rd. In a curd mill, the combination of the frame *A*, shaft *B*, feed chute *H* and wheel *D* provided with cutting knives on opposite sides of radial slots, to operate as described for the purpose set forth.

No. 20,488. Button-Setting Instrument.*(Machine à Poser les Boutons.)*

The Pratt Manufacturing Company, Portland, Me., (assignee of S. L. Pratt, Hingham, and A. M. English, Boston, Mass.) U.S., 4th November, 1884; 5 years.

Claim—1st. In an apparatus for setting buttons, a rest or support for the fastening, or hook, and a plunger provided with an anvil, combined with a spring-clamping jaw to grasp the shank of a button, and with a spring *h* to permit the movement of the plunger and anvil have acted to press the material upon the shank of the fastening or hook below its point, substantially as and for the purpose described. 2nd. In an apparatus for set buttons, a plunger, combined with a button-holding clamp composed of plates, substantially as described, to form shoulders or rests to act upon one face of the shank, and a spring jaw having its ends turned inwardly to bear against the opposite face of the said shank, substantially as described. 3rd. In an apparatus for setting buttons, the frame-work or head *A*, provided with the guide *a*, and the button-carrying plunger therein, combined with a lever and a link, arranged substantially as described, whereby the operator to actuate the plunger to set a button may grasp in one hand the said guide and lever, substantially as set forth.

No. 20,489. Pulley. *(Poulie.)*

Alexander M. Smart and James A. Bailey, (assignee of M. L. Jack and J. L. Thomson,) Syracuse, N.Y., U.S., 4th November, 1884; 5 years.

Claim—1st. The combination, with a pulley, of a crowned facing composed of two or more layers of fibrous material of successively diminishing width cemented together, and to the periphery of the pulley, with the narrowest layer at the outside, substantially as described and shown. 2nd. The combination, with a pulley, of a bogging composed of one or more layers of textile fabric wrapped around the periphery of the pulley and cemented thereon, and a crowned facing composed of two or more layers of fibrous material of successively diminishing widths cemented together and to the aforesaid bogging with the narrowest layer of fibrous material of the outside, substantially as described and shown. 3rd. A multiple belt-carrying pulley having two or more crowned faces, each composed of two or more layers of fibrous material of successively diminishing widths cemented together and on the periphery of the pulley, each succeeding overlying layer being narrower than the preceding layer, substantially as described and shown. 4th. The combination of a pulley of one or more layers of textile fabric wrapped around the periphery of the pulley and covering the entire width thereof and cemented thereon, and two or more crowned faces each composed of two or more layers of fibrous material of successively diminished widths cemented together and on the textile fabric wrapping aforesaid, substantially as described and shown.

No. 20,490. Automatic Fire Alarm and Indicator. *(Tocsin et Indicateur d'Incendie Automatiques.)*

Frank A. Simonds and Frank Hall, Grand Rapids, Mich., U.S., 4th November, 1884; 5 years.

Claim—1st. In a fire alarm and indicator, the combination, with the building, of the alternate series of wires or cords, arranged on the ceiling of each room or compartment of the same, said alternate cross-wires being of a length insufficient to reach a cord drawn in a straight line between their points, a zigzag longitudinal wire or cord connecting with each of the alternate cross-wires or cords and extending down to the basement cellar or other convenient place over suitable pulleys, a weight attached to the lower end of the longitudinal wire or cord, indicators fastened to the same, a transverse wire or cord connecting with the weighted wire or cord and also connecting with the operating mechanism of a bell, whistle or other alarm, as set forth. 2nd. In a fire alarm, the combination, with the building, of the alternate series of cross wires or cords arranged on the ceiling of each room or compartments, said alternate cross-wires being of a length insufficient to reach a cord drawn in a straight line between their points, a longitudinal wire or cord connecting with each cross wire or cords and extending down to the basement or cellar, a weight at the lower end of the longitudinal wire or cord, the latter with operating mechanism of a bell, whistle or other alarm, as set forth. 3rd. In a fire indicator, the combination, with the building, of the alternate series of cross wires or cords arranged on the ceiling of each room or compartment, said alternate cross wires being of a length insufficient to reach a cord drawn in a straight line between their points, a longitudinal wire or cord connecting with the alternate cross wires and extending to the basement or cellar, the longitudinal wire or cord having a zigzag course on the ceiling, a weight at the lower end of said wire or cord and indicators attached to the weighted wire or cord and suitably numbered or lettered, as and for the purpose set forth. 4th. In a fire alarm and indicator, the combination, with the building, of the series of cross wires or cords arranged along the ceiling of each room or compartment one