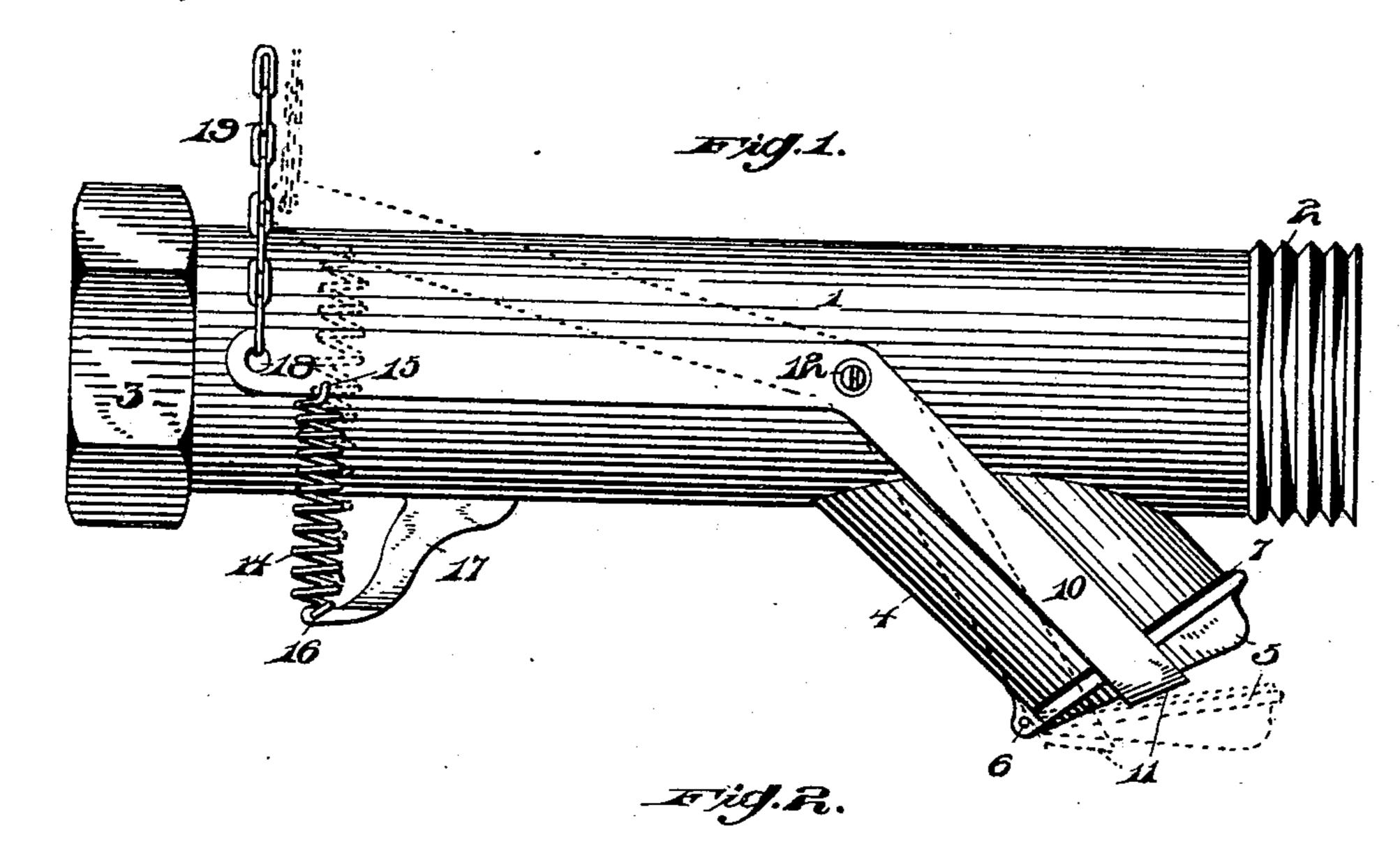
