adjustment of the table carrying the roller, without straining the gear for driving the said roller. 2nd. In a machine in which a feed Foller is placed in a table adjustably connected to the frame carrying the driving gear, a rod flexibly connected at one end to the spindle of the feed roller, in combination with a sleeve formed to receive the other end of the rod, and connected to the spindles of the driving zear by a flexible ioint.
No. 15,739. Improvements on Milk Cans. (Perfectionnements aux bidons à lait.)
William H. Haney, Bellerue, Iowa, U. S., 6th November, 1882; for 5 years.
Claim.-The cylindrical milk can having, in one side, the vertical recess extending about two-thirds the way up from the bottom and having a rounded back and an upwardly inclined top.
No. 15,740. Improvements on Machines for Scouring and Polishing Grain. (Perfectionnements aux machines $\vec{a}$ nettoyer et polir les grains.)
David M. Richardson, Detroit, Mich., U.S., 6th November, 1882; (Extension of Patent No. 11,930 .)

## No. 15,741. Improvements on Air Compressors. (Perfectionnements aux compresseurs dair.)

$\underset{\text { Benjamin T. Babbitt, New York, N. Y., U. S., 6th November, 1882; }}{\text { E }}$ (Extension of Patent No. 8118.)
No. 15,742. Washboard Leg Planing and Grooving Machine. (Machines à raboter et caneler les pieds des planches à savonner.)
Valancey E. Fuller, Hamilton, (assignee of Charles T. Brandon, James S. McMurray and Thomas R. Fuller, of Toronto,) Ont., 6 th November, 1882; (Extension of Patent No. 8075.)

## No. 15,743. Improvements in Seeding Machines and Cultivators. (Perfectionnements aux semoirs-cultivateurs.)

Joseph W. Thomas and Abraham R. Ludlow, Springfield, Ohio, U. S., 6th November, 1882 ; for 5 years.
Claim.-1st. The combination, with a hoe or tooth and a lifting roller or shaft, for raising and lowering the same, of a jointed pres-
sure-rod hinged to said shaft and provided with a shouldered or lock-sure-rod hinged to said shaft and provided with a shouldered or locking joint. 2nd. The combination, with the hoe or tooth, of the rock shaft for raising and lowering the same, a jointed pressure rod interpocking joint and a spring arranged to exert its tension to straighten said jointed rod. 3rd. The combination of the hoes. or teeth, the said jointed rod. 3rd. The combination of the hoes. or the jointed rods connecting said teeth and shaft hinged to the same, later and having rods connecting said teeth and shaft hinged to the latter and having
shouldered or locking joints and means for locking said shaft, whereshouldered or locking joints and means for locking said shaft, where-
by the hoes or teeth may be held locked in working position, while at by the hoes or teeth may be held locked in working position, while at
the same time any one tooth is adapted to rise without disturbing the the same time any one tooth is adapted to rise without disturbing the
others or the lifting roller or shaft. 4th. The combination of the others or the lifting roller or shaft. 4th. The combination of the hoes or teeth, the lifting roller or shaft for raising and lowering the
same, the jointed pressure-rods connecting said teeth and shaft and same, the jointed pressure-rods connecting said teeth and shaft and having a hinged or pivoted connection with the latter, and a lever
geared to said shaft for actuating it. 5th. The combination of the hoes or teeth, a lifting roller or shaft connected therewith by jointed pressure rods and provided with a toothed wheel, a lever geared pressure rods and provith for actuating it, and means for holding said lever at any desired adjustment. 6th. A jointed pressure-rod for connecting the hoes or teeth, and the rock-shaft adapted to be hinged to the latter and provided with shouldered or locking joints in combination with the provided with shouldered or locking jointed pressure-rods connecting the hoes or teeth, and the rock-shaft hinged to the latter and provided
with shouldered or locking joints, distending springs and slots perWith shouldered or lecking joll and rise within certain limits, each independently of the others. 8th. The jointed and folding pressureindependently of connecting the hoes or teeth and the lifting roller or shaft, and rods connecting the hoes or teeth and latter, said jointed rods having slots permitting the independent movement of the teeth, perforations and set-sorews or bolts adapting them to hold the teeth at any desired adjustment, and seif locking or shouldered jossure rods connecting Fith springs. 9 th. The jointed and the hoes or teeth with the hifting roller, provided with shouldered or gelf-locking joints, in combination with distending springs and means
for holding said joints flexed. 10th. The combination, with the hoes for holding said joints flexed. 1oth. The combination, with the hoes or teeth and adjustable drag-bars for changing said teeth from a straight line or single row, the atter and provided with self locking
lifting roller hinged to the joints.

## No. 15,744. Improvements on Liquid Drainers. (Perfectionnements aux transvaseurs.) John C. Harlacker and Simon W. Oyster, of Harrisburgh, Penn., U. S., 6th November, 1882 ; for 5 years. <br> Claim.-1st. The vessel A provided with the grooves at top and bottom, in combination with the rigidly attached funnel 13 . 2 nd. The vessel A, ind. The sectional strainer rings a a provided with cams $\frac{8 t r a i n e r ~ c . ~ p i n s ~ c ~}{d} d d$, in combination with a strainer. <br> No. 15,745. Improvements on Car-Couplings. (Perfectionnements aux accouplages des chars.) <br> Antoine Benoit, Dunham, Que., 6th November, 1882 ; for 5 years.

