No. 27,325, Machinery for Drying Pile and other Woven and Felted Fabrics. (*Appareil pour sécher les étoffer à poile, et autres etoffes tissées et feutrees.*)

Henry Lister, Huddersfield, Eng., 2nd August, 1887; 5 years.

Claim.—1st. In combination with a machine for drying pile and other woven or felted fabrics, consisting of two discs, such as A and B, of the plate wheel J, rotated as described, free to move on spindle K, and rotating disc S at constantly varying speed by means of projections *m* set in spiral curve on face of T, and intermeshing with J, all as and for the purposes set forth. 2nd. In combination with a machine for drying pile and other woven and felted fabrics, consisting of two disks, A and B, and means for varying velocity of said discs to correspond with varying diameter of fabric being wound on said discs of the lever O and bell crank P connected together, operated by plate wheel J and operating sliding bar Q and its connections, as and for the purposes set forth. 3rd. In combination with the discs A and B, of the additional spiral grooves *f* cut therein for receiving the runners *g*, and studs j_1, for the purposes substantially as herein described. 4th. In combination with a drying machine, having discs A and B, of the cylinder or roller H, provided with right and left-handed spirals on its surface, for the purpose of stretching and removing the creases from the fabric. 5th. In drying machines, such as herein shown, the use of the notched or serrated bars or laths G, for the purpose of stretching and removing the creases from the fabrics. 6th. In combination with the discs A and B, the employment of the toothed straps *p*, for holding the selvedges of the fabric as it enters the machine. 7th. In combination with the discs A and B, the use of the rack U, and pawl *w* for removing the pressure off the nut V, substantially as described.

No. 27,326. Brake for Trucks, Waggons, or Vehicles. (*Freins pour wagons ou voitures.*)

John B. Crosby, Bonshaw, P.E.I., 2nd August, 1887; 5 years.

Claim.—1st. The combination of the yoke C, the rod A, the pole B, the double tree E with buffers, the slit or socket in the pole, the double tree bolt and the front wheels H, H, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the buffers, with the clasp and slit, and the double tree E and the front wheels H, H, substantially as and for the purpose hereinbefore set forth.

No. 27,327. Transmitter for Electrical Type Writers. (*Appareil transmetteur pour graphotypes electriques.*)

James F. McLaughlin, Philadelphia, Penn., U.S., 2nd August, 1887; 5 years.