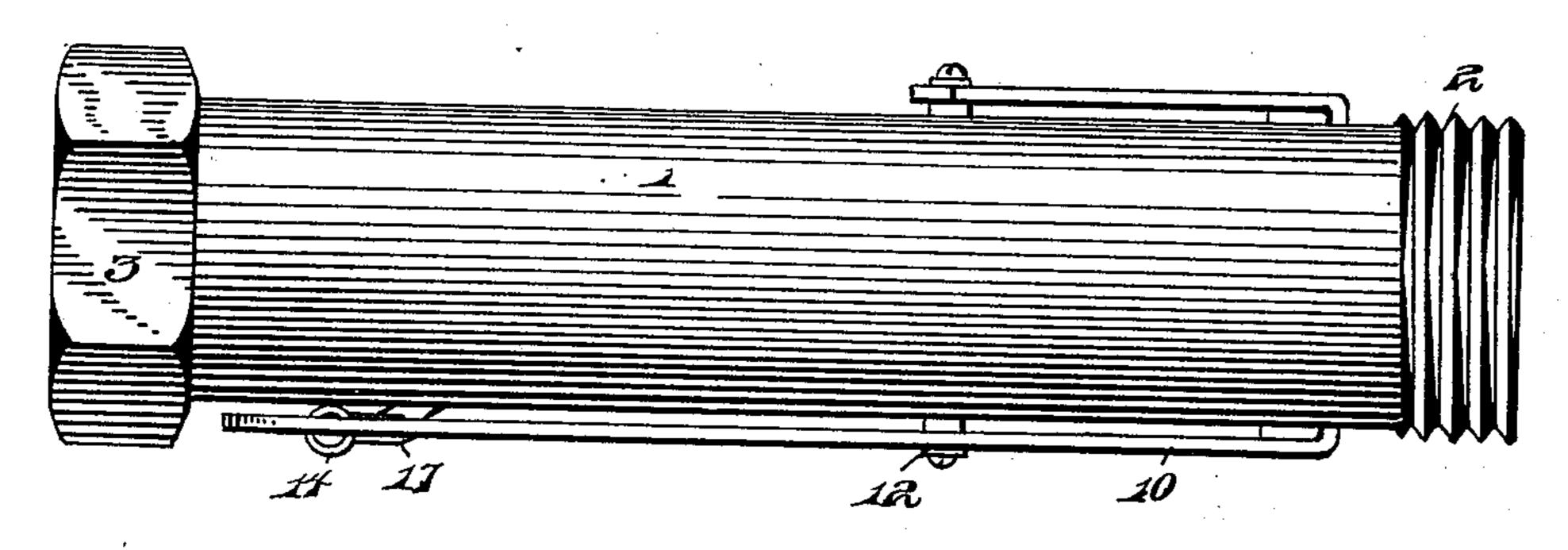
R. K. WEST.

