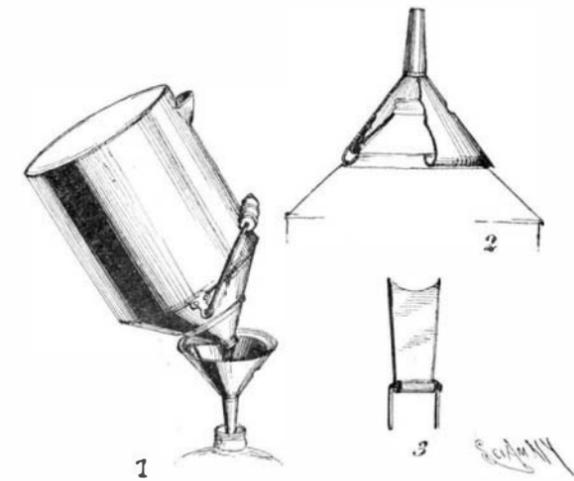


ODDITIES IN INVENTIONS.

DRIP-RECEIVER FOR UMBRELLAS.—An Ohio inventor has hit upon a very simple device which can be attached to a wet umbrella to catch the drip. It consists of a rubber receptacle having approximately the shape of a top. The lower end of the receptacle is provided with a small opening which will snugly fit over the slenderest umbrella rod; yet the material is sufficiently elastic to permit of its being stretched over the largest rod ordinarily used. At the upper end of the device is a much larger opening formed with an inwardly extending flange which serves to retain the dripping even though the umbrella be raised for use. In order to keep this flange clear of the umbrella, it has a number of ribs formed therein. An opening is formed in the side of the receptacle, through which the water collected may be removed. This opening is normally closed with a rubber plug.

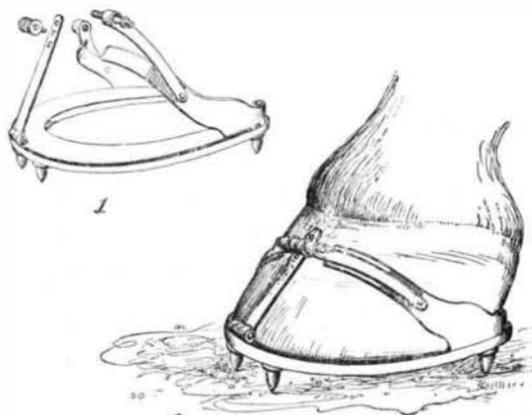
AN IMPROVED OIL CAN.—A recent invention provides an oil can and funnel which may be used in filling lamps or for other purposes in such manner as to prevent waste of oil. The funnel is attached to the can by a hinge, such as shown in Fig. 3. Normally,



AN IMPROVED OIL CAN.

the funnel covers the top of the can, as shown in Fig. 2; but when it is desired to fill a lamp or the like, the funnel may be swung to the position shown in Fig. 1. It will be observed that on the line where the funnel rests on the top of the can, a groove is formed; also from Fig. 2 it will be observed that the edge of the funnel at the mouth is turned over, forming a trough. When the funnel occupies the position shown in Fig. 2, any drippings from the can or funnel will be caught in this trough and retained until poured out on filling of the next lamp. A slight projection on the inner face of the funnel is adapted to catch on the mouth of the can and hold the edge of the trough in snug engagement with the upper edge of the groove on the can.

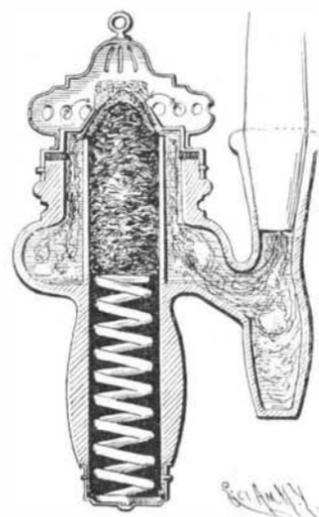
NAILLESS HORSESHOE.—As a substitute for the ordinary nailed horseshoe a Pennsylvanian has invented a shoe which can be applied very readily and secured by means of a single bolt. The shoe consists of a plate of horseshoe form provided with heel and toe calks. Pivoted to the upper face of the plate, at the heel ends, are two draw-straps made to fit the contour of the hoof. Tongue-straps are pivoted to these draw-straps, and are provided with lugs at their ends to re-



