F. McCABE.

STEAM WHISTLE.

Patented Sept. 25, 1883. No. 285,639. Fig. h. Fig.4. Tig. 5. INVENTOR: WITNESSES:

ATTORNEYS.

United States Patent Office.

FRANK McCABE, OF PROVIDENCE, RHODE ISLAND.

STEAM-WHISTLE.

SPECIFICATION forming part of Letters Patent No. 285,639, dated September 25, 1883.

Application filed December 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, Frank McCabe, of Providence, in the county of Providence and State of Rhode Island, have invented a new and Improved Steam-Whistle, of which the following is a full, clear, and exact description.

The object of my invention is to provide a steam-whistle of inexpensive construction; and it consists in a hollow whistle slotted at one side for the escape of steam, and provided with an adjustable lip-plate, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my improved whistle. Fig. 2 is a plan view of the same. Fig. 3 is a longitudinal section on line x x, 20 Fig. 1. Fig. 4 is a cross-section on line y y, Fig. 3. Fig. 5 is a longitudinal section, showing the whistle as fitted for use as a low-water

indicator. A is the whistle, consisting of a flat tubular 25 portion, a, and at its closed end an enlarged portion, b, which forms a steam-chamber. At one side of the chamber b is a transverse slot, c, over which is fitted a plate, d, attached by means of a screw, e, passing through a slot in 30 the plate, so that the plate can be adjusted to close the slot c more or less, in order to make the whistle to sound more or less shrilly. In Figs. 1, 2, 3, and 4 the lower end of the tube a opens at one side, and is formed with flanges 35 for attachment upon a tube, B, and in the tube B is fitted a valve, l, that is closed upward against its seat by a spring, m, so that when the whistle is applied to a boiler the valve will

cut off the steam, and a lever, n, is provided for forcing the valve l downward to admit 40 steam to the whistle.

When used as a low-water indicator, the whistle is to be attached, as shown in Fig. 5, to the end of a tube, o, which will be connected to the water-space of the boiler.

The body of the whistle can be readily formed of cast metal, and its construction is simple and inexpensive.

The lip-plate d can be readily adjusted to obtain either a shrill or a deep sound, as may be 50 desired, according to the location or use, and for that reason comparatively few sizes of whistles will be required to produce a great variety of sounds. It is evident that when no adjustment is wanted the plate d may be dispensed with and the slot c made more or less wide.

I am aware that it is not new in steamwhistles to use a valve closed by gravity or a spring, and opened by pressing with a pivoted 60 bar or arm upon the valve-rod, or to form a chamber above the aperture through which the steam passes in order to produce the whistling sound; but

What I do claim is—
The lip d, having a slot and a clamp-screw,
e, in combination with the neck a and chamber b, the front of neck a being extended beyond the front of said chamber, whereby the
lip d will be brought into the same plane with 7
the front of neck a, and may be graduated in
its distance therefrom, as shown and described.

FRANK McCABE.
Witnesses:
John Magee,
Wm. B. Avery.