No. 14,129. Improvements in Fanning Mills.

(Perfectionnements aux tarares-cribleurs.)

Henry Keller, Sank Centre, Ma., U.S., 7th February, 1882; for 5 years. of Claim.—The combination, with the batten E having the L-slot to the main frame A, and having its lower end ds made L-shape and adapted to be inserted in the slot do.

No. 14,130. Improvements on Harrows.

(Perfection unements aux herses.)

William J. Lane, Milbrook, N.Y., U.S., 7th February, 1882; for 5

Vears. Claim.—1st. The combination of the head A with the gang bars B spivelled so as to move in a horizontal plane to a position parallel to the line of draft and then in a vertical plane and vice-versa. 2nd. The combination of the swivelled gang bars, the runners k and suitable locking devices. 3rd. The combination of the swivelled gang bars, the head A and the stay rods k adapted to lock the bars either in a position parallel, or substantially parallel to the head, or at right angles thereto. angles thereto.

No. 14,131. Improvement on Pianos and Organs. (Perfectionnement des pianos et des orgues.)

Cyrus N. Andrews, San Francisco. Cal., U.S., 7th February, 1882; for

5 years.

Claim.—1st. The means of actuating or manipulating the keys of musical instruments which consists essentially of a perforated sheet of paper, or other non-conducting material, interposed between a positive and a negative pole of a battery, so that, when the said sheet or web is moved and the negative pole falls into, or engages the slot in said sheet, the circuit is complete and sound is produced upon the insaid sheet, the circuit is complete and sound is produced upon the insaid sheet, the circuit is complete and sound is produced upon the insaid sheet, the circuit is consequence of the circuit is broken.

And, In an electro-magnetic piano or organ player in which the circuit is closed or broken in an automatic manner, the perforated or slotted music sheet or strip o, positively charged cylinder D. (over which said sheet is caused to pass) and negatively charged rod or point G. 3rd. In an electro-magnetic piano or organ player, the combination, with an automatic circuit closing and breaking apparates, of the helix I and armature J mounted upon a lever arm K connected to and by which a key or valve of the instrument is operated in the manner specified, 4th, In an automatic electro-magnetic piano player, the battery A, connecting wires BC, positively charged theo or cylinder D, negatively charged rod or point F, slotted music sheet O by which the current between the two electrodes is closed or of Cords and levers, by which the key or valve of the instrument is operated. operated.

$^{ m No.}$ 14,132. Improvement on Water Wheels.

(Perfectionnement des roues hydrauliques.)

Covel R. Cowley, Wyoming, N.Y., U.S., 7th February, 1882; for 5 years.

years.
Claim.—1st. The triangular butments cc forming divisions between the buckets of the wheel, said butments having their adjoining sides parallel and equidistant at all parts for the movement of the followers between them. 2nd. The combination, with the buckets of the wheel, of followers resting in the buckets and adjustable out and in, to increase or lessen the area of the buckets adapting the same therein the different volumes of water. 3rd. The combination of the adjustable followers C and the conical sliding head D, the followers being provided with inclined flanges presting in corresponding grooves of the sliding head, 4th. The combination of the threaded standard E, the cylinder or nut H, disk L, cap K, spur gear M and sliding pinion N. 5th. The combination, with the followers C, of the packing k, set into edge and serving to pack the follower and prevent loss of water in the buckets. 6th, The combination, with the water wheel B, of the chutes V having pivoted inner heads r capable of swinging outward away from the wheel, when any impediment comes between them and the wheel. between them and the wheel.

No. 14,133. Improvements on Telegraph Receiving Apparatus. (Perfectionnements aux récepteurs télégraphiques.)

John W. Fuller, London, Eng., 7th February, 1882; for 15 years. im.—1st. The galvanometer coils formed with a coniform aper-in the centre of the coils, increasing in diameter in receding from the centre of the coils, increasing in diameter in receding from the plane in which the mirror and magnet are suspended. 2nd. The way of winding such galvanometer coils having a coniform aperametal blocks receiving pegs between them, for shanting the outer coils when desired, 3rd. The mirror and magnet holder. 4th. The combination of galvanometer coils having a coniform aperture, with adjusting instruments introduced into the said coniform aperture.

No. 14,134. Improvement in Sewing chines. (Perfectionnement des machines à

Thomas Stevens, Hamilton, Ont., 8th February, 1882: for 5 years. Claim.—1st. The combination of the outer plate E and the inner plate F, the thread take-up lever G. 2nd. The plates E F provided with slots dec. 3rd. The combination of the take-up lever G, the outer-blate E and the inner plate F, groove D, spring g. 4th. An adjustable thread take-up, consisting of the two vertical plates E L, sliding in a groove D and provided with slots, through the lower two of which is made to pass the thread take-up lever G and the inner plate F capable of being raised and lowered, to adjust the long or short throw of the said take-up lever, to suit fine or coarse goods, and operated by a cam.

