

### No. 12,718. Improvements on Counters for Boots and Shoes. (*Perfectionnements aux contrefores des chaussures.*)

Charles E. Bigelow, Brooklyn, N. Y., U. S., 29th April, 1881; for 5 years.

*Claim.*—1st. In a metal counter support, a series of transverse slits or slots *o o*. 2nd. The metal counter support A having a seat flange, and provided with a series of transverse slits or slots *o o*.

### No. 12,719. Improvements on Car Brakes. (*Perfectionnements aux freins des chars.*)

William Brattle, Coon Rapids, Iowa, U. S., 30th April, 1881; for 5 years.

*Claim.*—1st. The fulcrum C, lever D, brake shaft E, friction wheel F, pinion F, cog wheel G, chains H N, sliding buffer K provided with sheave L and fixed sheave M. 2nd. In combination with the break shaft E, the extension fulcrum C, lever D, friction wheel and pinion F F, cog wheel G and chains H N. 3rd. The combination, with the chain N, of the sliding buffer K provided with sheave L and fixed sheave M, whereby the slack of said chain is taken up.

### No. 12,720. Improvements on Pulleys and Snatch Blocks. (*Perfectionnements aux poulies couples et autres.*)

Herbert Loud, Everett, (Assignee of Thomas R. Ferrall, Boston,) Mass., U. S., 30th April, 1881; for 5 years.

*Claim.*—1st. A snatch block having its hook pivoted or journaled to one cheek, and a link hinged to the other cheek, said link being adapted by its free end, to pass over the end of, and embrace the other pivot or journal of said hook, and to be secured thereto by an arm or lip *o* of said journal. 2nd. A snatch or pulley block provided with the closed hollow cheek B B; each consisting of a hollow cast metal shell formed with rounded edges *c*, the said cheeks being connected together by a cross bar at their lower extremities, and the journals of the pulley wheel being supported by the walls of the hollow cheeks. 3rd. The combination, with the two hollow cast metal cheeks B B in a snatch or pulley block, of the two straps G G; inclosed within the hollow shells constituting the cheeks, the said straps being made with bearings for the journals of the pulley wheel and extending out from the cheeks to connect with the hook, and each cheek being made in a single piece. 4th. The combination, with the two hollow cast metal cheeks B B in a snatch block, of the two straps G G inclosed within the hollow shells constituting the cheeks, the straps G G being extended out from one of the cheeks to form an eye for the hinged link, the strap G<sub>1</sub> being formed to provide a bearing for one of the journals of the hook, and both of the said straps being made with bearings for the journals of the pulley wheel. 5th. A cast metal snatch or pulley block having its cheeks cast hollow, and having its hook pivoted or journaled to one cheek, and a link hinged to the other cheek, said link being adapted, by its free end, to pass over the end of and embrace the other pivot or journal of said hook, and to be secured thereto by an arm or lip *o* of said journal. 6th. In combination with a cast metal snatch block, having its cheeks cast hollow, the wrought iron inside straps, the hook J pivoted or journaled to one cheek, and a link hinged to the other cheek, and adapted, by its free end, to pass over the end of, and embrace the other pivot or journal of said hook, and to be secured thereto by an arm or lip of said journal.

### No. 12,721. Improvements in the Production of Stereotypes and Electrotypes. (*Perfectionnements dans la production des clichés.*)

George D. McDougald, William Adie, George R. Adams and Peter Fleming, Dundee, Scotland, 3rd May, 1881; for 5 years.

*Claim.*—1st. Forming the matrices by successively punching, stamping or impressing the characters, letters or signs, or combination of characters, letters or signs necessary to form the matrix, by means of hard types one after the other, onto and into the material of the matrix essentially as described, and whereby ordinary types, and type setting, are dispensed with. 2nd. The machinery or apparatus arranged relatively with a matrix stamping machine for producing the perforated paper, or other strips, for use in said matrix, stamping machine essentially as described, also the modification described, or any other mere modification of the same. 3rd. The machinery or apparatus for use in combination with the said perforated paper, or other strip, for stamping or impressing one after another, unto and into the material, of the matrix, the characters, letters, words or signs, or combinations of words, letters, characters or signs, necessary to produce the matrix, the said machinery or apparatus being constructed and arranged as described. 4th. The use, in machinery for producing matrices, of a strip of paper or other material previously perforated with holes, or recesses, in proper position to cause the actuation in a matrix stamping machine at the proper times, of the necessary types, or stamps to produce the required matrix. 5th. The direct acting machinery, or apparatus wherein the matrix stamping types are actuated by means of keys or their equivalents, without the intervention of a perforated strip of paper or its equivalent. 6th. The machine or apparatus for stamping the matrix material with the requisite letters, or signs, the said machine or apparatus being constructed or arranged and operated by air or liquid, under pressure. 7th. The adaptation and use for proof taking of the machines claimed in the preceding third, fifth and sixth claiming clauses.

### No. 12,722. Improvements on Combined Sleeping and Drawing Room Cars. (*Perfectionnements aux chars dortoirs et chars salons combinés.*)

Adolphus Davis, Montreal, Que., 3rd May, 1881; for 5 years.

*Claim.*—1st. The combination, with the cupboards A, of brackets B carrying same and running on wheels. 2nd. The combination, with the cupboard A, of supports for berths secured on either side of same and to each other. 3rd. The combination berth support and hook E. 4th. The combination, with the swinging cupboards A, of the bolt G working in sleeve H raised and lowered and locked in either position in same, by means

of handle G<sub>1</sub>. 5th. In a drawing room car chair, a revolving rocking support consisting of a curved spring carrying on its upper end a frame, and bolted at its lower end to an eye or socket resting in a seat formed in the floor, and secured therein by a loose pin or spindle.

