a locking lever pivoted to the base to engage the teeth of the segment, substantially as described. 10th, A surgical chair having a stationary base, a frame rockingly supported upon said base, and back seat and foot section hinged to said frame in such manner that they can all or either of them be adjusted to different positions, substantially as described. 11th. A surgical chair provided with an elevating device at its side, consisting of a guide a prop or a bar loose in said guide, a lever to press said prop downward, and a pawl or dog to lock said lever and prop in a depressed position, substantially as set forth. 12th. The combination, with the back and seat section and the supporting link D^1 , of the locking device consisting of the two oppositely extended bolts H^1 , the lever H to which they are pivoted, and, the rod or pull bar h^5 , substantially as and for the purpose set forth.

No. 33,583. Charcoal Kiln,

(Four â charbon de bois.)

Edward W. Rathbun, Deseronto, Ont., (assignee of Elbert J. Burrell, Newbury, Mich., U.S.,) 4th February, 1890; 5 years.

Claim.—1st. In a kiln for producing wood charcoal the outlet to the gases passing through the floor, and the flue descending below the kiln floor, as herein described and for the purpose specified. 2nd. In a kiln for producing wood chorcoal, the outlet flue passing through the floor and covered by a screen wall E, as herein described and for the purpose specified. and for the purpose specified

No. 33,584. Friction Clutch Pulley.

(Poulie d'embrayage à friction.)

The Waterous Engine Works Co., (assignee of Charles H. Waterous and James N. Peel), Brantford, Ont., 4th February, 1890; 5 years.

years.

Claim.—1st. In a friction clutch pulley, the friction wheel B rigidly fastened to the shaft A and separate from the pulley E, and clamping devices, substantially as shown and for the purpose specified.

2nd. In a friction clutch pulley having a coatinuous ring made in the ring, the vokes O, O, said ring may be made in sections attached to the spokes of the pulley E, in vokes O, O, the clamping jaws C. C, are located, hinged and carried on the bolts N, N, in the yokes O, O, and co-operate with each other, substantially as shown and for the purpose described. 3rd. In a friction clutch pulley, the outer jaws C carrying the blocks G, G hinged on the bolts L, L, located in said jaws, and the adjusting blocks H, H, for adjusting the blocks G, G, and clamping jaws C, C, substantially as shown and for the purpose specified. 4th. In a friction clutch pulley, the inner jaws C carrying the levers F, F, held in the jaws and hinged on the bolt Q, Q in the jaws C, said levers F, F, connected at the bottom by the links J, J, to the sliding sleeve K, and operate with each other, substantially as shown and for the purpose described. 5th. In a friction clutch pulley, the manner of attaching the ring or section containing the yokes O, O, located in said yokes, the clamping jaws C, C to the spokes of a pulley by bolts, or other means of fastening, to said spokes, the collars S, S for holding the pulley E in its place, substantially as shown and for the purpose specified.

No. 33,585. Pipe Wrench. (Clé à tuyaux.)

James R. Smith and John W. Myrick, Beamont, Texas, U. S., 4th February, 1890: 5 years.

February, 1890: 5 years.

Claim—1st. In a wrench the handle having the integral L-shaped foot at its end forming the rigid jaw of the wrench, said foot or jaw having its inner face curved so as to receive and provide a bearing for the pipe, and its outer face at right angles to the handle, and said face being serrated, combined with the C-shaped swinging jaw pivoted at one end to the hundle by a single bolt, and having its entire inner face serrated from the pivot-point to the outer end, and the teeth 6 along the outer edge of the handle in close proximity to the rigid foot, as set forth. 2nd. In a wrench, the handle having the integral L-shaped foot at its end, forming the rigid jaw of the wrench, said foot or jaw having its engaging face at right angles to the stock or handle, and said face being serrated combined with the C-shaped swinging juw pivoted at one end to the handle by a single bolt, and having its entire inner face serrated from the pivot-point to the outer end, the teeth 6 on the outer straight side edge of the handle in close proximity to the rigid jaw, and the teeth on the inner straight edge of the stock, whereby the C-shaped jaw may be swung around so as to engage the pipe with either of the three different series of teeth and this without any adjustment or changing of the parts, as set forth.

