

*Claim.*—The combination of the two pieces A A' hinged together at C, the two parts forming the handle and bearings of a stove cover lifter, and the spring B within the handle to expand the same.

### No. 13,010. Improvements in Wheel Felloes. (*Perfectionnements aux jantes des roues.*)

Louis Bredannaz, Montreal, Que., 16th June, 1881; for 5 years.

*Résumé.*—En combinaison avec les bandages de roues, à triple méplats, la nouvelle tubulure C telle que faite et composée de la nerouve c, tout tel que décrit.

### No. 13,011. Improvements on Modes and Apparatus for Manufacturing Stiffeners for Corsets, &c. (*Perfectionnements aux méthodes et appareils pour confectionner les contreforts des corsets, &c.*)

James A. House, Bridgeport, Ct., U.S., 16th June, 1881; for 5 years.

*Claim.*—1st. The improved stiffening ribs and blades for corsets and other articles consisting of tampee fibre connected together in the peculiar manner set forth. 2nd. The method and means of manufacturing stiffeners for corsets and other articles. 3rd. The mode of forming straight ribs by bundling together a series of fibres and confining them by external binding threads. 4th. A stiffening rib consisting of fibres bound by threads wrapped in opposite directions. 5th. The improvement in the manufacture of stiffening ribs, the same consisting in wrapping a bundle of parallel fibres with threads carried simultaneously in opposite directions. 6th. The combination, with the hollow spindles carrying bobbins X X' and driven in opposite directions, of guides for carrying both threads to the end of the outer spindle. 7th. The combination, with the hollow spindles carrying bobbins and devices for driving them in opposite directions, of feed rolls. 8th. The combination of the hollow spindle A carrying the bobbins and revolving in opposite directions, the feed rolls H H' and appliances for adjusting the same to and from each other. 9th. The mode of forming strips from cords, bundles or ribs of stiff material, the same consisting in forming the bundles or cords into continuous strips, bringing the same parallel to each other, and then uniting them by passing threads across and between the bundles and interlocking the same. 10th. The combination, in a machine for forming strips from cords, ribs or bundles of stiff material, of devices for bringing a series of bundles or ribs side by side and feeding them forward, and appliances whereby binding threads are carried across and between the ribs and interlocked. 11th. The combination, in a machine for uniting ribs or bundles of fibres, of a channelled plate feeding appliances, a shuttle and devices for reciprocating the same, a series of needles and appliances whereby they are reciprocated between the channels. 12th. The combination, with the frame A provided with a shuttle race to receive the shuttle B, of an arm or frame carrying a series of needles, a channelled plate D through which to pass a series of ribs, feed rollers E E', a thread carrier C and appliances for reciprocating the needle carrier and thread carrier, and for operating the feed devices. 13th. The combination with the feed rolls, of the adjustable blocks n n'.

### No. 13,012. Improvements in Spring Hinges. (*Perfectionnements aux pentures à ressorts.*)

Daniel W. Housley, Grove City, and George C. Whipple, Chicago, Ill., U.S., 16th June, 1881; for 5 years.

*Claim.*—1st. The combination with a coiled spring G, of a hinge composed of three leaves connected to unfold and to fold upon each other, said spring being connected with the middle leaf or leaves, and swinging out therefrom laterally into a lengthwise oblique position from the jamb connected end, and adapted for use with a door opening in either direction. 2nd. The combination of a double acting spring hinge composed of three leaves connected to unfold and to fold upon each other, a coiled spring G connected at both ends and swinging out laterally at one or either end, with the alternate unfolding of the middle leaf or leaves and an adjustable plug D locking by the pin F with an eye on the middle leaf and connecting one end of said spring with said eye-leaf. 3rd. A double acting door spring hinge, composed of two separate hinges of three leaves each, connected to unfold and to fold upon each other, with a coiled spring G connected at each end and swinging out laterally at either end with the alternate unfolding of said leaves, and the loose pintles K L connecting said middle leaves with the outside leaves of each of the two hinges at the top and at the bottom of the door, whereby the door may be opened to the right or to the left without bringing into action the function of the spring, yet maintaining its connections. 4th. The combination of two separate hinges of three leaves, each connected to unfold and to fold upon each other, the coiled spring G connected at each end with the middle leaves of each hinge, the loose pintles K L connecting said middle leaves with the outside leaves, and the adjustable plug D locking by the pin F with an eye on one of said middle leaves, and connecting one end of said spring with said eye middle leaf, all constructed and adapted for use with a door opening in either direction.

### No. 13,013. Improvement in Alphabet and System of Writing in Cipher. (*Perfectionnements dans l'alphabet et le système d'écrire en chiffres.*)

Charles G. Burke, New York, U.S., 20th June, 1881; for 5 years.

*Claim.*—1st. An alphabet consisting of four characters, differing in form or color, three horizontal parallel lines and the spaces between, above and below said lines and the spaces together representing the vowel sounds, and forming the sounding scale. 2nd. In combination with the alphabet, the dial A graduated into the three lines f g h and the six pointed indicator D. 3rd. In combination with said alphabet, the dial A with the several lines, circles and markings, together with the indicator B having six pointers with their several markings, and termed together a Kosmograph. 4th. The phonetic code, the code for colored lights, the code for flashes of light, differing in duration, and the code for the use of motions in differing directions, all and severally in combination with said alphabet.

