

**No. 29,915. Motor for Sewing Machine.***(Moteur pour machine à coudre.)*

Emma F. Briggs, San Marcos, Texas, U. S., 26th September, 1888, 5 years.

*Claim.*—As an attachment for the stand of a sewing machine, adapted for interchangeable motors, the dependent hook, designed to receive and support, when out of use, either the pitman or the inclined hand rod, substantially as described.

**No. 29,916. Smoking Machine. (Fumigateur.)**

George S. Boin, Salinas, Cal., U. S., 26th September, 1888, 5 years.

*Claim.*—1st. The smoking machine, consisting of the upright fuel box, having hinged nozzle top, perforated draft plate, and blower attached thereto by braces, and having its tapering chute entering the centre of the base to communicate with the air chamber below the equalizer plate, substantially as specified. 2nd. The smoking machine, consisting of the upright fuel-box, having upper and lower openings with doors, the hinged nozzle-top, the inside perforated draft-plate, the blower attachment and its braces and the pivoted standards, substantially as specified.

**No. 29,917. Stove Pipe Damper.***(Clé de tuyaux de poêle.)*

James E. Fenner, and Henry G. Dixon, Dolphi, N.Y. U. S., 27th September, 1888, 5 years.

*Claim.*—The combination, with the stove pipe section A, of the plates *p*, secured lengthwise and respectively at opposite sides of the interior of said pipe section, disconnected from each other to leave a single passage in the pipe section, a series of diaphragms *a*, pivoted independently of each other to the said plates at intervals of their lengths, couplings *c*, connecting the alternate diaphragms at one side of the axis thereof, and connecting the intermediate diaphragm at the opposite side of the axis thereof, and the adjusting rod *h* attached to one of said diaphragms, substantially as described and shown.

**No. 29,918. Electric Railway Station Indicator. (Indicateur électrique de station de chemin de fer.)**

George H. Kirwin, Christian Stegmaier, and Frederick Stegmaier, Wilkesbarre, Penn., U. S., 17th September, 1888, 5 years.

*Claim.*—1st. The combination of the station indicator, the motor to operate the same, and provided with the switch wheel and arm or contact, the armature having the arm to engage and disengage the motor for the purpose set forth, the electro-magnet to operate the armature, the battery, the circuit closer, the bell and the open circuits connecting the electro-magnet to the circuit closer and the battery, and connecting the bell, the switch and the battery, substantially as described. 2nd. The combination in a station indicator, of the shaft F, the wheel M loose thereon, the motor having the operating wheel engaging wheel M, the clutch to connect the said wheel to the said shaft, the lever to operate said clutch, the shaft W, the spring U connected thereto, and the scroll or apron rolled on the shaft W and connected to the shaft F, whereby when the latter is rotated the scroll will be unrolled from the shaft W onto the shaft F, and the springs will be wound, substantially as described. 3rd. The combination of the spindle S, the spring U attached thereto, the shaft W having one end journaled in a suitable bearing and detachable therefrom, the opposite end of the said shaft being secured to the spindle, the operating shaft F, the scroll normally rolled on the shaft W, and having its free end detachably connected to shaft F, the wheel M loose on shaft F, the clutch to secure said wheel thereto, and the motor having the wheel engaging said wheel M, substantially as described. 4th. The combination of the station indicator, the motor to operate the same provided with a switch wheel, and with the revolving cam L, having the notch M, the annunciator connected in open circuit with the switch wheel and with the battery, the armature having the arm provided with the stop to engage the notch in the cam, and the electro-magnet to operate the said armature, said electro-magnet being connected in open circuit with the battery and with the circuit closer, substantially as described.

**No. 29,919. Car Coupling. (Attelage de chars.)**

Heinrich Sommerfeld, Canton, and Archie Brown, McPherson, Ks., U. S., 27th September, 1888, 5 years.

*Claim.*—1st. In car couplings, the link C having handles D, in combination with the bumpers, having recesses *a* and slots *at*, and provided with sliding plates F operated by pivoted levers H in the manner shown and herein specified. 2nd. The combination of the bumpers A and B, provided with sliding plates F actuated by springs G, and levers H with the links C, having cross-bars *e* to engage with the recesses *a* and slots *at*, all constructed and arranged as herein shown and set forth. 3rd. The combination of the bumpers A and B, provided with sliding plates F actuated by springs G and pivoted levers H, with the links C having cross-bars *e* supported by springs E, and arranged to engage with the slots *at* and recesses *a*, in the manner and for the purpose herein specified. 4th. The link C supported on adjustable springs E, and provided with handles D, in combination with the bumpers A, B, having recesses *a*, and slots *at*, and provided with sliding plates F actuated by springs G and pivoted levers H, all operating as shown and set forth. 5th. The car coupling herein described, consisting of the bumpers A, B, provided with sliding plates F actuated by springs G, and levers H, and having springs E, in combination with the link C having cross-bars *e*, and arranged to engage with the slot *at* and recess *a*, all as shown and specified. 6th. In car coupling, the spring-actuated sliding plate F, and levers H arranged to secure the link C having handles D in the slotted

groove *a* in the bumpers A, B, provided with with springs E for supporting said link C, and all constructed and arranged as shown and specified. 7th. In a car coupling, the combination, of a link C having handles D, and cross-bars *e* with bumpers having slotted grooves *a*, and arranged to engage by a movable sliding plate, and pivoted levers attached thereto, in the manner and for the purpose herein described.