No. 14,135. Improvements on Chairs.

(Perfectionnements aux chaises.)

Charles H. Gilpin, Uxbridge, Ont., 8th February, 1882; for 5 years.

Claim—1st. The combination of the metal plates SSSS and R R and the cups or sockets GG, with flanges OO. 2nd, The combination of the cups or sockets GG and the rods CC, and the thumb screw D working on threads from both ends of the rod CC. 3rd. The combination of any shifting motion and any cups or sockets to shift backward or forward, either on the sides or tops of rockers by means of flanges in graphysis. flanges or grooves in rockers.

No. 14,136 Improvements on Machinery for Tanning Hides, Skins or Pelts.

(Perfectionnements aux appareils pour tanner les peaux.)

John W. Janson, London, Eng., 8th February, 1882; for 5 years.

Chaim.—1st. In a machine for unhairing, fleshing, paring, shaving and setting hides, skins or pelts, the knife cylinder E and roller F, in combination with the knife cylinder C and roller D. 2nd. The machine shown on the drawing.

No. 14,137. Improvements on Writing Tablets. (Perfectionnements aux livrets de fac-

John H. Holder, Aurora, Ill., U.S., 8th February. 1882; (Extension of Patent No. 7049.)

No. 14,138 Improvements on Machines for Twisting and Doubling Cotton.

(Perfectionnements aux machines à doubler et retordre le coton.)

Alfred Yates. Tissington, Eng., 8th February, 1882; for 5 years,

Affred Yates. Tissington, Eng., 8th February, 1882: for 5 years.

Claim.—1st. In a machine for twisting and doubling cotton or other fibres, the regulation of the yarn or thread in the creel itself by arranging a number of creel bobbins radially round revolving pulleys or drums which regulate the delivery of the thread and, assisted by the pulley or drag of the spindle, produce a regular tension on the threads without the intervention of drawing rollers or other like mechanism. 2nd. In combination with drums or pulleys B, the radially supported slides 0 0 for guiding the bobbins on to the drums. 3rd. In combination with the rails M carrying the slides 0 01, the bracket supporting same, the bearing and the upper shelf. 4th. In twisting or doubling machines the pivoted counterweighted wires or levers G carrying the pulleys or beads F, for automatically placing the thread in the water or other liquid.

No. 14,139. Improvements on Glove Fasteners. (Perfectionnements arx agrafes des gants.)

Edward Horsepool, London, Eng., 8th February, 1882; for 5 years.

Claim.—The plate a, spring v and lever c.

No. 14,140. Improvement in Hub Bands (Perfectionnement aux coublures des moyeux.)

Washington I. Atwood, Amesbury, Mass., U. S., 8th February, 1882; for 5 years.

Claim .- 1st. An ornamental interior hub band having central open-Claim.—1st. An ornamental interior hub band having central opening for the insertion of the axle nut, a rim to engage or seat upon the outer band, and spurs or projections to enter the hub and hold such interior band in place. 2nd. An interior hub band formed with the curved concentric wall a, the central opening d, the securing spurs and the scating rim b. 3rd. The combination of hub b, the outer band i and the inner band formed with spurs to enter the hub, a rim to seat upon the outer band and a central opening for the axle nut.

No. 14,141. Improvements on Apple Slicers.

(Perfectionnements aux tranche pommes.)

Albert J. Rice, Sodus, N. Y., U. S., 8th February, 1882; for 5 years.

Albert J. Ricc, Sodus, N. Y., U. S., 8th February, 1882; for 5 years. Claim.—1st. The combination, with a suitable supporting frame of the spirally arranged knives B Bi Bii Biii removably attached to the frame at each end and offset on one side of the finger-shaft and the rotating fingers C. 2nd. In combination with the knives B and the rotary fingers C, the projection h. 3rd. The combination, with a suitable frame, of the shaft d, rotating fingers C and their knives B Bii Bii attached to the frame at one or both ends by a suitable straining device. 4th. The reversible apple slicer consisting of the supporting frame A, rotating fingers C and knives extending each away from the centre and sharpened on opposite edges. 5th. The combination, with the rotating fingers C and knives B, of the supporting frame A, provided with ribs or lugs c c, for attaching the machine to the table in reversed position.

No. 14,142. Improvement on Squares.

(Perfectionnement anx équerres.)

Lester Low, Ryegate, Vt., U. S., 8th February, 1882; for 5 years.

Cluim.—Ist. A square provided with crenelations or notches along its edges, arranged coincidently with its graduations. 2nd. A square provided with crenelations on these along its edges, arranged coincidently with its graduations, and having their base formed angularly. 3rd. A square provided with a series of diamond or lozenge-shaped holes, each having one of its angles arranged coincidently with one of its graduations.