### No. 12,723. Improvements in Stock Cars. (*Perfectionnements aux chars à bestiaux.*)

James Howard, Hamilton, Ont., 3rd May, 1881; for 5 years.

*Claim.*—1st. In combination with railway stock or cattle cars, the food boxes A placed on the top of the car and provided with their sliding doors, spouts and valves for the distribution of food. 2nd. In combination with railway stock cars, of the troughs D E F G, the same being placed in the position shown on or a little above the floor, the latter to admit the auxiliary sliding trough or troughs to be placed under them opposite the door, and provided with inlet and outlet tubes for food and water. 3rd. In combination with railway stock and cattle cars, movable dividers to separate cattle, the same being constructed of any material and arranged to be easily moved out of the way when not required, or the modified gates R<sub>1</sub> R<sub>2</sub>. 4th. In combination with the large troughs D E F G, the movable single or double auxiliary troughs X<sub>1</sub> Y<sub>1</sub>. 5th. The combination of the food boxes A with their valves, and spouts, troughs D E F G with their inlets and outlets, balanced lid and fastening appendages, auxiliary trough or troughs X<sub>1</sub> Y<sub>1</sub>, movable dividing bars R, gates R<sub>1</sub> or their equivalent mechanical devices.

### No. 12,724. Improvements on Self-Levelling Berths for Ships. (*Perfectionnements aux lits de bord suspendus.*)

The Brunswick Berth Company, Hartford, Ct., (Assignee of William T. Milligan, Boston, Mass.,) U. S., 3rd May, 1881; for 15 years.

*Claim.*—1st. The ways D D pivoted to the bulk head and arranged with relation to the berth, and journals or trunnions, and adapted to keep the long axis of the berth horizontal. 2nd. The weighted lever P in combination with the rope *m* of a self-levelling berth.

### No. 12,725. Improvements on Telephones. (*Perfectionnements aux téléphones.*)

Charles D. Haskins, New York, U. S., 3rd May, 1881; for 15 years.

*Claim.*—1st. The combination, with an electro-magnet having a vibratory tongue armature playing between its poles, and a main line and local or bell circuit, of a shunting device connected with, or adapted to be operated by said tongue armature, an extra armature operated by said electro-magnet, and a movable stop operated by said extra armature, to control the movement of said tongue armature and shunting devices, whereby the local or bell circuit may be brought into the main circuit or shunted therefrom, by means of an electric current passing over said main line. 2nd. The combination of the polarized electro-magnet, the vibratory tongue armature D having projecting stud D<sub>2</sub>, the disk E having the aperture *e*, the extra armature I and suitable intermediate mechanism, by which motion may be communicated from said extra armature to said disk, and a shunting device or devices, arranged to be operated by said vibratory tongue armature. 3rd. In a series of telephones upon the same main circuit connected with a central station, the combination, with each of the telephones, of a shunt or cut out operated by a current over the main circuit, and a locking device for each of said shunts or cut outs, independently operated for locking by a current in one direction over said main circuit, and for unlocking by a reversed current, whereby any given number of telephones may be placed in communication, and all the other telephones may be out of the circuit, by an operator at the central station, except those at stations where the shunt or circuit is locked. 4th. The combination, with the telephone and signal at each station, of a telephone shunt operated by a series of pulsations of the same polarity, and shunt lock and a signal shunt and shunt lock operated independently of each other by means of reversed currents, whereby the operator, at the central station, may call any given station and place it in communication with any other without actuating the signals of any but these two stations, and then shunt out of circuit the call bell, telephone and break key at the remaining stations. 5th. The combination with the vibratory tongue D operated by reversals of the main line current, of the unison stop controlled by said vibratory tongue, and the call bell shunt operated also by said tongue, and controlled by a current over the main line. 6th. The combination, with the vibratory tongue D operated by reversals of the current, of the unison devices controlled by said tongue, and the telephone shunt and its operating devices controlled by a current over the main line. 7th. The combination, with a polarized magnet, of the vibratory tongue armature, the unison devices, and call bell shunt controlled by said tongue and the telephone shunt, and the devices operated by said magnet for actuating said stops and telephone shunt. 8th. The combination, with the telephone switch lever Q carrying the spring arm Q<sub>1</sub> insulated therefrom, and the spring Q<sub>2</sub> in electrical contact therewith, of the metal segment R having its ends so arranged that, when the switch lever is in its normal position, one of the said ends will be in contact with spring arm Q<sub>1</sub> and the telephone switched out of the main circuit, and when the said lever is swung outward, the other end of said segment will be in contact with arm Q<sub>2</sub> and the telephone switched into the main circuit.

### No. 12,726. Improvements on Box and Cattle Cars. (*Perfectionnements aux chars à fret et à bestiaux.*)

Thomas Clarke, Truro, N. S., 3rd May, 1881; for 5 years.

*Claim.*—1st. In a cattle car, the combination of the horizontal cords or chains F F<sub>1</sub> for dividing the car into separate stalls, and vertical stringers G connected to and bracing said horizontal cords or chains. 2nd. The detachable horizontal stall ropes or stringers F F<sub>1</sub> connected to one another by the coupling composed of the link *b*, bent lever *c*, link *d* and sliding ring *e*. 3rd. In a railway freight car, the upper floor or horizontal partition D provided with the water tanks E E inclined vertically in opposite directions and provided with the branches or discharge pipes *n*, connecting end pipes L having faucets *l*, inlets *m* and sliding guards K. 4th. The upper floor or horizontal partition D provided with trap