**No. 29,920. Mathematical Games.***(Jeu de mathématiques.)*

Louise Martane, Paris, France, 27th September, 1888, 5 years.

*Claim.*—The herein described mathematical game, consisting essentially of a board divided into squares, as described, and checkers bearing numbers, mathematical signs, the word "Proof" and blank checkers, substantially as and for the purpose described.

**No. 29,921. Utilization of Slate, Slate Waste, Black Grit, or other similar, or like waste material and in the Manufacture of Glass therefrom. (Utilité de l'ar.loise et de la grés noire dans la fabrication du verre.)**

William J. Parry, Coetmor Hall, John T. Welch, Penrhyn, North Wales, Great Britain, Andrew Burns, Montreal, Que., 27th September, 1888, 5 years.

*Claim.*—1st. In the manufacture of glass, the fusion of slate or slate waste, as described, and further manufacturing it as described, substantially as set forth. 2nd. In the manufacture of glass, the process which consists of pulverizing slate or slate waste, as described, adding thereto a flux and heating the mass to fusion, and further manipulating the fused mass by the ordinary methods in use for the manufacture of glass, substantially as described.

**No. 29,922. Floor Mats and Matting.***(Natte pour plancher.)*

John B. Carr, Montreal, Que., 25th September, 1888, 5 years.

*Claim.*—1st. A mat or matting composed of rows, or disks A, set edgewise vertically and arranged to make intervening interstices B, and connecting rods C, as set forth. 2nd. A mat or matting composed of disks A, provided with holes *a*, *b*, and having rods C passing through said holes, the alternate disks intervening, the alternate disks on the next row to form interstices B, as set forth. 3rd. A flexible mat or matting consisting of disks A provided with holes *a*, *b*, and sleeved laterally on rods C, and alternately adjusted to make intervening interstices B, said rods provided with ends to retain the disks thereon, substantially as set forth. 4th. In a mat or matting, the combination, of the disks A having holes *a*, *b*, and rods C provided with a head *d*, and nut *e* to compress the disks sleeved on said rods, and the disks alternately arranged to form interstices B vertically, substantially as set forth and for the purpose described.

**No. 29,923. Machines for Making Barbed Wire for Fences. (Machine pour faire le fil de fer barbelé pour clôtures.)**

John W. Glover, Springfield, Miss., U. S., 28th September, 1888, 5 years.

*Claim.*—1st. The combination, with the shaft B and a cam C having a groove *e* provided with a point *ca*, of a lever I having a roller *ca* and adjustable plunger J, substantially as shown and described. 2nd. The combination, with a shaft B and eccentric E, of connecting rod M, lever *an*, punch N and die N5, substantially as shown and described. 3rd. In combination with a shaft B and a wheel D of a crank wheel *d2*, pitman *d*, slotted arm K, adjustable feed rollers *ka*, *kb*, and eccentric lever *k2*, substantially as and for the purpose specified. 4th. In combination, with rollers *k4*, tubes *ks* and feed rollers *ka*, *kb*, one of which has adjustable bearing upon rods *ka* and *kb*, provided with springs *k1*, and a cam lever *k2* for tightening the same, substantially as shown and described. 5th. The combination, with the sprocket wheels *h*, *h'*, and feed rollers L, *L2*, of shaft B having gear connection with the crank wheel W3, pitman W2 provided with an arm U having pawls for driving the said sprocket wheels and rollers by means of ratchet wheels, substantially as shown and described. 6th. The combination, with shaft B and cam F, of a lever O and shear P, stationary shear Z, and stationary shear having detachable plates, substantially as and for the purpose specified. 7th. The combination of a shaft B and cam G, with a rod S and shear Q, said shear having points *q*, and a groove *q2*, and holes *q1*, substantially as and for the purpose specified. 8th. In combination with a shaft B, and a cam H having a groove *h* and a point *h2*, of a lever I having a roller *ia* and an adjustable rod U provided with a head V, substantially as and for the purpose specified. 9th. A former R pivoted at one end and having a hole *ra*, and groove *rs* combined with a wire *rs*, and a roller *rs*, substantially as and for the purpose specified. 10th. The combination, with a shaft B and gear for operating crank wheels *rc*, *rd*, which are provided with pitman rods W, W2 for driving the feed rollers, and sprocket wheels for feeding the strip into a machine from which the shields are formed, and for operating the rack, and fingers for feeding the wire into the machine from which the bars are cut, substantially as and for the purpose specified. 11th. The combination, with a pitman W, which is operated as specified, of a cog wheel *rs*, rack *rs*, frame *rs*, provided with holes *rs*, a lug *rs*, having spring *rs* for operating up and down by means of the rack, and a similar frame *rs* made stationary and provided with a similar spring finger for feeding the wire from which the bars are made into the machine, substantially as shown and described. 12th. In combination with a shaft B, frame A, cams, eccentric, and cog wheels, substantially as and for the purpose specified.