pinion J meshing into said gear rim, opposite one of said interior bearing shoulders, substantially as set forth and for the purpose set forth. 16th. In combination, with the needle and the cord-looper, the breast plate having the tongue Bao protruding through the plane of the needle's path between the looper and the bundle, and terminatine substantially in line with the looper shaft, substantially as and for the purpose set forth. 17th. In combination with the cord knotting meohanism, whose cord-looper stands when the knot is fnished with its bill pointing towards the discharge side of the machine, the breast plate having the cord guiding edge of that part of chine, the breast plate having the cord gaiding edge of that part of the cord slot which is beyond the looper bill on that side of the ver-
tical plane of said bill which is towards the needle, substantially as tical plane of said bill whioh is towards the needle, substantially as
set forth. 18th. In combination with the cord-knotting mechanism, set forth. 18th. In combination with the cord-znoting mechanism,
whose oord-looper stands at the completion of the knot with its bill whose oord-looper stands at the completion of the knot With its bill
pointing obliquely outward toward the plane of the needle, the breast plate having the oord-guiding edge of the part of the cord slot beyond the looper located on that side of the vertical plane of the looper bill Fhich is towards the plane of the needle, substantially as eet forth. 19th. The cord-looper, oomprising the fixed jaw and the vibrating jaw, the former havints a barb toward the point at one side of the vibrating jaw, forward thereof on the path of revolution of the point of ssid looper, substantially as zet forth. 20th. In combination pith the disoharge and the breast plato. the stripper yielding out of the path of the bundle as the latter is disoharged, and antomatioally returning to a position obstructing said path, substantially as and for returning to a position obstructing said path, substantially as and for
the purpose set forth. 21st. In combination with the discharge, having its centre of motion on the side of the breat plate opposite the bandle, the stripper pivoted between the bundle and the disoharger, and yielding out of the path of the bundle as the latter is disoharged, and returning antomatically into a position obstructing the said path, substantially as set forth. 22nd. In combination, substantially as set forth, the breast plato and the disoharger, and the stripper connected to the former and standing normally acrusg the path of disoharge of the bundle, and yielding out of said path as the bundle is discharged, and returning automatically to its normal position. 23 rd . In combination, substantially as set forth, the breast plate and the discharger, and the stripper hinged to the former and plate and the discosarger, sand the stripper hinged to the former and provided with the spring tending to hold it in the path of the disof said path when pressed by the bundle.

## No. 25,9\&0. Flue Thimble and Stopper. (De et Bouchon de Tuyau.)

William P. Walker, Newton, K8., U. S., 4th February, 1887 ; 5\% \%ears. Claim.-18t. The combination of a diak for closing a flue hole, movable arms pirotally supported by the disk, a hab pivotally conneoted to the said arms, and a sorew-threaded rod pasaing through the disk and engraging, with the hub for spreading the arms and
securing the disk in place. 2nd. The combination of a disk for securing the disk in place. 2nd. The combination of a disk for
olosing a fue bole, an elastio washer upon the inner face of the disk, movable arms pivotally supported by the disk, a hab pivotally conneoted to the said arms, and as sorew threaded rod passing through the disk, and engaging with the hub for spreading the arme and securing the disk in place. 3rd. The combination of a disk for olosing a fue hole, a tube fifting into the fine hole, movable arms pivotally supported by the said disk and projecting through the said tube, a hubpivotally connected to the said arms, and a sorew threaded rod passing through the disk and engaging with the hub for sproading phe arms and securing the disk to the tube. 1th. The combination of a tube fitting into the fue hole, a disk provided with a flange fitting into the outer end of the tube, a standard plate projeoting from the into the outer end of the tube, a standard plate projeotandard plate, a hibb pivotally conneoted to the said armg, and a sorew threaded rod passing through the disk and engaging with the hub for pressing the projecting ends of the arms aqainst the inner end of the said tube. 8th. The combination of a tube fitting into the flue hole, a disk provided with a flange fitting into the outer end of the tube, an elastic washer upon the inner face of the disk, a standard plate projecting from the said flange, movable arms pivotally connected to the standard plate, a hub pivotally connected to the said sams and a corev threaded rod passing through the disk and engaging with the hub for pressing the projecting ends of the arms against the inner end of the said tube. 6th. The combination of the handle $D$, with the rod K , sarew F , standard plate $G$, brace plate $K$, rivets J, slots $L$ movable arms $M$, rngulating arms $N$, disk 0 , pivots and slots $P$ and Q, hub 8 and tube $R$.

## No. 25,921. Combined Table and Desk. (Table-Pupitre.)

John G. Peace, Balem, Mo., U.S., 4th February, 1887 ; 5 years.
Claim.-1st. A table or desk, comprising a top strip having a leg rigidly secured thereto, a leaf hinged to the strip having a brace to support the leaf, and the feet hinged to the lof to support the table or deak, substantially as set forth. 2nd. A table or desk, comprising - top strip, a leg rigidly secured thereto, a leaf hinged to the top strip, a brace by which the leaf is supported, feet hinged to the leg, and a clamp having notohes to engage the feet and hinged to the leg, substantially as set forth. 3rd. A table or dosk comprising a top strip, a log rividy seoured thereto, a leaf hinged to the top strip, a brace by which the leaf is supported, a metal braotet formed with lips $g \mathrm{I}, 0^{2}$, and lefs $g^{3}$, pintle $f$ and the pintle $I$ hinged by the pintle to the eyes, anbetantially ss set forth. 4th. A table or disk, comprising a top strip, a leg having suitable feet, a vertioal strip having notohes $e$, cr seoured to the log, shorisontal strip, a bracket F hinged to the leaf obliquely to the strips, and having an end $f$ engaging the notoh, substantially as set forth.

