

Nov. 11, 1947.

F. H. JOHNSON, JR

2,430,512

CLEANING DEVICE FOR CHIMNEYS OR THE LIKE

Filed May 22, 1946

Fig. 1

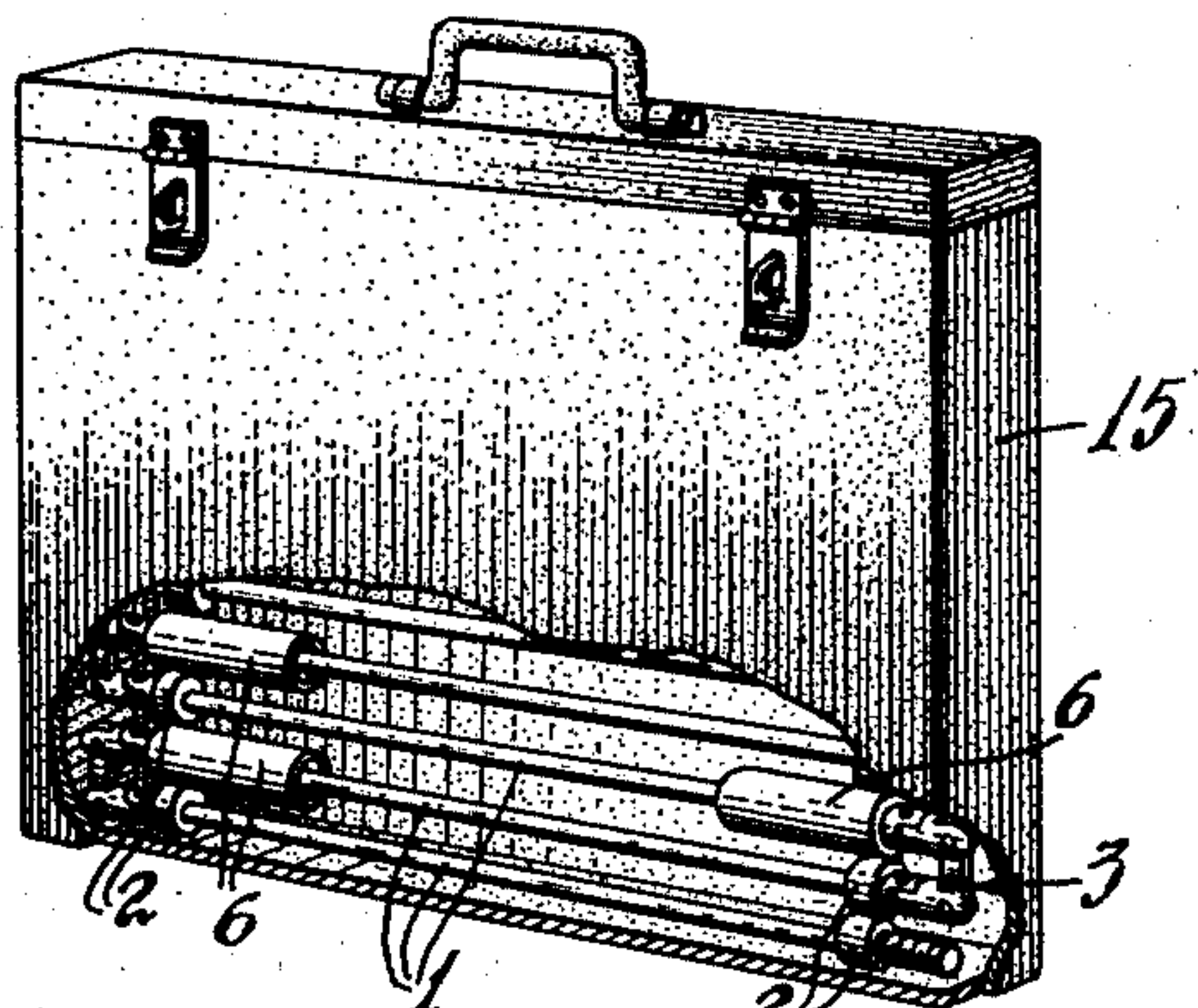


Fig. 2

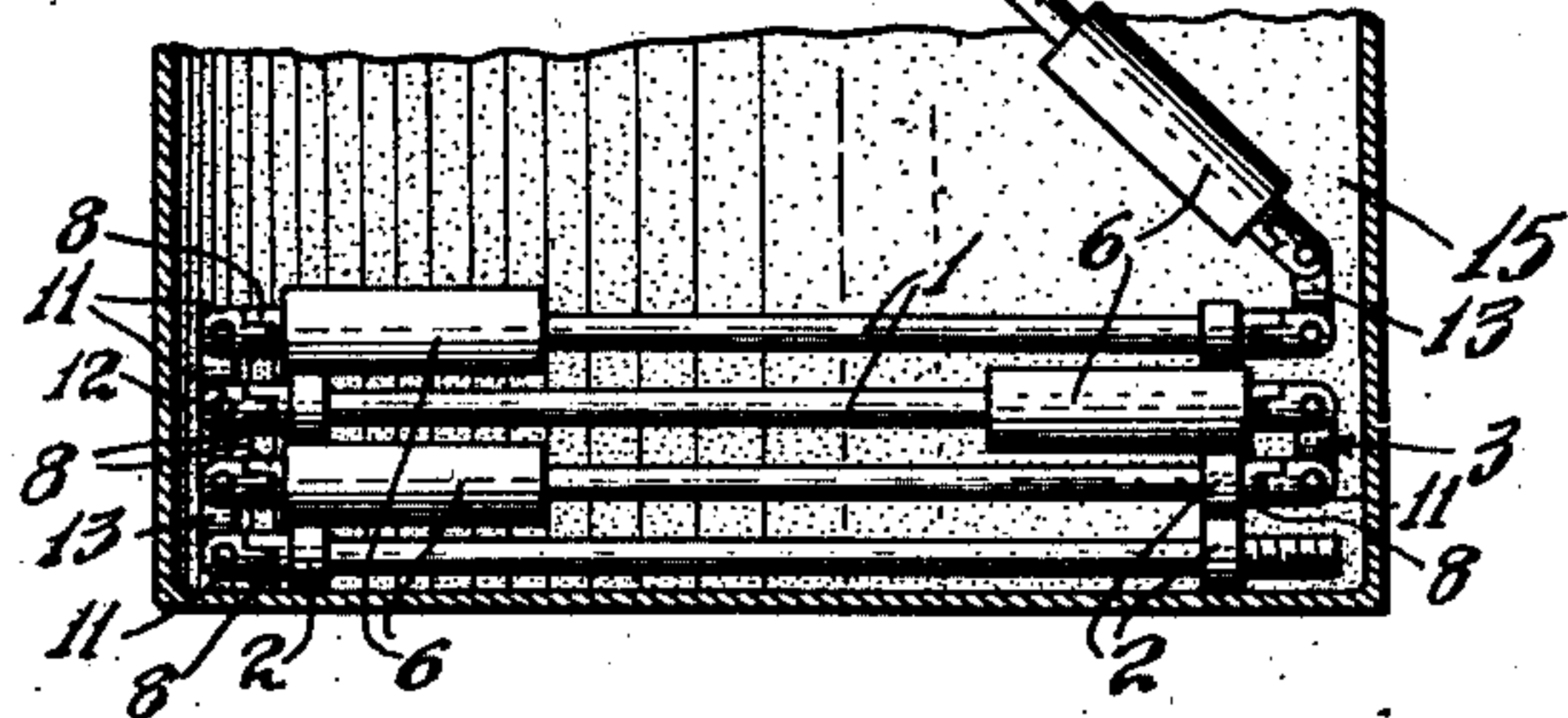