NAILLESS HORSESHOE.

ceive the clamping bolt. A toe-strip pivotally attached to the toe of the horseshoe extends upward to meet the tongue-straps. Openings provided in this toe-strip are adapted to receive a projection formed on a sleeve lying between the ends of the lugs on the tongue-straps. This projection serves to hold the straps from working downward. In placing the shoe on the horse's hoof, the straps may be quickly swung in position, and secured by means of the bolt.

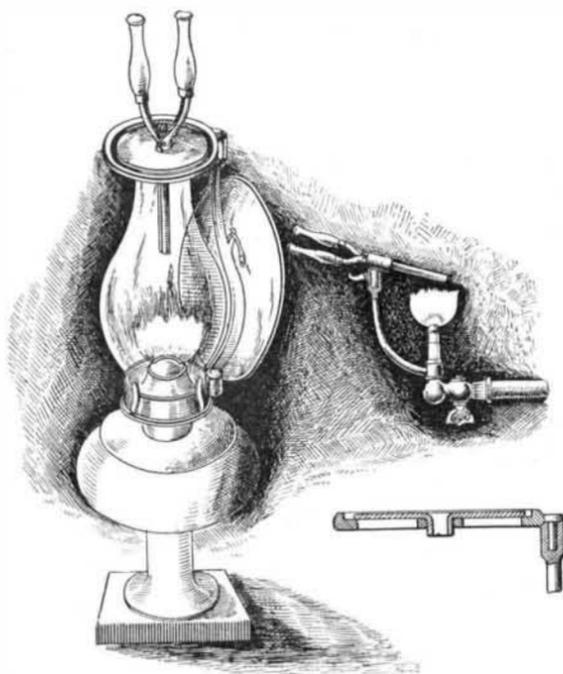
IMPROVED TOBACCO PIPE.—Advantages claimed for the recently patented tobacco pipe illustrated herewith, are that it provides means whereby the burning portion of the tobacco is always left exposed to the air, that the unused tobacco is kept fresh and pure, that it will retain fire as long as a cigar, thus doing away with the tedious continuous sucking usually required, and that it automatically controls the feed of tobacco to the zone of combustion. The bowl of the pipe is formed with a central bore or tube, around the upper end of which is an annular chamber connected at one side with the pipe stem. The tobacco in the shape of a plug is inserted in the tube, and is pressed upward against a burner head by a coil spring. The burner head is attached to the mouth of the bowl, and over it is placed a cover piece. On lighting the tobacco, only that part projecting above the burner head will burn, but the adjacent portion of the plug becomes gradually plastic under the combined action of the heat and the moisture in the tobacco, so that the spring is enabled to force it up slowly to the zone of combustion. The ashes formed are collected in the pipe-cover.



IMPROVED TOBACCO PIPE.

It is claimed that by this arrangement, even if the pipe should go out a number of times, the flavor of the tobacco would remain the same as that of a freshly charged pipe.