Claim.—1st. The combination of two instruments, respectively located each at an extremity of a line circuit, as shown, and consisting each essentially of a series of circuit-closing keys, having elongated stems which engage aad intercept the rotation of a revolving contact brush arm when a key is depressed, a series of normally charged retracting springs, corresponding in number and relative situation to the series of keys, and adapted to make contact with a series of vertically adjustable segments, a series of segments arranged to be normally in or out of contact with the retracting springs, and corresponding in number and relative situation thereto, a central shaft revolving in unison with the shaft of the other instrument, and provided respectively with an exterior indicating arm, an interior brush-arm normally in contact with the segments, and an armature disk mounted rigidly upon the said central shaft, and projecting in the centre of the magnetic field of an electro-magnet, an electro-magnet in circuit with the source of electricity at the other end of the line, and a suitable device, as shown, for electrically connecting the rotating shaft with the line circuit, the whole being arranged to operate, as set forth, with two sources of electricity, respectively at each end of the line, the switches and the electrical connections, whereby the successive and separate electric pulsations transmitted from either extremity of the line-circuit are received and indicated at the other extremity, as specified. 2nd. The combination of a suitable source of electricity, the retracting springs, the wires connecting each of said springs with the switch, a three-point switch having its lever in circuit with the battery, and one of its points in circuit with all of the retracting springs, and the circuit-closing keys provided each with an elongated stem, as specified. 3rd. The combination of the series of keys, each having inwardly-projecting stem, provided with collar and extension-rod, the retracting springs having the forward ends provided with eyes for the reception of the extension-rods of the keys, and the contact-springs arranged below said retracting springs corresponding in number and relative situation thereto, as set forth. 4th. The combination of the keys, retracting springs and contact springs, arranged and constructed, as described, with the system of circularly-arranged insulated segments, corresponding in number to the keys, and each having one of the contact springs secured thereto, as set forth. 5th. The combination of the series of insulated segments, arranged as shown, and their superincumbent springs, with the vertically adjustable cross-bar, whereby the segments and contact springs may be elevated, and said contact springs placed normally in contact with the retracting springs, substantially as set forth. 6th. The combination of the centrally-separable cylindrical inclosing case, having the slots and pivoted catches ón the sides thereof, as shown, the vertically adjustable cross-bar supporting the series of segments, provided with end lugs, which project through said slots, and the inner circular flange formed integral with the casing, and supporting the cross-bar supporting the said series of magnets in its normal position, as described. 7th. The combination of the circuit-closing keys, the retracting springs, and the vertically-adjustable contact springs and insulated segments, with the central revolving shaft provided respectively with external indicating arm and the internal contact-brush arm, both adjustably mounted on said central shaft, substantially as described. 8th. The combination of the vertically-adjustable segments and contact springs, with the central revolving shaft, and the rotating brush-arm mounted thereon and adapted to rotate in contact with said segments, substantially as set forth. 9th. The combination of the series of keys mounted in the removable lid of the cylindrical casing, and having the stems, as shown, provided with collars and extension rods, piercing the ends of the retracting springs, and of sufficient length to intercept the rotation of inner contact-bush arm, when a key is depressed with the retracting springs, the vertically-adjustable insulated segments carrying contact springs, and the inner brush-arm mounted rigidly on the central rotating shaft, substantially as shown and described, 10th. The combination of the vertically-adjustable segments, and their respective superincumbent springs, with the retracting springs, the series of keys having stems and collars, as shown, and provided with extension rods piercing ends of retracting springs, and of sufficient length to intercept the rotation of the inner brush-arm, when a key is depressed, the external indicating arm mounted adjustably in upper end of central shaft, and the inner rotating contact brush-arm, substantially as shown and set forth. 11th. The combination of the series of circuit-closing keys, suitably mounted in movable lid or top of cylindrical casing, and having the stems and collars, as shown, and provided with extension rods piercing the ends of retracting springs, and of sufficient length to intercept the rotation of inner rotating brush arm adjustably mounted on the central revolving shaft, as set forth. 12th. The means, such as described, for rendering the segments and their superincumbent springs vertically-adjustable, which consists of the cross-bar supporting said segments, provided with end lugs which project through slots of the required size in sides of casing, and the pivoted thumb-catches for holding said lugs at the upper end of said slots, as described. 13th. The combination of the revolving central shaft, the casing, the keys having elongated stems, provided with collars, as shown, the external indicating arm and the inner rotating contact brush-arm, as set forth. 14th. The combination of the central rotating shaft, with the armature disk rigidly keyed thereon, and revolving centrally in its rotation between the poles of a magnet, the electro-magnet secured upon the diaphragm of the casing, and having the poles thereof arranged in line and in proximity to each other, and a suitable source of electricity and electrical connections for energizing and de-energizing said magnet, as set forth. 15th. The contact segments, such as shown and described, each formed of suitable conducting material insulated from the adjacent segments, and having an inclined contact surface, as shown, said segments being arranged relatively with reference to their respective keys, in circular order upon a vertically adjustable flange, in combination with the vertically-adjustable supporting cross-bar, the retracting springs, the circuit-closing keys and the circuit, as shown and described. 16th. The combination of the circuit-closing keys and their respective retracting and contact springs, and the vertically-adjustable segments, with a suitable constant battery separately connected with each and every retracting spring, as set forth. 17th. The combination of a constant battery with the wires a_1, a_1, arranged as described, the switched P, P, and the retracting-springs and keys for closing the circuit, as set forth. 18th. The combination of the vertically-adjustable cross-bar, the superincumbent segments aud the casing, as described, with the vertical guide-rods, whereby such mechanism is retained in its proper position, as set forth. 19th. The combination of the battery switch, and the wires cbnnecting each retracting-spring with the line from battery with the circuit-closing keys, the retracting and contact spring and the vertically-adjustable segments, as described. 20th. The combination of the vertical rotating shaft, the external indicating-arm, the inner brush-arm and the armature-disk, with the means, such as shown and described, for stopping the rotation of said shaft by the depression of any of the circuit-closing keys of the key-board, with its respective arms at the respective segments, and the key corresponding to the key depressed, and the electro-magnet having poles arranged, as shown and set forth. 21st. The combination of the vertically-adjustable segments, the contact and retractiug springs, and the circuit-closing keys with the central revolving shaft, the contact and indicating arms, the armature disk, the electro-magnet having the poles arranged, as shown, the stationary brush-arm fixed to casing and normally in contact with the lower end of central shaft, the line-circuit, the switches, electrical connections and a suitable battery, as set forth. 22nd, The combination of the central vertical revolving shaft, the collars i, i_1 and the disk armature I_1 adapted to be attracted by a suitable electro-magnet, having electrical connections, the stationary brush-arm connecting the central shaft with the line, and the line-circuit, whereby said shaft is stopped and released at the desired time, as set forth. 23rd. The combination of the shaft G and arms H_{II} and G_{II}, with the segments H, H, and keys E, E, the battery and the line circuit, as set forth. 24th. The combination of the keys, each having a stem *g*, collar g_1 and rod f_1 of the necessary length, with the arm H_{II} secured to shaft G and the rotating central shaft, the retracting spring, the vertically-adjustable segments and the circuit, as set forth. 25th, The combination of the battery O_{II}, the switch lever O_{III}, points o, o_1, o_{II}, and wires p, p_1, p_{II}, and a_1, a_1, with the retracting springs E_1, and the keys E, E, as shown and described. 26th. The combination of a suitable constant battery, having switch switch-point, switch-lever, and suitable wire connections with retracting springs, with the circuit-closing keys, the retracting springs, contact-springs, insulated segments, contact brush-arm, external indicating arm connecting the central shaft with the line, the central vertical rotating shaft, the stationary brush-arm and the line-circuit, as set forth. 27th. The combination of the vertically adjustable segments, adapted to receive the current communicated by the contact and retracting springs through depressing of the keys of the instrument, with the rotating contact brush-arm, the revolving central shaft, the stationary brush-arm and the line, as set forth, 28th. The combination of the vertically adjustable segments adapted to receive current from retracting springs through their respective contact springs, communicated by the depression of the keys of the instrument with the external indicating arm, the rotary contact brush-arm, the vertical central revolving shaft, the stationary brush-arm, the line, the armature disk and the electro-magnet, having poles, arranged as shown and described. 20th. The combination of the electro-magnet J, having poles I_1, I_{II}, and suitable line and