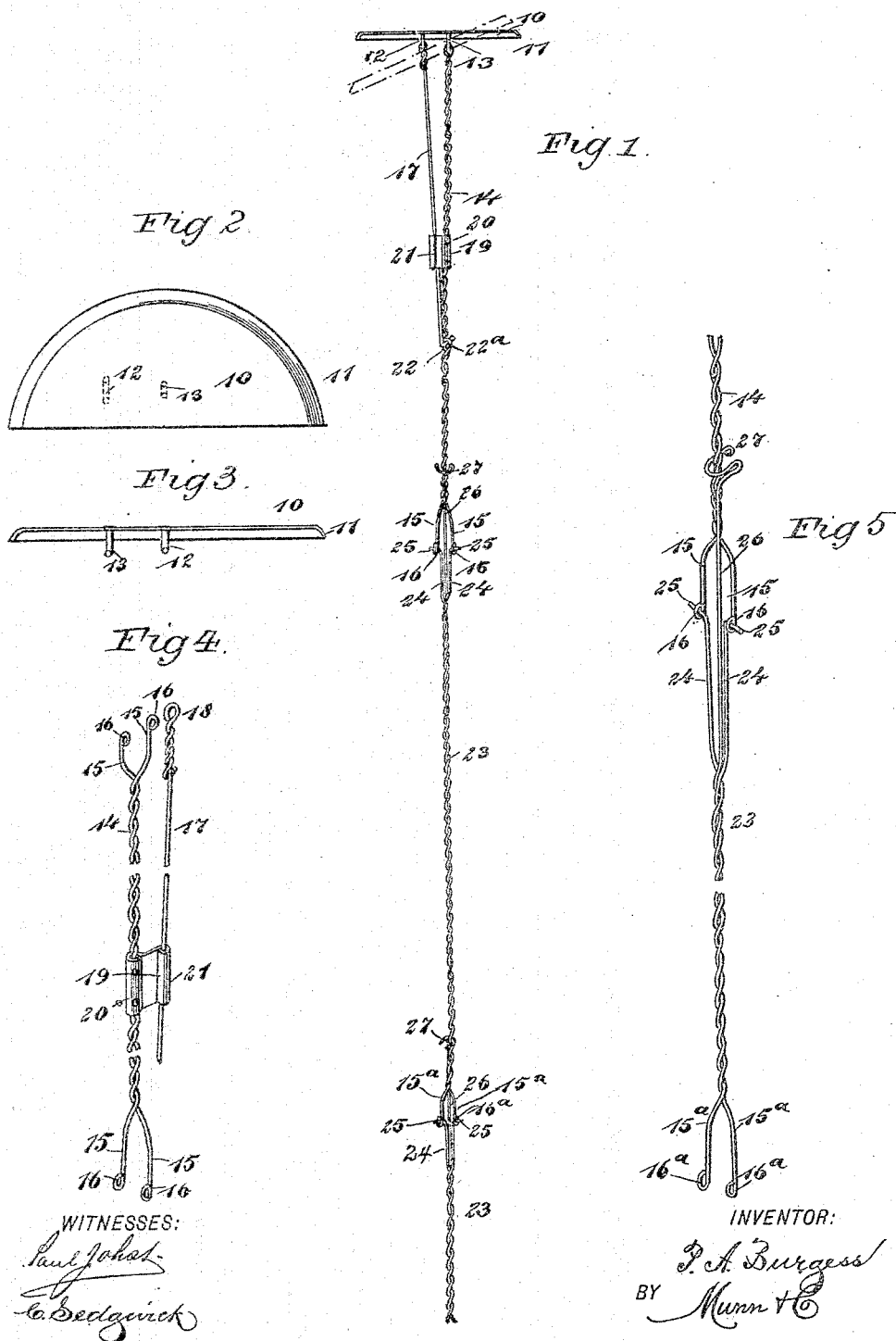


P. A. BURGESS.
FLUE CLEANER.

Patented Feb. 7, 1893.



ATTORNEYS.

UNITED STATES PATENT OFFICE.

PERRY A. BURGESS, OF STEAMBOAT SPRINGS, COLORADO.

FLUE-CLEANER.

SPECIFICATION forming part of Letters Patent No. 491,404, dated February 7, 1893.

Application filed May 24, 1892. Serial No. 434,186. (No model.)

To all whom it may concern:

Be it known that I, PERRY A. BURGESS, of Steamboat Springs, in the the county of Routt and State of Colorado, have invented a new and Improved Flue-Cleaner, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of devices which are adapted to remove soot, ashes, and other collections in flues or pipes. In horizontal flues or pipes a great deal of this matter collects so as to obstruct the draft, and the object of my invention is to produce a simple device which may be easily inserted in a small aperture such as is made or may be made in the elbow of a common stove pipe, which may be adjusted after being entered so as to extend transversely to the pipe, which will efficiently scrape out the matter within the flue or pipe, and which may be easily adjusted so as to be extended through a pipe or flue of any reasonable length.

