

(No Model.)

W. JENKS.
SEWER CLEANSER.

No. 312,206.

Patented Feb. 10, 1885.

Fig. 1.

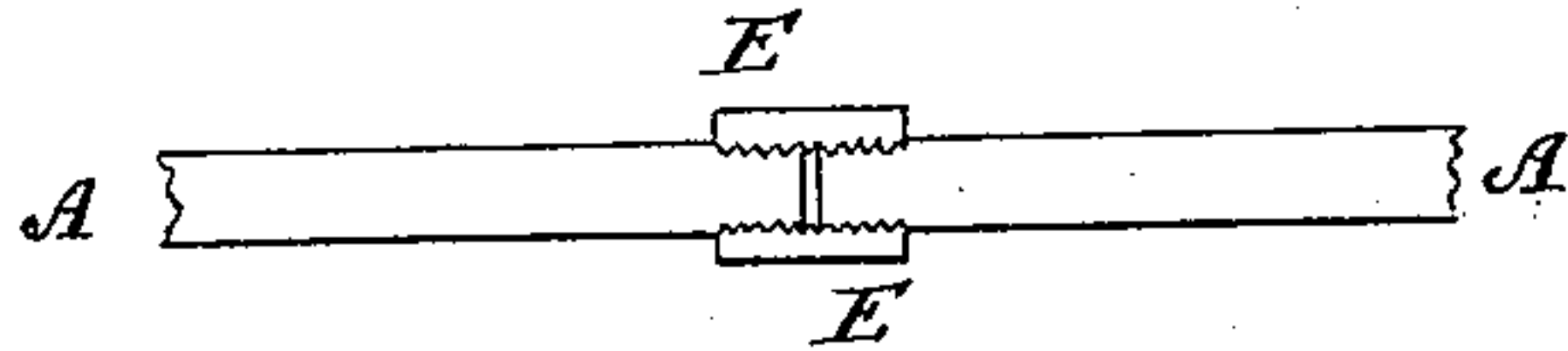


Fig. 2.

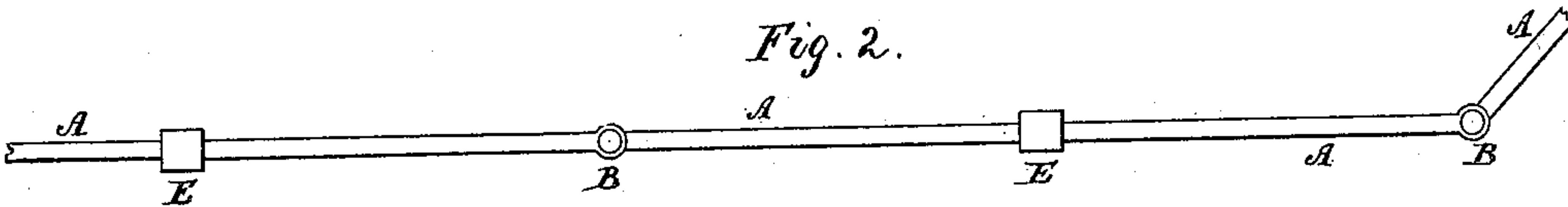


Fig. 3.

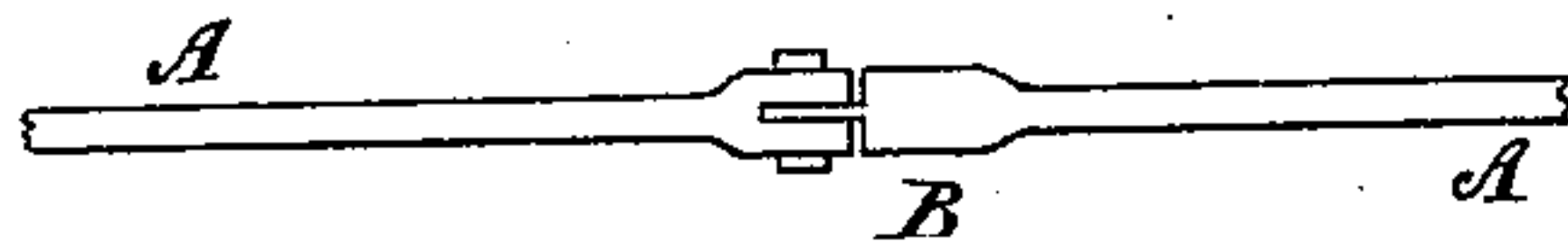


Fig. 4.