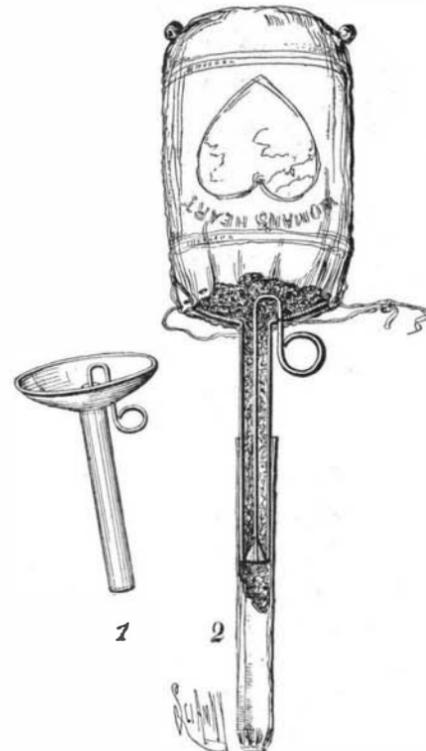
HEATING ATTACHMENT FOR LAMPS OR GAS BURNERS.—A lady in Chicago has recently invented an attachment for lamps or gas burners, which may be used to support any desired article above the flame, making use of its heat without detracting from its luminosity. The device may be easily attached to or removed from the lamp and packed in a small compass, so that it will be found very useful for travelers. As designed for a lamp, the device comprises a base ring which fits upon the lamp burner. The ring carries an upright arm formed with a socket at the top, which is adapted to receive the supporting pin of a spider. The spider is thus held centrally over the chimney to support a cup



HEATING ATTACHMENT FOR LAMPS OR GAS BURNERS.

or other receptacle for heating liquids. A disk is also furnished, and this placed on a spider serves as a deflecting plate. A curling iron may be heated by placing the end through the central opening in the disk. The gas attachment differs mainly in the form of the supporting arm, which is much shorter and is provided with a socket at the bottom which fits over the burner. A separate support is provided for curling irons, consisting of a short tubular section with a pin to fit into the socket at the top of the supporting arm.

CIGARETTE FORMER.—A simple little device for forming cigarettes is shown in the accompanying illustration. It may be conveniently fastened to the ordinary package of tobacco, to which it may remain attached until the tobacco is exhausted. It comprises an oval shaped cup and a stem of either circular or oval cross-section depending upon the form of cigarette desired. The cup is slipped into the mouth of the



CIGARETTE FORMER.

tobacco pouch and fastened therein by the shirring string of the pouch.

In use the cigarette paper is wrapped about the projecting stem of the device and the pouch inverted so that the tobacco will flow into the paper. A plunger is arranged in the stem, and may be operated to govern the flow, and also to pack the tobacco in the paper tube, which is slowly drawn off the stem as it becomes filled.

Brief Notes Concerning Patents.

An improvement in air brakes which is covered by sixteen patents has been devised by W. V. Turner, air brake inspector, and George R. Henderson, superintendent of motive power of the Santa Fé system. A great feature of the innovation, according to the inventors, is that it is possible to recharge the brakes on a train while the brakes are set, thus making it impossible for a train on a grade to start and run away while the brakes are being reset. It will do away with the creeping, due to the leakage on a train line, and will maintain a uniform pressure on all the reservoirs of a line, preventing the possibility of a train's breaking in two. A train set with this brake will remain any length of time on a grade without any danger of moving. It requires only about two-thirds as much air as the best brakes now in use, and is said also to effect a great saving in pumps.

Col. U. R. Brooks, clerk of the Supreme Court of the State of South Carolina, is at the head of the Brooks Improved Steam Valve Company, with headquarters at Columbia, S. C. The device made by the company, it is claimed, decreases the steam consumption of a locomotive and at the same time increases the speed of the engine. The invention is that of a man who has been for sixteen years employed at the shops of the Southern Railroad Company, and whose name is for certain reasons withheld. The device has been recently called to the attention of a number of railroad men, who have become much interested because of some very novel features introduced, and a locomotive is being equipped with it, for the purpose of subjecting the valve to the severest tests, in order to determine exactly what the value of the invention may be.

There are said to be about fifty thousand square miles of land in this country covered with bituminous shale, for an average depth of thirty feet, for which there is little or no use, and a patent has been recently granted to Otto Oppelt, a chemist of New Albany, Ky., covering a process by which a good quality of gas and oil can be made from this deposit at a cost far below that of gas at present. These shales abound around Louisville, and in some places deposits are one hundred feet in thickness. It is proposed to erect a plant at once, and supply gas for industrial use to firms in Louisville. This business alone could be profitably engaged in, but another considerable source of income will be derived from the sale of the by-products, consisting of silicate and sulphate of alumina, ammonia, sulphate of iron, paraffine, and phosphoric acid.