No. 33,586. Beer Glass with Automatic Opening and Opening Device. (Verre à bière avec appareil d'ouverture et de fermelure automatique.

Käthe Peters, Kiel, Prussia, 4th February, 1890; 5 years.

Claim.—1st. In mugs, jugs and the like fitted with lids, the combination of a toothed sector attached to such lid engaging with a rack attached to or integral with a sliding handle or their equivalent, substantially as described. 2nd In mugs, jugs and the like fitted with lids, the method of attaching a self-acting lid thereto by means of spring rings engaging with grooves round the circumference of the said vessels, substantially as described. 3rd. Attach self-acting to drinking vessels, jugs and the like, by means of spring rings, in combination with a ring or plate at the bottom of the bar connecting the spring rings, substantially as described.

No. 33,587. Safety Railway Car.

(Char de chemin defer de sûreté.)

Charles C. Gilman, Eldoro, Iowa, U.S., 4th February, 1890; 5 years.

Claim.—1st. In a car provided with an opening in its roof, a cover for said opening and catches arranged for engaging and disengaging with said cover, in combination with an electric battery and connections for operating said catches, substantially as and for the purpose described. 2nd. In a car provided with an opening in its roof, a cover for the opening, a catch or grapple device to catch and hold the cover and adapted also to be released therefrom, an armature, an electro-magnet, an electric battery and a wire circuit, in combination with a circuit-breaker and means for operating the latter, substantially as and for the purpose described. 3rd. In a car having an opening in its too or roof, a cover to fit and close said opening. a catch device adapted to engage and hold said cover, and means tending to move the armature in an opposite direction to disengage the catch device from the cover, in combination with an electric battery, an electro-magnet, an electric circuit connection, and means for breaking the circuit, substantially as and for the purpose described. 4th. A orr having an opening in its roof, a cover adapted to close the opening, and a catch mechanism to engage and hold the cover and also adapted to be disengaged therefrom to release the same, in combination with all electro-magnetic mechanism for operating the same, substantially as and for the purpose described. 5th. A car provided with an opening of a size adapted for the escape of its occupants or passengers when unobstructed, a cover fitting said opening, and a catch device adapted to engage and hold said cover when the car is in its upright or normal position, and to release the cover when the car is overturned, in combination with an electric battery, an electro-magnet, electric circuit connections, and an armature connected with said catch device, substantially as and for the purpose described. 7th. In a car having an opening in its roof and a cover fitting tooley the sam Charles C. Gilman, Eldoro, Iowa, U.S., 4th February, 1890; 5 years.

No. 33,588. Composition of Matter for Roadways, Sidewalks, Fireproof Rooting, Vault Linings and similar purposes. (Composition de matières pour les chemins, trottoirs, toitures iucombustibles, doublures de coffre-forts et autres choses semblables.)

Henry Benjamin, Montreal, Que., 4th February, 1890; 5 years. Claim.—The composition herein described of finely divided iron particles and a bituminous substance, substantially in the proportions and for the uses set forth.

No. 33,589. Lock. (Serrure.)

Charles R. Uhlmann, Peoria, III., U. S., 4th February, 1890; 5 years. Claim—1st. The combination, with the lock case having the notched edge wall and a lug projecting inward from said wall, of the sliding key-hole guard or block equal in thickness to the distance between the side walls of the case, and provided with a stud projecting through the notch in said walls, and a spring acting to throw the guard into engagement with said lug, whereby the guard pressed inward, by means of said stud, and passed over the key-hole or to the opposite limit of its path, muy be automatically locked in either position. 2nd. The combination, with the lock case A having its edge wall notched to a suitable depth and provided with integrally formed lugs C, H, of the sliding key-hole guard E provided with the recess J adapted to receive the lug H, the guard-actuating stud E formed integrally with the guard and projecting through the notch in the edge wall of the case, the spring-actuated stud F projecting from the guard against the lug C, and the removable side plate K resting upon the guard E, and stud E retaining them in position, substantially as set forth. Charles R. Uhlmann, Peoria, Ill., U.S., 4th February, 1890; 5 years.

No. 33,590. Electric Mechanism for Operating Telephone Call Bells.
(Mécanisme électrique pour faire fonctionner les timbres des téléphones.)

Frederick W. A. Schneider, Toronto, Ont., 4th February, 1890; 5