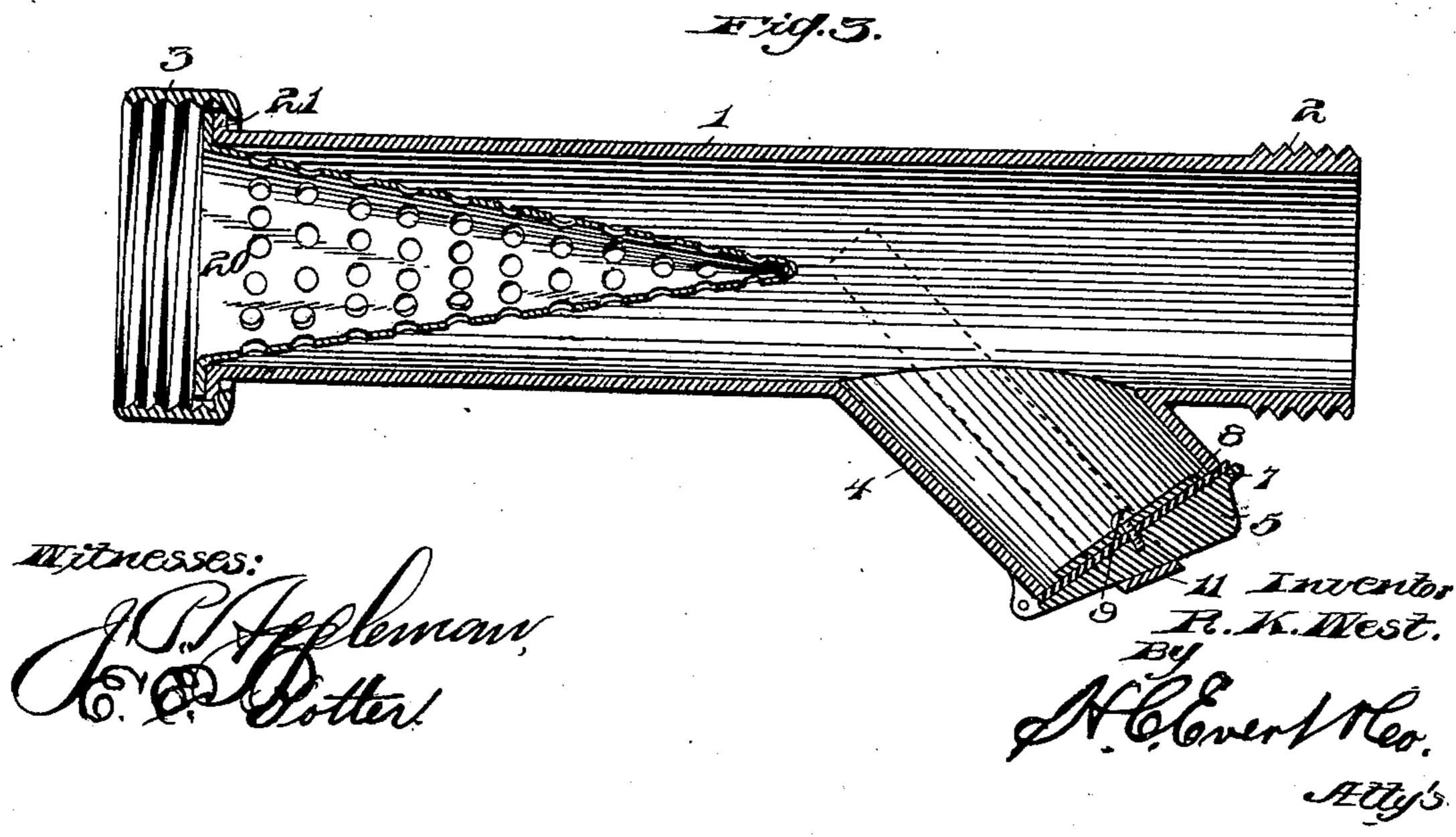
STRAINER CLEANING DEVICE FOR LOCOMOTIVES.