Claim.-1st. In combination with the draw-bar head having the recess in its lower side, the vertical coupling-pin and the vertical sus-taining-pin provided with arm b. 2nd. The draw-bar head and its coupling pin, in combination with the rotary bar D provided with the arm $b$ and with an external arm or handle, whereby the arm $b$ may be faced against the coupling link. 3rd. In combination with the draw-bar head having the mouth or opening to receive the coupling link, the transverse vertically movable bar E mounted in the head. 4th. In combination with the draw-bar head having the vertical slots and shoulders, the movable bar $E$ arranged to co-operate with the shoulders.

## No. 15,746. Improvements on Car Brakes.

(Perfectionnements aux freins des chars.)
Aldis H. Marden, Cambridge, Mass., U. S., 6th November, 1882 : for 5 years.
Claim.-1st. An iron or steel brake beam having the body a provided with the flanged edge $d$ and ribbed edge $x$. 2nd. An iron or steel brake beam having the body a provided with the flanged edge $d$, ribbed edge $x$ and curved outwardly on the line of strain. 3rd. An iron or steal brake beam, either straight or curved, having the body $a$, flanged edge $d$ and ribbed edge $x$, in combination with the heads $B$ B and clamp $C$. 4th. The beam $A$ provided with the notch $v$, for securing the same in the head B by means of the key $m$. 5th. The clamp $C$ provided with the diagonally arranged arms $t$ and with a mortise conforming with, the diagonaly arranged arms $t$ and with a mortise conformin $d$.
or adapted to receive the rib $x$, body $a$ and flanged edge

## No. 15,747. Improvements on Stove Lamps.

(Perfectionnements aux lampes-fourneaux.)
Bradford F. Lancaster, Leander J. Crooker and Richard W. Black, of Augusta, Me., U.S., 6th November, 1882 ; for 5 years.
Claim.-A cooking utensil composed of the tube A with its morable joint A1, tank $B$ with its section $C$ C and provided with the vertically adjustable rest $F$ having opening $f$.
No. 15,748. Improvements on Blind Hinges. (Perfectionnements aux pentures des persiennes.)
Hermann Stubbendorff, (assignee of John L. Roy,) of Montreal, Que.,
6th November, 1882; for 5 years.
Claim.-1st. In a blind hinge, the combination, with the sleeve and fixed pin, of the channel $d$ formed in projection $D_{\text {, }}$ to receive and guide the lug $E$ in opening and closing the blind. 2nd. The projection $D$ in which is formed by upper and lower lips Di D2, a channel d and notch $d^{3}$. 3rd. The projection D with groove $d 2$ formed in upper lip Di.

## No. 15,749. Improvements on Machines for Converting Motion. (I'erfectionne. ments aux machines à convertir le mouvement.)

William B. Munger, Oberlin, Ohio, U. S,, 6th November, 1882; for 5 years.
Claim. -1 st. The double rack geared to a single pinion, so as to work simultaneously on opposite sides of it. 2nd. The two cogs at each end of each rack for the purpose of producing lateral motion of the racks. 3rd. The wings or guides automatically adjusted, holding the racks always in gear with the pinion. 4th. The combination of the self adjusting racks, pinion and guides.

No. 15,750. Improvements on Machines for Cooling and Drawing $B$ e er. (Perfectionnements aux machines a rafraîchir et tirer la biere.)
Charles Gordon, Rochester, N. Y., U. S., 6th November, 1882 ; for 5 years.
Claim.-1st. The combination of the ice box D, supply-pipe B , faucet $C$ and the cold air passage $H$ surrounding the supply-pipe. 2nd. TLe combination, with the ice box $D$, of the supply pipe $B$ and faucet $C$, provided with the non-conducting jacket $J$. 3rd. The combination, with the ice box $D$, supply pipe $B$ and faucet $C$, of the cold air passage $H$ and the non-conducting jacket $E$. 4th. The combination of the ice box $D$, supply-pipe $B$, faucet $C$, lower chamber $F$ and the cold air passage II communicating between the ice box and the chamber.

## No. 15,751. Improvements on Bottle Stoppers. (Perfectionnements aux bouchons et aux ligatures des bouteilles.)

Augustus E. Rioh, of Fall River, Mass., U. S., 7th November, 1882; for 5 years.
Claim.-1st. A bottle stopper-fastening device consisting of a neck band with an outwardly and upwardly projecting latch, in combination with a slotted lever arranged to engage detachably with the ear of a stopper cap, said cap being linked to the neek band, and the lever operating with a downward and inward motion, sliding upon said latch, but not detachable therefrom. 2nd. The metal cap piece with ears a $b$, one ear being linked to the neck-band of a bottle, in combination with a flexible valve stopper having an elastie teat. 3rd. In combination, a flexible stopper with upwardly projecting and selfsupporting teat formed in one piece, with cap piece having induot through its centre, a means for connecting the cap-piece to the bottle neck, and a neck band having an outwardly and upwardly projecting latch or horn with slotted lever arranged to detachably connect with cap piece and said latch or horn. 4th. In combination with the flexible stopper and cap piece, the link $f$, neck band $e$, lateh or horn $k$ and slotted lever $D$ having means for detachably engaging the cap piece. Sth. A stopper linked to a neck band of a bottle, in combina
tion with a detachable slotted lever operating on an upwardly and