To this end my invention consists in certain features of construction and combinations of parts, as will be fully described hereinafter and then pointed out in the claims.

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

Figure 1 is a side elevation of the flue cleaner adapted for use and with its handle extended; Fig. 2 is a front elevation of the cleaner blade; Fig. 3 is a plan of the same; Fig. 4 is a broken perspective view of the handle and adjusting rod; and Fig. 5 is a broken enlarged perspective view showing the manner of connecting two sections of the handle.

The cleaner is provided with a blade 10, which is semi-circular in form so that it may be scraped efficiently against the walls of a round pipe or flue, and it has its rounded or working edge flanged or inclined forwardly, as shown at 11, so that it may be pushed inward over the soot without materially disturbing it and then pulled outward so as to drag the soot or other matter with it. The blade 10 has, near the center and on the front side, a staple 12 and at one side of this is a similar staple 13. To the latter staple is hinged a handle 14 which is preferably formed of twisted wire, as shown in the drawings, al-

though it may be made of any suitable material having the necessary stiffness. It has at each end diverging prongs 15 terminating in eyes 16 which may be secured to the keeper or staple 13, thus forming a hinge which will permit the blade 10 to be turned into a position nearly parallel with the handle.

An adjusting rod 17 is held nearly parallel with the handle 14, this rod having an eye 18 at one end which is secured in the staple 12. The rod 17 is held to the handle 14 by means of a guide 19, which guide consists of a plate having one end 20 formed into a sleeve which is fixed to the handle 14, and the other end formed into a similar sleeve 21 through which the rod 17 slides. The outer end of the rod 17 is bent at right angles, as shown at 22, and this bent end is adapted to enter a hole 22^a in the handle 14, as shown in Fig. 1, so as to fix the position of the rod and blade. The hole 22^a is placed in such a position that when the adjusting rod is secured in it, the blade 10 will be held at right angles to the handle 14, as shown in Fig. 1.

For ordinary use the handle 14 is sufficiently long; that is, where only one or two joints of pipe are to be cleaned, but where a long pipe or flue is to be cleaned the length of the handle may be increased and to this end, sections 23 are employed, corresponding in cross section to that of the handle 14, and each section has at one end diverging prongs 24 terminating in outward bends 25 which are adapted to enter the eyes 16 of the handle 14, as shown in Fig. 5. The prongs 24 are of spring material, and to insert their bent ends in the eye they are compressed, and said bent ends are allowed to spring out through the eyes.

The section 23 has at one end an elongated arm 26 which is held between the prongs 24 and terminates at one end in an open keeper 27 which embraces the handle 14 and serves to brace the same and stiffen the joint between the section 23 and the handle. The opposite end of the section 23 terminates in prongs and eyes 15^a and 16^a, like those on the handle 14 described above, and thus provision is made for securing still another section in place, if desired, in the manner already described.

To use the cleaner the end 22 of the adjusting rod is removed from the hole 22^a of the

handle, the blade 10 is tipped nearly parallel with the handle 14 so as to permit the blade to be easily inserted through a narrow door in an elbow of the flue or pipe, and after the blade is inserted the adjusting rod is pushed inward and its end fastened in the hole 22^a, thus placing the blade 10 in a position at right angles to the handle 14. The blade is pushed inward over the soot and other matter in the flue or pipe and is then pulled outward, thus scraping out the said matter, and the operation may be repeated until the flue or pipe is thoroughly cleaned.

If the handle 14 is not sufficiently long, one or more sections 23 may be added to it in the manner described. It will be noticed that the guide 19 serves to hold the adjusting rod in the correct position, and it also stiffens the rod so that it acts as an efficient brace.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent:—

1. A flue cleaner, comprising a blade, a handle hinged to one side of the blade at about its center, and an adjusting rod having one end hinged to the blade at one side of its center and in the same horizontal plane with the handle, and its other end detachably connected to the handle, substantially as described.

2. A flue cleaner, comprising a blade, a handle hinged to one side of the blade at about its center, an adjusting rod having one end hinged to the blade at one side of its center and in the same horizontal plane with the

handle and its other end detachably secured to the handle, and a guide secured to the handle and through which the adjusting rod works, substantially as described.

3. A flue cleaner comprising a blade, a handle pivotally connected therewith, an adjusting rod also pivotally connected with the blade at one end and detachably connected with the handle at its opposite end; the handle being formed of sections provided at their adjacent ends respectively with eyes and spring prongs to enter therein, and an arm on one section having a keeper to embrace the other section, substantially as set forth.

4. A flue cleaner comprising the scraping blade provided with a handle pivotally connected therewith and having an aperture and a guide between the blade and aperture, and a rod pivotally connected with the blade to one side of the handle, extending through the guide and having its inner end bent at an angle to enter the said aperture, substantially as set forth.

5. The combination with the handle having terminal eyes at the ends of the handle sections, spring prongs to engage the eyes, and an elongated arm terminating in a keeper adapted to embrace the handle, substantially as described.

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Witnesses:

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