(Application filed Apr. 24, 1901.)

(No Model.)







United States Patent Office.

RICHARD K. WEST, OF SHARPSBURG, PENNSYLVANIA.

STRAINER-CLEANING DEVICE FOR LOCOMOTIVES.

SPECIFICATION forming part of Letters Patent No. 680,096, dated August 6, 1901.

Application filed April 24, 1901. Serial No. 57,305. (No model.)

To all whom it may concern:

Be it known that I, RICHARD K. WEST, a citizen of the United States of America, residing at Sharpsburg, in the county of Alle-5 gheny and State of Pennsylvania, have invented certain new and useful Improvements in Strainer-Cleaning Devices for Locomotives, of which the following is a specification, reference being had therein to the accompanyto ing drawings.

This invention relates to certain new and useful improvements in strainer-cleaners for locomotives and the like, and has for its object the provision of novel means whereby 15 the water from the tender to the boiler is strained and provide novel means whereby this pipe is easily and effectually cleaned.

The invention still further aims to construct a device of this character that will be 20 extremely simple in construction, strong, durable, comparatively inexpensive to manufacture, and highly efficient in its use.

Another object of the invention is to provide novel means that will permit the clean-25 ing apparatus to be operated from any part of the cab of the engine when it is necessary to clean the pipe.

With the above and other objects in view the invention consists in the novel combina-30 tion and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, 35 forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several . views, in which—

Figure 1 is a side elevation of my improved 40 strainer-cleaner. Fig. 2 is a top view thereof. Fig. 3 is a vertical sectional view as shown in Fig. 1.

In the drawings the reference-numeral 1 indicates a pipe carrying at its end suitable 45 screw-threads 2 and on its opposite end a coupling 3, the said pipe 1 having formed integral therewith an elbow 4, extending downwardly at an angle from the lower side thereof.

50 The reference-numeral 5 indicates a flap-

the elbow 4. This flap-valve carries an interior gasket 7, which is rigidly secured thereto by means of apertured disks 8, in which is centrally arranged a screw 9, pass- 55 ing through said disks and gasket and engag-

ing the inner face of the flap-valve.

10 indicates a substantially U-shaped lever which carries the flap-valve 5, the latter being secured thereto at 11 in any suitable 60 manner. The U-shaped lever is pivoted at 12 12 to opposite sides of the pipe 1 and carries a forward extension 10', to the free end 18 of which is secured a chain 19 or like connection leading to a suitable point in the cab 65 of the locomotive. A spring 14 is connected at 15 to the extension 10' and at 16 to a bracket 17, carried by the pipe 1, this spring serving to normally hold the flap-valve 5 closed and to close the same after having 70 been operated.

The reference-numeral 20 represents a coneshaped strainer carrying a flange 21, which is attached to the pipe 1 in the usual and wellknown manner.

When it is desired to clean the pipe 1, the chain or operating-cord 19 is pulled, allowing the flap-valve to open, as shown in Fig. 1 of the drawings, the spring 14 serving to automatically operate the lever downwardly and 80 return the valve to its seat.

The many advantages afforded by the use of my improved cleaner will be readily apparent from the foregoing description, taken in connection with the accompanying draw-85 ings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, the combination of a pipe having an elbow 95 forming a drain-opening, a U-shaped lever pivoted to opposite sides of said pipe and straddling the elbow, a flap-valve hinged to the elbow and connected to said lever, an extension made integral with one end of said 100 lever, operating means connected to the free valve, which is hinged at 6 to the mouth of | end of said extension, and a spring for normally holding the flap-valve closed and for closing said valve after operating, substan-

tially as described.

2. In a device of the character described, the combination of a pipe having a drain-opening, a substantially U-shaped lever pivoted to opposite sides of the pipe, a flap-valve hinged to the pipe and connected to the U-shaped lever for normally closing the drain-opening, an extension carried by said lever, operating means connected to the free end of said extension, a bracket carried by the pipe, and a spring connected to said bracket and to the extension for holding the flap-valve normally closed and for closing said valve after operating, substantially as described.

3. In a device of the character described, the combination of a pipe having a drain-opening, a cone-shaped strainer secured in

one end of said pipe, a substantially U-shaped 20 lever pivoted to opposite sides of the pipe, a flap-valve hinged to the pipe and connected to the U-shaped lever for normally closing the drain-opening, an extension carried by said lever, operating means connected to the 25 free end of said extension, a bracket carried by the pipe, and a spring connected to said bracket and to the extension for holding the flap-valve normally closed and for closing said valve after operating, substantially as 30 described.

In testimony whereof I affix my signature in the presence of two witnesses.

RICHARD K. WEST.

Witnesses:

JOHN NOLAND,

E. E. POTTER.