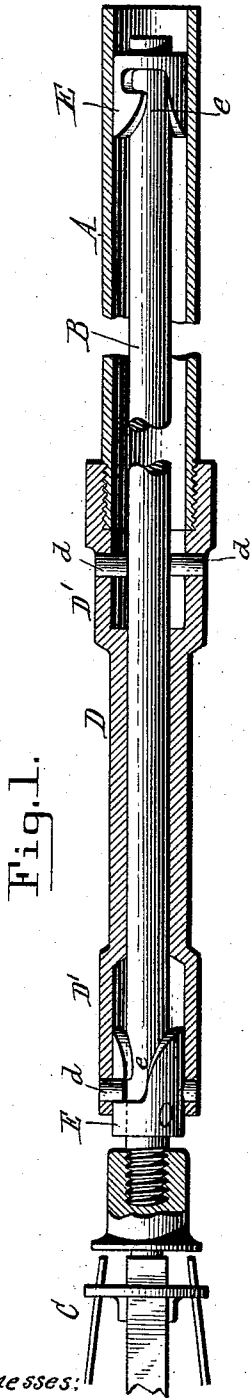


(No Model.)

E. P. HUNT.
FLUE BRUSH HANDLE.

No. 531,039.

Patented Dec. 18, 1894.



Witnesses:

Emil Neubart.
Chas. F. Burkhardt.

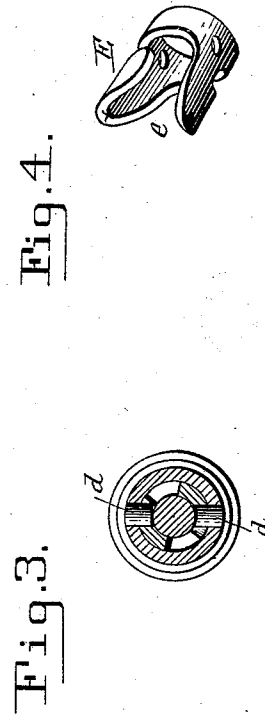
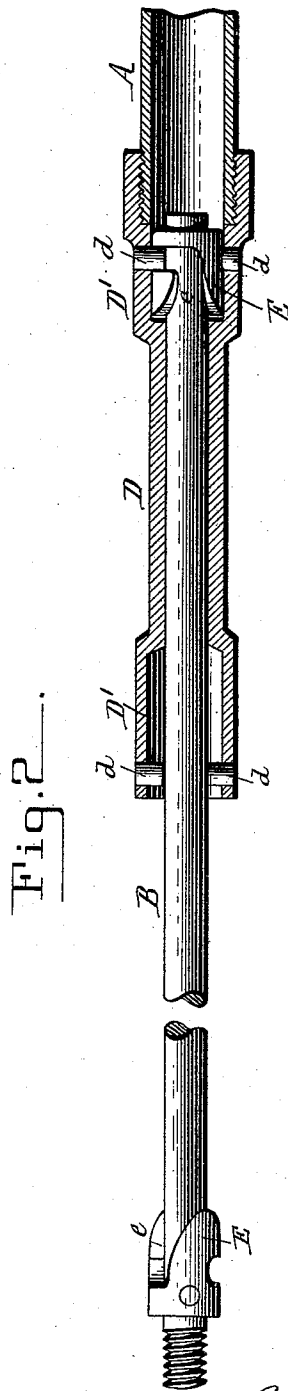
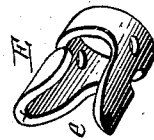


Fig. 4.



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UNITED STATES PATENT OFFICE.

EDWARD P. HUNT, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF TO
JACOB BLOESER, OF SAME PLACE.

FLUE-BRUSH HANDLE.

SPECIFICATION forming part of Letters Patent No. 531,039, dated December 18, 1894.

Application filed August 17, 1894. Serial No. 520,582. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. HUNT, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Flue-Brush Handles, of which the following is a specification.

This invention relates to a handle designed more especially for boiler-flue brushes or cleaners. The space between the boiler front and the opposite wall of the boiler-room is sometimes so small that the use of a rigid or continuous handle, as long as the boiler flues, is impossible. In such cases a flexible handle composed of links or sections has heretofore been employed, but this construction is unsatisfactory, because the same is inconvenient in use and because the link-connections are liable to become entangled in the flues and bind in the same, rendering it sometimes impossible to remove the links without injuring the flue.

The object of my invention is to provide an inexpensive handle of simple construction which can be easily and conveniently manipulated under the above mentioned conditions.

In the accompanying drawings:—Figure 1 is a sectional elevation of my improved handle, showing the same telescoped. Fig. 2 is a similar view, showing the same extended. Fig. 3 is a cross section in line 3—3, Fig. 1. Fig. 4 is a perspective view of one of the coupling collars.

Like letters of reference refer to like parts in the several figures.

A represents the outer or tubular section of the telescopic handle, and B is the inner section arranged to slide within the outer section and consisting preferably of a solid rod.

C is the flue brush which is secured to the front end of the inner handle section, the brush being attached to the latter by a screw-threaded connection, as shown, or by any other suitable fastening.