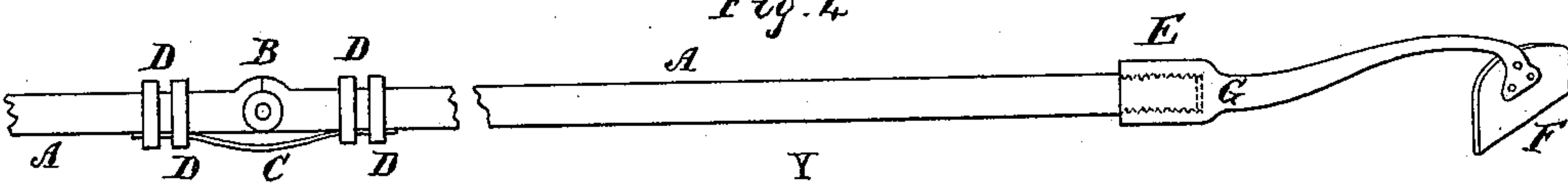


Fig. 6.

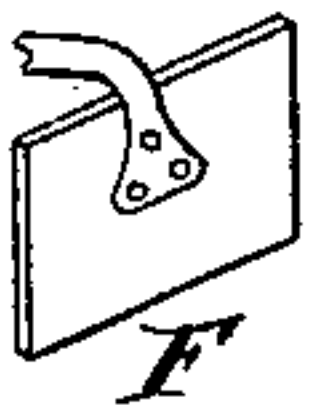


Fig. 5.

