

RECENTLY PATENTED INVENTIONS.

In the accompanying engraving are illustrated several novelties, and also some new and improved tools and appliances, that have been recently patented by inventors in different parts of the country.

Fig. 1 shows a very simple and ingenious shade-holding candlestick, patented by Charles E. Sherman and Louis Sachse, of Havilah, Cal. The socket for holding the candle is formed of four wires, or narrow strips of metal, rising from the base. The globe is supported by a ring placed on the top of the candle, so that, as the candle burns away, the shade will be lowered accordingly, shading the light as long as the candle lasts. The globe and ring are steadied on the candle by a rod attached to the base that passes up through a sleeve attached to the ring.

Mr. Jeremiah Schroy, of Indianapolis, Ind., has recently patented the fire-lighter shown in Fig. 2, by which coal oil may be safely and economically used for kindling fires. The device is made of two hollow perforated or slotted castings hinged together and provided with a handle. Between the castings is packed a quantity of asbestos fiber. In use,

making a straight cut. The point at the end of the shank that passes through the top of the can, for furnishing a fulcrum and pivotal center for the tool in making a circular cut, is made a part of a pivoted plate, which may be turned back to occupy less space in the handle. In making a straight cut the tool will be used without fulcrum or guide.

In Fig. 5 is illustrated a modified form of hydraulic ram. The air-chamber is of glass, and is held in place upon the water-box by means of a hinged yoke, screw, and cap, so that it may be easily removed for repairs. The water-box is divided into induction and eduction chambers by a valved partition. The weighted, pulsating valve is placed in the induction chamber. The eduction chamber is provided with an air-pump for forcing air into the air-chamber. The above is the invention of Mr. Geo. W. McKeuzie, of Harrington, Me.

An ingenious device for exterminating burrowing animals by suffocation is shown in Fig. 6. It consists of a perforated cylinder, contained in an outer casing that is open at the bottom, and of an air-pump that is connected with the perforated cylinder by a rubber tube. When the appa-

of the boiler, which at the same time serves the purpose of a safety valve. This was recently patented by Mr. Chas. W. Dean, of Auburndale, Wis.

In Fig. 9 is illustrated a new apparatus for hatching fish eggs. It is the invention of Mr. Marshall McDonald, of Washington, D. C. In its simplest form the apparatus consists of a closed hatching jar and connected fish receiving jar, which latter is provided with a screened outlet or overflow pipe. The hatching jar is continually supplied with a forced current of water through a centrally placed supply pipe, that extends nearly to the bottom of the jar, so that the impact of the water upon the bottom of the jar will produce the necessary agitation of the eggs, and this supply pipe is made vertically adjustable, so that the agitation may be made more or less violent, as circumstances require. The young fish, as soon as hatched, will be caught in the current of water and transferred through the connecting pipe to the receiving jar, where the water is comparatively fresh and clean. When the buoyant eggs of salt water fish are to be hatched, the current through the apparatus will be reversed; that is, it will be made to enter and pass out



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the device is first dipped in coal oil until the asbestos fiber becomes saturated. It is then ignited with a match, and placed under the fuel to be lighted, and left until the fire is well started, after which it may be withdrawn and extinguished. The absorptive and non-combustible properties of the asbestos fiber render the device durable and efficient for its purpose. The lighter is also adapted to be used as a torch.

In Fig. 3 of the engraving is shown a new form of ticket punch. The jaws or plates of the punch, which carry the dies, are slotted, and move on a central bar, and are adapted, when the handles are pressed for punching, to approach each other equally, thus always insuring perfect registration of the dies. The above is the subject of a patent granted to Mr. John Lippincott, of Baltimore, Md.

The can-opener shown in Fig. 4 has been patented by Mr. William A. McFarlane, of Ivenpah, Cal. The shank which carries the cutting blade is detachable from the handle, and the handle is made hollow, for inclosing the shank and all parts attached to it when the tool is not in use. The cubical block in which the blade is journaled is reversible on the shank, for holding the blade at right angles to the shank for making a circular cut, or parallel therewith for

ratus is to be used, it is placed over the outlet of this burrow, and the soil packed around the lower end of the casing to exclude the air. A small quantity of sulphur, together with some firebrands, is then placed in the perforated cylinder, and the air-pump is then operated, which forces air into the cylinder, causing rapid combustion of the sulphur, and forces the resulting gases and fumes out through the perforations and down into the burrow, causing the animals therein to be suffocated. This appliance was patented by Mr. Austin D. Palmer, of Abilene, Texas.

The crucible tongs shown in Fig. 7 were recently patented by Mr. Samuel C. Murdoch, of Pittsburg, Pa. They are intended to take the place of the hand tongs commonly used in making crucible steel, for placing the crucibles in and lifting them out of the melting furnace, and of the cradle commonly used for pouring the metal. The tongs are adapted to be raised and lowered, and moved to and from the furnace, by a crane.

The combined blow-pipe and soldering lamp illustrated in Fig. 8 employs a jet of steam for focusing the blaze. The lamp has two wick tubes—one for generating the steam in the boiler above it, the other for melting. The required pressure is maintained in the boiler by a stopper at the top

at the bottom of the jars. By proper manipulation of the connecting pipe, the bad eggs, which, by virtue of their less specific gravity, will collect on the top of the mass of eggs in the jar, may be passed off with the current through the connecting pipe, so that the good eggs may be kept in the most favorable condition during hatching; and the apparatus requires but little attendance after being properly put in operation.

The fountain tooth-brush shown in Fig. 10 is the subject of a patent by Mr. Louis Chevallier, of Brooklyn, N. Y. The novelty of this brush consists in a rubber bulb placed on the handle of the brush, and a metal feed tube leading from the interior of the bulb along the handle to the center of the head of the brush, where it passes through an orifice for conducting the water from the bulb to the bristles of the brush while in use.

O. SILVESTRI has found that the basaltic lava in the neighborhood of Etna contains small geodes filled with solid crystallized paraffine. The paraffine is in large translucent plates of waxy appearance and yellowish-white color, with a melting point of 56°. It is soluble in ether and in boiling alcohol.