### No. 13,014. Improvements on Magneto-Electric Machines. (*Perfectionnements aux machines magneto-électriques.*)

The European Electric Company, (Assignee of C. A. Hussey), New York, N.Y., U.S., 20th June, 1881; for 5 years.

*Claim.*—1st. A continuous or endless permanent magnet of internally circular or analogous form, provided with poles or consequent points. 2nd. A continuous or endless permanent magnet having projections extending radially inwards. 3rd. A continuous or endless permanent magnet having radial projections and arc-shaped extensions. 4th. A permanent magnet composed of a number of continuous or endless sections of internally circular or analogous form. 5th. A permanent magnet composed of a number of continuous or endless sections of internally circular or analogous form, and a brass case or shell enclosing side sections and maintaining them in position. 6th. The process of centering the magnets or magnet sections in their case. 7th. The process of magnetizing continuous or endless magnets. 8th. The combination of a permanent magnet of internally circular or analogous form, and an armature arranged within the same and adapted to rotate before the poles or consequent points and entire length of said magnet. 9th. The combination of a permanent magnet of internally circular or analogous form, and an armature wound longitudinally with wire and arranged within the magnet, so as to be adapted to rotate before its poles or consequent points and entire length. 11th. The combination of a permanent magnet, having projections extending radially inwards and comprising a portion or portions wound with wire, and the diaphragm of a telephone.

### No. 13,015. Improvements on the Preservation of Human Bodies. (*Perfectionnements dans la conservation des corps humains.*)

Joseph Bélanger, (Assignee of Peter Jarratt), Detroit, Mich., U.S.; for 5 years.

*Claim.*—The combination, with the lower half B of the case provided with brackets a and drip pipe h, of the metallic suspensory shelf D without openings, and having handle e, and the upper half A of the case provided with ice receptacle E having cover F, and discharge pipe i with a free open space between the upper ice receptacle and corps, whereby the cold air can freely descend uninterrupted from the upper ice receptacle upon the corpse.

### No. 13,016. Improvements on Clutches for Rolls, Shafts, Pinions, &c. (*Perfectionnements aux endentures des rouleaux, arbres de couche, pignons, &c.*)

Uri Haakins, Pittsburg, Penn., and Azel W. Gibbs, Hartford, Ct., U.S., 20th June, 1881; for 5 years.

*Claim.*—1st. The combination of the sliding clutch and a cam for disconnecting the clutch from the shaft which is driven thereby. 2nd. The combination of a clutch with a sliding fractional bearing mounted upon a shaft, and having a counterpart or seat on the other shaft, so as to form a friction coupling.

### No. 13,017. Improvements in Locomotive Engines. (*Perfectionnements aux machines locomotives.*)

Ephraim Shay, Haring, Mich., U.S., 20th June, 1881; for 5 years.

*Claim.*—1st. A bogie locomotive with the bogie wheels driven by direct connection with the crank shaft of the engine. 2nd. In a locomotive in which the power of the engine is applied directly to the bogie wheels, the combination, with the bogie wheels and with the engine, of connecting driving shaft that accommodate themselves both horizontally and vertically to the motion of the bogies. 3rd. As a means for transporting power from a locomotive engine to the locomotive drivers, the double crank shaft F', bevelled gear wheel F, shaft connection lines G and bogie axle gear wheels E E'. 4th. The combination, with the piston rod and connection B B' and axles D D' of the crank shaft F', bevel gears F F', shaft sections b c d f, universal coupling joints K, coupling sleeves L, pinions I M and bevel gear wheels E E'. 5th. The construction of the shaft connecting lines G for transmitting motion from the engine to the drivers of a locomotive, the shaft section b carrying the pinion I, universal joint K, coupling shaft sections b c, shaft sections c d coupled by sleeve L, the section d being longitudinally movable in said sleeve L, universal joint K, coupling shaft sections d f and shaft section f carrying pinions M M'.

### No. 13,018. Improvements on Car Wheels. (*Perfectionnements aux roues des chars.*)

Enoch L. Taylor, Philadelphia, Penn., U.S., 20th June, 1881; for 5 years.

*Claim.*—1st. A car wheel in the web pattern in which the hub, the back and the flange of tread are made in one piece, in combination with a face plate and an elastic filling. 2nd. A car wheel in which the outer annular and flanged portion is combined with, and arranged to turn on a central portion having a flange on the same side of the wheel as the flange of the annular portion of the same. 3rd. A car wheel in which an annular portion and its thread of vulcanized rubber, compressed fibre, or other equivalent, is combined with a central portion on which the annular portion can turn. 4th. The combination of the recessed annular portion of the wheel with the tread, the face plate and the fastening rolls having nuts sunk into the recessed annular portion of the wheels. 5th. A car wheel having one or more annular brake flanges, as shown at L to be acted on by a short single or double brake bar carrying two or four brake shoes. 6th. A car wheel in which a hollow webbed hub between the walls of which is fitted a filling of wood, paper, fibre, or other suitable material. 7th. The combination, with the sectional wheel consisting of an inner and outer portion, of an oil box, and a curved feeding and discharging tube arranged therein.

### No. 13,019. Improvements on Washing and Wringing Machines. (*Perfectionnements aux lavewses-essoreuses.*)

John H. Cahoon, Keenansville, Ont., 20th June, 1881; for 5 years.

*Claim.*—1st. The bars D having the sides of different widths and bevelling