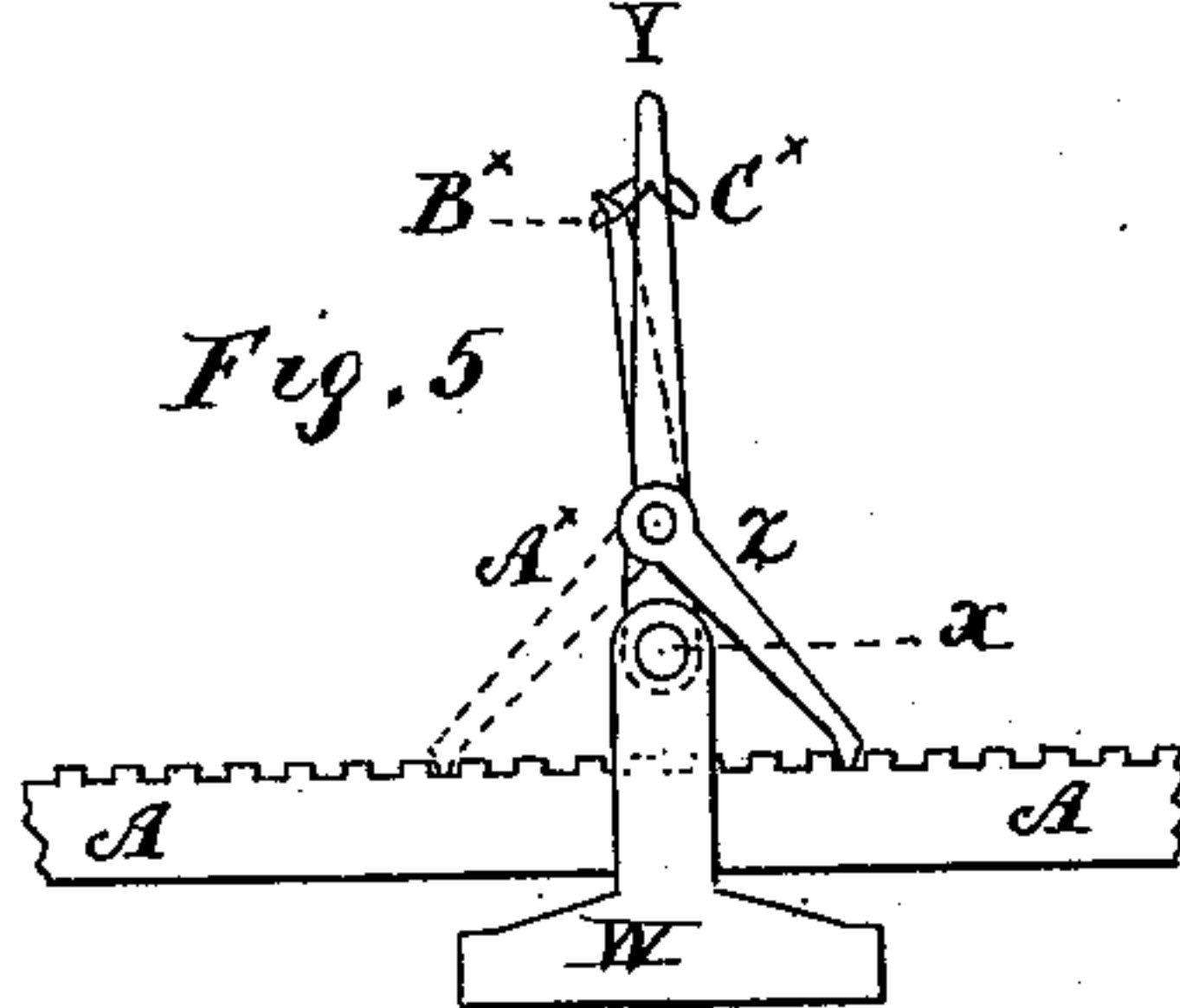


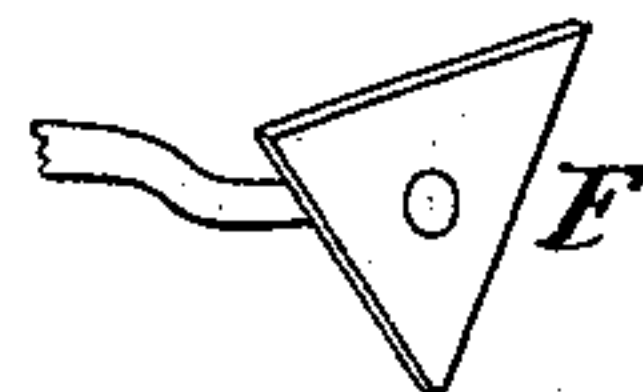
Fig. 8.



Fig. 7.



Fig. 9.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM JENKS, OF NEWTON, MASSACHUSETTS.

SEWER-CLEANSER.

SPECIFICATION forming part of Letters Patent No. 312,206, dated February 10, 1885.

Application filed December 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JENKS, a citizen of the United States, residing at the city of Newton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Sewer-Cleaner, of which the following is a specification.

The nature of my invention is that of an extensible jointed and hinged rod furnished with straightening-springs, and bearing at one end a changeable scraper of varying forms, also provided with a device to force the whole arrangement into and out of the sewer; and the object is to furnish a tool for the purpose of scraping or cleaning out sewers, drains, &c., and thus obviating the need of digging up the sewers, while making them perfectly clean.

In the drawings, Figure 1 is a view in vertical section of a part of my device, showing the connection of the joints. Fig. 2 is a top view of a portion of the combination, showing the hinges and the joints. Fig. 3 is a side view of a portion of the rod, with a hinge. (These last two figures are diminished.) Fig. 4 is a top view showing part of the main rod, and a joint, a hinge, and the spring with the latter, also one form of my scraper. Fig. 5 is a side view of a portion of the invention, with a lever and a movable stand bearing the lever, &c., for forcing the rod, &c., in and out of the sewer. Figs. 6, 7, 8, and 9 are views in perspective of different forms of the scraper adapted to the varying forms of sewers and drains.

