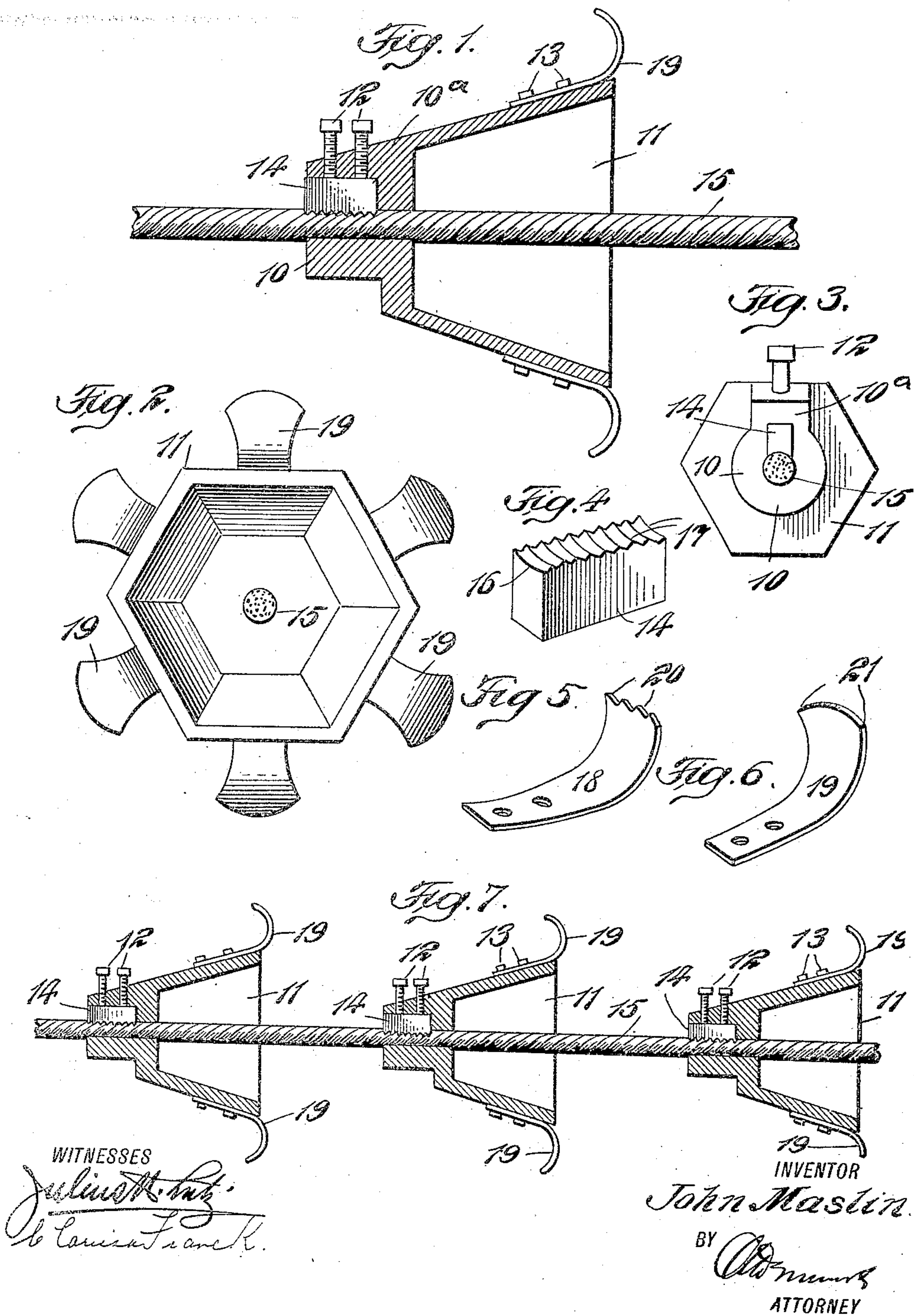


No. 894,220.

PATENTED JULY 28, 1908.

J. MASLIN.  
DEVICE FOR CLEANING WATER MAINS.  
APPLICATION FILED JAN. 30, 1908.





# UNITED STATES PATENT OFFICE.

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## DEVICE FOR CLEANING WATER-MAINS.

No. 894,200.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed January 30, 1908. Serial No. 413,386.

*To all whom it may concern:*

Be it known that I, JOHN MASLIN, a citizen of the United States, and resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Devices for Cleaning Water-Mains, of which the following is a specification.

This invention relates to devices for cleaning water pipes and mains and has in view the production of a device that is so flexible as to readily pass around the curves and angles of a water main and at the same time be economical to manufacture, simple and strong and easy to be repaired, all as now will be described, reference being had to the following description, the claims and the drawing, in which

Figure 1 is a horizontal section of one of the hollow bodies with scrapers attached. Fig. 2 is a transverse section of the hollow body showing the expanded opening. Fig. 3 is a transverse section of the end of the hollow body at which a cable is attached. Fig. 4 is a perspective of the fastening key showing the grooved hollow side. Fig. 5 shows a toothed cutter. Fig. 6 shows a scraper with curved end. Fig. 7 shows a series of three hollow bodies with cutters and scrapers attached.

In the drawing, Fig. 1, is shown a cylindrical portion 10 of a hollow body to be attached to a cable 15 by means of set screws 12, and a key 14, the cylinder preferably carrying an enlargement or ridge 10<sup>a</sup>, in which the set screws and key are located. The expanded portion 11 of the hollow body, is shown as being of hexagonal contour, and carries cutters and scrapers 18 and 19, attached by means of screws 13. The key 14 consists of a parallelepipedic block having one side 16 hollow and supplied with grooves or threads 17, by means of which it is held very firmly on the cable 15. The cutter 18, has at its end teeth 20 and the scraper 19 is at its end rounded so as to fit closely in the pipe to be cleaned.

In practice I prefer to have a number of hollow bodies carrying toothed cutters and

an equal number carrying rounded scrapers. Six hollow bodies, three carrying cutters and three carrying scrapers, constitute a satisfactory cleaning device. The device is pulled through the pipe to be cleaned by means of a cable and the hollow bodies may either be attached to this or to a short piece of cable, which is then attached to the long cable by means of which the device is pulled through the pipe. On account of the enlargement in the opening of the portion 11, the cable is free to move laterally, whereby the device is readily passed around curves and angles, and the latter may even be as small as 90°.

Inasmuch as the hollow bodies may all be cast from the same mold they can be produced very cheaply. Besides on account of the configuration of these bodies they are very strong. The cutters and scrapers 18 and 19 are made of spring steel, so as to readily pass around permanent obstructions in pipes, and these cutters and scrapers as well as the screws and blocks are all interchangeable, whereby the device is very easily, cheaply and quickly repaired.

It is evident that many of the parts of this device may be replaced by their usual mechanical equivalents without departing from the spirit of the invention.

What I claim as new is:

1. In a device of the character described, a hollow body with an opening expanding towards one end and a key at the other end adapted to fasten the hollow body to a cable.

2. In a device of the character described, the combination of a hollow body with an opening expanding towards one end a key at the other end adapted to fasten the hollow body to a cable, and scrapers attached to the hollow body.

Signed at Jersey City in the county of Hudson and State of New Jersey this 27th day of January A. D. 1908.

JOHN MASLIN.

Witnesses:

GEO. F. WHITNEY,  
H. T. NUGENT.