## No. 25,922. Steam Engine Lubricator. (Graiseeur de Machine a Vapewr.)

The Bennett Manufacturing Companyt(asaignee of Pbileas A Bennett) Chioge, Ill., U.S,, 4th February, 1887 ; 5 years.
Claim.-1at. In a lubricator, operated by a hydrostatic column, as dearibed. avertical connecting neok between the condenser and the oil receptacle, havint its upper end open and provided with a trant-
verse partition, and a horisontal branoh passage common to the incoming steam and oil feed, and adapted to receive and carry off the surplus water of condensation, essentially os set forth. 2nd. In a lubricator, operatod by a hydrostatic column, us desoribed, as open ended vertical neok C, connected to the cundenser B, and provided with a transverse partition $G$, in combination with the horizonta passage D, having communioation with the steam pipe of the engine and the oil feed, essentially as set forth. 3rd. In a lubricator, operated by a hydrostatic column, as described, the horizontal branch passage $D$ common to the inooming steam and oil feed, the inner end of which communicates with the contracted passage I that is arranced above the central axis of said passage $D$, so as to form an abrupt shoulder or offset $J$ at the inner and lower end of the same, essentially as set forth. 4th. In a lubrioator operated by a hydrostatic column, the combination, with the condenser B and oil receptacle A, of the open ended connecting neek $C$, partition $G$, horizontal branch passage $D$ and passage $I$, ending in an offset $J$, essentially as set forth. 5th. In a lubricator, operated by a hydrostatio column, as described, the combination of the condenser $B$, connecting neck $C$, partition $G$, passages I and $D$, shoulder or offset $J$, sight feed tube $E$ and oil receptacle $A$, essentially as aet forth.

No. 25,923. Tea Kettle Cooker.
(Ustentile de Cuisine au Bain-Marie.)
Abbott A. Davis and Harry Dutton, Boston, Mass., U.B., 4th February, 1887 ; 5 years.
Claim.-1st. A tea kettle cooker, provided with one or more rims or collars around its body, as set forth. 2nd. A tea kettle cooker, having a tapering body provided with one or more rims or collars there around, as set forth. 3rd. A tes kettle cooker having a tapering body, and provided with a plurality of rims or collara of varying widths there around, as set forth.

No. 25,924. Preserving Piles and Submerged Wood. (Preservation des Piles et du Bois Submerge.)
James Cass, Cayucos Landing, Cal., U. B., 4th February, 1887; 5 years.
Claim.-let. The process herein described, of preserving piles or or other wooden atructures that are to be submerged, consisting essentially in brushing upon said wood from which the bark has been removed a waterproof poisonous compound, then applying a coating of ships' folt, and finally securing battens or strips upon the pile outside of the felt, substantially as herein desoribed. 2nd. The improved process of preserving timber that is to be submerged consist ing essentially in coating said timber with a compound of pitoh tar and arsenic, next surrounding said compound with a covering of ship's felt, then nailing the longitudinal battens upon the timber outside of the felt 80 as to inolose the whole, and finally seouring the outside of the felt 80 as to inolose the whole, and inaly geouring the
battens by hoops or holding bandi, substantially as herein desoribed.
No. 25,925. Apparatus for Making Infusions infuser le the, le caté, etc.)
Frederick E. V. Beznes, London, Eng., 5th February, 1887; 5 years.
Claim.-In an apparatus for making infusions of tes or the like, the combination of a strainer or its equivalent with a vessel or urn that the strainer can be supported at varions heights in the vessel or urn, substantially as described, and the several arrangements and combinations therefor hereinbefore described and illugtated in the accompany drawing.
No. 25.926. Rail Joint. (Joint de Rail.)
Maris F. Lewis and Carlton A. Dódge, Orange Iowa, U. 8., 5th February, 1887 ; 5 years
Claim.-1st. A rail-joint fastening consisting of a sootional fishplate, one sention being apertured and provided with inclined recesses or notohes, and the other provided with inclined projections and longitudinal alots having enlargements, a double headed bolt having one head of gréator diameter than the other, and a wedge substantially as shown and desoribed. 2nd. The combination, with the meoting ends of the rails having the transverse apertures, of the double headed bolts haring one head of greater diameter than the other, the flat fish-plate having the transverse apertures, the double fish-plate composed of the sections having the inclined recesses, and projections forming the inclined recesses, and projections forming the abrupt shoulders snd formed respootively with the apertures, and the longitudinal slots having the enlargements, and the wedge having its lower reduced end curved on the inner side thereof, all constructed and arranged to operate in the manner and for the purpose herein set forth.

## No, 25,927. Saw Mill. (Scierie.)

George E. Overton, Chatham, Ont., 5th February, 1887; 5 years.
Claim.-1st. The combination, in a oircular saw sawmill using the ordinary head blooks and carriage, of a orown or horisontal sam $J$, Fith the usual vertioal circular saw Egabstantialiy sashown for the purpose specified. 2nd. The combination, in a circalar saw sawmill, of the braoket $G$ provived with bearings and adjustable boxes Hi, and the vertical saw spindle I capable of horizontal and vertical adjustment, substantially as desoribed. 3rd. The combination, in a circular saw sawmill, of the saw J , the sdjustable spindle I provided with a pulley $P$ and the palleys $M, M I$ and $F$, substantially as shown for the purposes specified.
No. 25,928. Fruit Jar. (Jarre a Fruits.)
George D. Corey, Lowell, and Winfred I. Ames, Boston, Mass., U.S., 5th February, 1887; 5 years.
Claim-1st. The combingtion, with the jar A provided with ledge