In the drawings, A A, Fig. 1, are iron rods, preferably of a round shape, of any length desirable, (generally some four feet long, respectively,) bearing at each end a male screw, on which screws a collar, E E, Fig. 1, (E, Figs. 2 and 4,) bearing a female screw. By means of these screws the length of the whole device may be increased by the addition of rods, or, conversely, diminished. These rods A A, when screwed together, form what in the description I will call the "rod A A." At intervals, midway of each separate rod, are hinges B B, Fig. 2. A hinge is seen in side view in Fig. 3, also in top view in Fig. 4, where it is seen to be accompanied by a spring, C, held at each end firmly to the hinged rods by, respectively, two or more rings, D D D D, (or

in any other convenient manner.) The hinge is seen in Fig. 4 to be so constructed as to bend only one way. F, Fig. 4, is a scraper like a hoe-blade, (and drawn in perspective in Fig. 4 that its mode of being worked may be more plainly exhibited.) This scraper is fastened to a handle, G, Fig. 4, which handle bears a male screw at its left-hand end, screwing into a collar, by which collar it is held tightly to the rod.

I do not confine myself to any shape of my scraper, but use various shapes, as shown in Figs. 6, 7, 8, and 9, the latter being attached to the handle at the center of the triangular plate of iron or steel, like a butcher's scraper.

In Fig. 5 the rod A A is seen to be armed, at that point shown with a rack, and to slide through the upper part of the pedestal W (or a projection from the pedestal) of a device called the "shover." Hinged at both sides of the rod A A at the point X (which is at the top of the projection named) is a lever, Y, called the "shover-lever," which bears at each side, respectively, a pawl, Z, called the "shover-pawl," and A^x, called the "withdrawing-pawl." B^x C^x, Fig. 5, are respectively hooks attached to the lever Y, and used, at pleasure to hold up and out of the way the respective pawls Z and A^x.

The operation of the invention is as follows: It is desired to scrape the bottom of the sewer. The cleaner is taken, say, into the cellar, and the scraper F, Fig. 4, is fastened by means of the collar E onto one of the hinged rods. In this Fig. 4 the hinged part is seen from above, but the right-hand portion of Fig. 4 is, for the sake of intelligibility, represented in side view to show the scraper. This scraper P is turned so as to present its lower edge to the bottom of the sewer, and the collar E being screwed up tightly other parts of the rod A A, Fig. 2, are added till a sufficient length of the tool is attained to reach from the inner end of the drain to and out of the drain-mouth in the cellar. The rod shown in Fig. 5, carrying the cogged rack, is then, by means of a collar, E, attached to the outer or projecting end of the rod A A, and with it the shover, being the device carrying the shover-lever Y, (shown in Fig. 5,) the shover-pedestal W, Fig. 5, being placed on the floor of the cellar, or on a staging of any sort placed thereon. The

shover-lever Y is then pushed, by means of its handle or upper end, to the right, and the pawl Z, engaging in the rack, the rod A A, with the scraper at its end, is forced into the drain, 5 the hinges and the springs (as shown in Fig. 4) of the rod enabling the scraper to follow the sinuosities (if any) of the sewer. The end of the sewer having been reached, the hook B^x is cast loose, and the withdrawing- 10 pawl A^x is placed in engagement with the rack, the pawl Z being disengaged and hung up by means of the hook C^x. By pulling the handle of the lever Y to the left the rod A A is now forced backward, drawing with it the 15 scraper F, and with it a load of whatever impurities may at the time clog the drain. These impurities, reaching the mouth of the drain, are placed in any convenient receptacle for removal, and the scraper being again forced in 20 in the manner above described the process is continued. When, as is sometimes the case, the bottom of the sewer is of a V shape, the scraper shown in Fig. 7 or Fig. 9 is substituted for the scraper F of Fig. 4, (or either of the 25 other two is used.)

I claim—

1. In sewer-cleaners, the jointed rod with the scraper or a grappler, in combination with the spring C and hinges B, all substantially as described and shown. 30
2. The shover and withdrawing apparatus consisting of the pedestal, the lever, and the pawls, in combination with the hinged rod and its rack, all constructed and arranged substantially as shown and described. 35
3. The combination of the hinged rod A A with its springs, the shover and withdrawing apparatus, and the scraper, all constructed and arranged substantially as described and shown. 40
4. The general combination of the hinged rod A A with its springs, the shover, and the withdrawing apparatus, with a device for holding and carrying the substances to be removed from the sewer, all constructed and arranged 45 substantially as described and shown.

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Witnesses:

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