D is a coupling sleeve whereby the two telescopic sections are movably connected and which is secured to the front end of the tubular section preferably by a screw-thread, as shown.

The inner section of the handle and the coupling sleeve are provided with interlock-

ing parts, whereby the sections may be locked against longitudinal movement on each other, both in their telescoped and extended positions, so that the handle may be shortened or lengthened and serve in either form as a practically rigid or continuous handle. In the construction shown in the drawings, the coupling sleeve is provided at opposite ends with sockets or enlargements D' in each of which are arranged two radial pins or projections d located diametrically opposite each other, and the inner telescopic section is provided at its ends with coupling collars E, having angular or L-shaped slots e which are adapted to interlock respectively with the front and rear pins of the coupling sleeve. The sections are interlocked by moving the outer section lengthwise on the inner section to cause one set of the pins to enter the longitudinal portions of the slots of the corresponding coupling collar, and then turning the outer section in the proper direction to cause the pins to enter the transverse portions of said slots, as shown. When the sections are telescoped they are interlocked by engaging the front coupling of the inner section with the front pins of the coupling sleeve, and when the sections are extended they are interlocked by engaging the rear coupling of the inner section with the rear pins of the coupling sleeve. The handle sections are uncoupled by turning the outer section upon the inner section in the proper direction to bring the interlocked pins into the longitudinal portions of the slots of the adjacent coupling, when the outer section can be slid lengthwise upon the inner section.

The sockets in the ends of the coupling sleeve are of sufficient size to receive the couplings of the inner section. These couplings are preferably arranged right and left, as shown, so that either coupling is interlocked with its corresponding pin by turning the outer section forward or toward the right, and uncoupled by turning said section backward or toward the left.

When my improved handle is used in connection with a flue brush, each of the sections should ordinarily be about one-half the length of the flues to be cleaned, so that when the handle, in its extended form, is inserted to the farther or rear end of the flue, the addi-

tional length of the intermediate coupling sleeve will allow the outer section to project beyond the front end of the flue sufficiently to enable the handle to be operated.

5 In cleaning a flue, the handle sections are telescoped and coupled together, as shown in Fig. 1, and the handle is in this shortened form inserted in the flue nearly to its full length, whereby the brush is pushed to about
10 the middle of the flue. The outer section is next uncoupled, by turning it backward on the inner section, and withdrawn until it strikes the wall opposite the boiler front, after which it is again coupled to the inner section by a
15 turn in the opposite direction, the frictional contact of the brush with the interior of the flue holding the inner handle-section from turning during these operations. The outer section now projects fully outside of the flue,
20 and upon pushing the same nearly to its full length into the flue, the brush is shoved to the rear end of the flue, the brush having now traversed the flue from end to end. Upon the return stroke of the brush, the extended handle
25 is withdrawn until the outer section strikes the wall opposite the boiler front, whereby the brush is moved back to about the middle of the flue. The outer section is next uncoupled from the inner section and
30 pushed forward into the flue for again telescoping the handle, and the outer section is then again coupled to the inner section and withdrawn, thereby drawing the brush back to the front end of the flue. These operations
35 are repeated during every forward and backward stroke of the brush; but a slight turn of the outer handle section is required to couple and uncouple the sections and the operations of shortening and lengthening the
40 handle are, therefore, performed easily and rapidly. As the sections of the handle are always in line with each other, they cannot bind against the inner sides of the flues, like the links of flexible handles.

45 To facilitate the entrance of the coupling pins *d* into the slots of the couplings *E*, the mouths of these slots are flared, as shown.

The sections of my improved handle may be constructed of ordinary rod-iron and piping,
50 ing, both of which are found in stock, and the

cost of the implement is, therefore, comparatively small.

Handles of various sizes, to suit boiler flues of different lengths, can be made by employing longer or shorter telescopic sections, and the coupling sleeve and the couplings of the inner section may be manufactured in one size only and used in connection with different sized handle-sections, thus materially simplifying the manufacture of the handles. 60

I claim as my invention—

1. In a flue brush handle, the combination with an outer tube or hollow section, of a coupling sleeve secured to the inner end of said hollow section and provided at each end with a locking device, and an inner section adapted to telescope into said coupling sleeve and said hollow outer section and provided near opposite ends thereof with couplings adapted to interlock with the respective locking devices of said sleeve, substantially as set forth. 70

2. In a flue brush handle, the combination with an outer tube or hollow section, of a coupling sleeve secured to the inner end of said hollow section and provided at each end with an internal pin or projection, and an inner section adapted to telescope into said coupling sleeve and said hollow outer section and provided near each end with an angular slot adapted to interlock with the corresponding pin or projection of the coupling sleeve, substantially as set forth. 75

3. In a flue brush handle, the combination with an outer tube or hollow section, of a coupling sleeve secured to the inner end of said section and provided at each end with an enlargement having an internal radial locking pin, and an inner section adapted to telescope into said sleeve and said hollow outer section and provided at each end with a coupling collar having an L-shaped slot adapted to interlock with the corresponding locking pin of said coupling sleeve, substantially as set forth. 80

Witness my hand this 9th day of August, 1894. 85

EDWARD P. HUNT.

Witnesses:

JACOB BLOESER,
CARL F. GEYER.