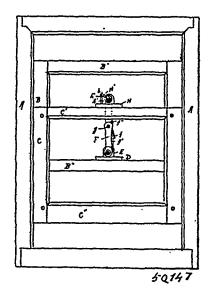
section arranged beneath the cap and at the top of one of the comsection arranged beneath the cap and at the top of one of the compartments, and the circular strainer arranged upon the upper portion of said pape, all arranged substantially as shown and described. 4th. In a pipe cleaner, a receptacle or case divided longitudinally into two compartments by means of an integral partition, one of said compartments being adapted to contain ar alkali and having a discharge cock about midway of its height, the valve casing arranged in the bottom of the case or receptacle, and carrying a two-way than independent communication being table when the strain of the case of th valve, independent communication being had between the valv valve, independent communication being had between the valve casing and the separate compartments, the cap arranged upon the top of the receptacle or case, and the pape section arranged in the top of one of the compartments, projecting upward into said cap, substantially as shown and described. 5th. An improved pipe cleantr, consisting of a receptacle formed into two compartments, and a valve casing, and having passages leading from the valve casing to the compartments, a valve arranged in the casing, the pipe section leaving a flanguage of and and tabular at the consistent. section having a flange near one end and tubular at the opposite end, the circular strainer arranged upon said tubular end, the dome-shaped cap and draw-off cock, all arranged substantially as shown and described.

## No. 50,147. Window Fastener. (Arrêle-croisée.)



Ernest Peters, Tompkins, Michigan, assignee of Charles Fowler, Lowell, Massachusetts, both in the U.S.A., 3rd October, 1895; 6 years.

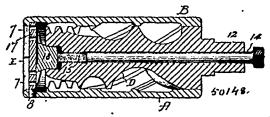
Claim.—1st. The herein described window fastener, consisting of a fulcrum piece E pivoted to one of the sashes and a notched lock plate H secured to the other sash and laving shoulder k12 combined with a link F pivoted to the piece E, and having a locking projection f, and a link G pivoted to the link F, substantially as and for the purpose set forth. 2nd. The herein described window fastener, consisting of a swinging fulcrum piece F loosely journalled in a plate on one of the sashes, and a lock plate H secured to the other sash, and having the notches h, h1 and H1, H1, and shoulder h11, combined with a link F, pivoted to the piece E and having a locking projection f, and a link G pivoted to the link F, and having a flatened projection G1, adapted to be introduced in the notch H1, and locked into the enlargement H11, on the lock plate H, substantially as and for the purpose set forth. 3nd. The herein described window fastener, consisting of a pivoted fulcrum piece E on one of the sashes, and a notched locking plate H secured to the other sash, and having shoulder h11, combined with a link F, pivoted to the piece E, and the link G pivoted to the link F, and means substantially as described for unlocking the fastening as well as for locking it crossway to or in a line locked in a partially open position as herein with the sashes and for holding the sashes, set forth and for the purpose specified. 4th. The herein described window fastener, consisting of a fulcrum piece E on one of the sashes and a notched locking piece H on the other sash, and having shoulder h11, combined with a link F, pivoted to the piece E, and having a locking projection f, and side rib f1, and a link G pivoted to the link F, substantially as and for the purpose set forth.

## No. 50,148. Ment Cutter. (Hachoir pour viande.)

The Peck Stow and Wilcox Company, Southington, assignee of Robert Cosmos Ellrich, Hartford, both of Connecticut, U.S.A., Srd October, 1895; 6 years.

Claim.—1st. The combination of a meat cutter case, its screw the knife fitted therein by an engaging angular recess and project cut off the air pipe from communication with the atmosphere, sub-

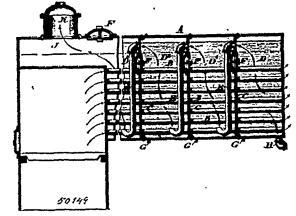
tion, the perforated plate and the screw adjusting rod extended through said screw for forming a step or pivot upon which the kinfo



may rock, substantially as described and for the purpose specified-2nd. The combination of a longitudinally divided and separable case 2nd. The combination of a longitudinally divided and separable case having a series of cutting elevations, a combined forcing and cutting screw having a series of peripheral grooves in bearing contact with said elevation, a perforated plate and knife, and an adjusting device for forcing said plate and knives against each other and at the same time forcing the cutting elevations and grooves of the screw and case into engagement, substantially as described and for the purpose specified.

## No. 50,149. Feed Water Heater.

(Réchauffeur de l'eau d'alimentation.)



Henry Griffith, Keasbey, Ambler, Pennsylvania, U.S.A., 3rd October, 1895; 6 years.

Claim.—1st. A shell with partitions therein forming separate chambers, pipes connected with said partitions forming a zig-zag passage for the water through the shell, and flues in said chambers with which the water contacts in its zig-zag course, said shell being connected with the flue of a steam boiler, and having the flues receive the gases or products of combustion therefrom, said parts being conheited subject subjects the forming an intervenue as ing combined substantially as described, forming an improvement in feed water heaters, economizers and purifiers, as set forth. 2nd. A feed water heater consisting of a shell having partitions therein forming water chambers, flues passing therethrough, one end of said flues being adapted to be in communication with the flue of a steam nues being adapted to be in communication with the fite of a steam boiler, and to receive the hot gases or products of combustion therefrom, the other end terminating in a chamber provided with a stack, pipes within said shell forming a communication between the top of a water chamber and the bottom of an adjacent water chamber, a water inlet pipe leading into the bottom of the water chamber farthest from the inlet end of the products of combustion, and a discharge pipe leading from the top of the water chamber nearest the polar for said powdrets of combustion said parts being combined ber being provided with a stack G, the other end of said shell being in communication with the flues of a boiler and adapted to receive the products of combustion therefrom, partitions C, C' and C' in said shell forming water chambers D, D', D', etc., and pipes E, E' and E' leading from the top of one water chamber to the bottom of another, a water supply pipe leading into the water chamber near-est the inlet end of said flues, said parts being combined substantially as described.

## No. 50, 150. Grave Signal. (Signal pour fosses.)

Hubert Deveau, New York, State of New York, U.S.A., 3rd October, 1895; 6 years.

Claim. - 1st. A grave signal comprising an air pipe adapted to communicate with the interior of a collin, a movable red extending longitudinally through the pipe and adapted to project into the collin, and a valve secured to the said red and adapted to normally