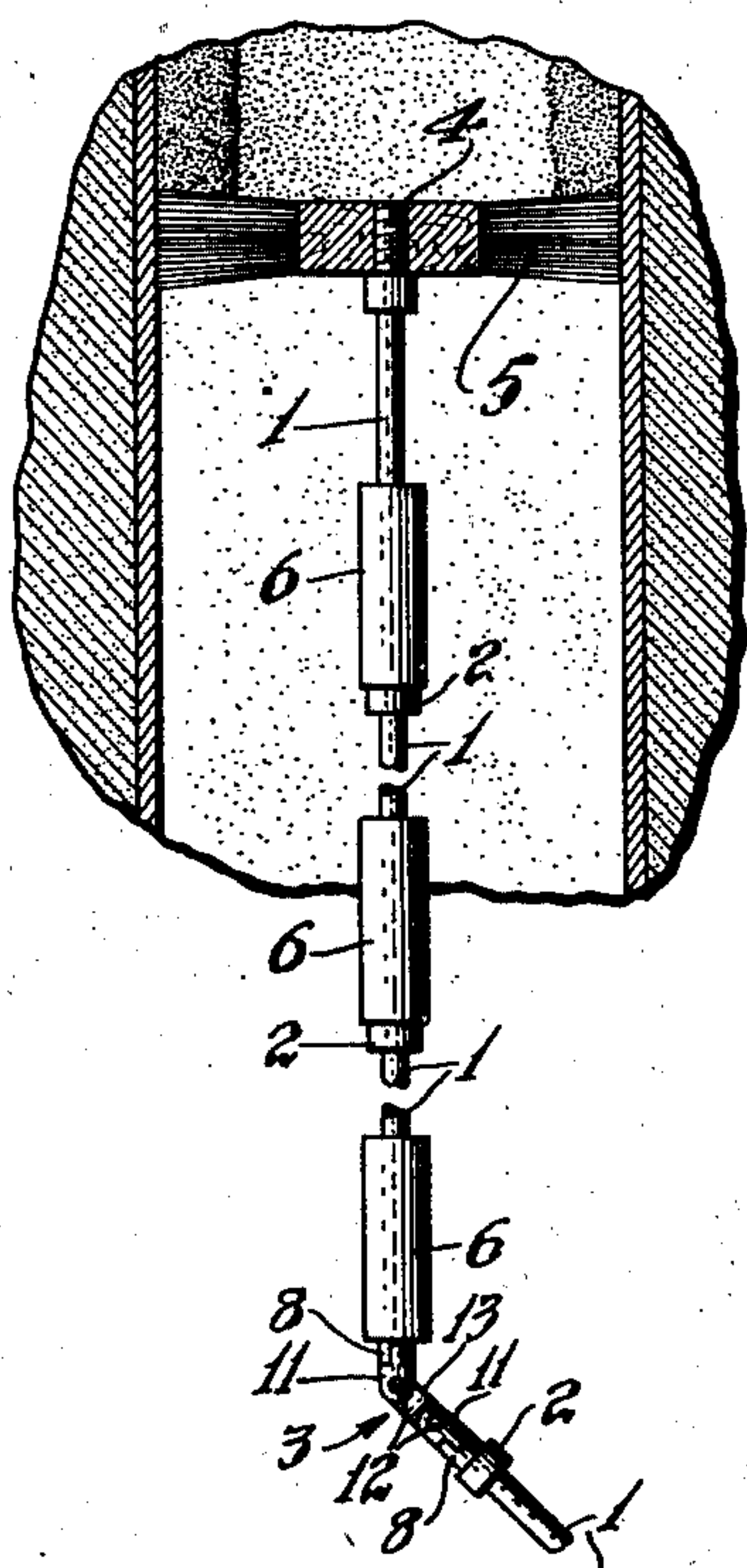


Fig. 6



Fig. 5

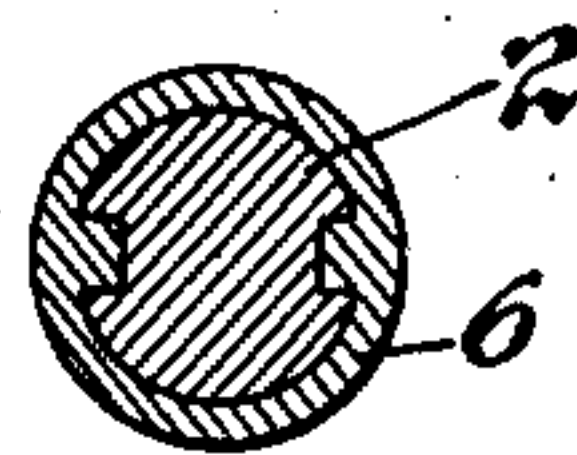
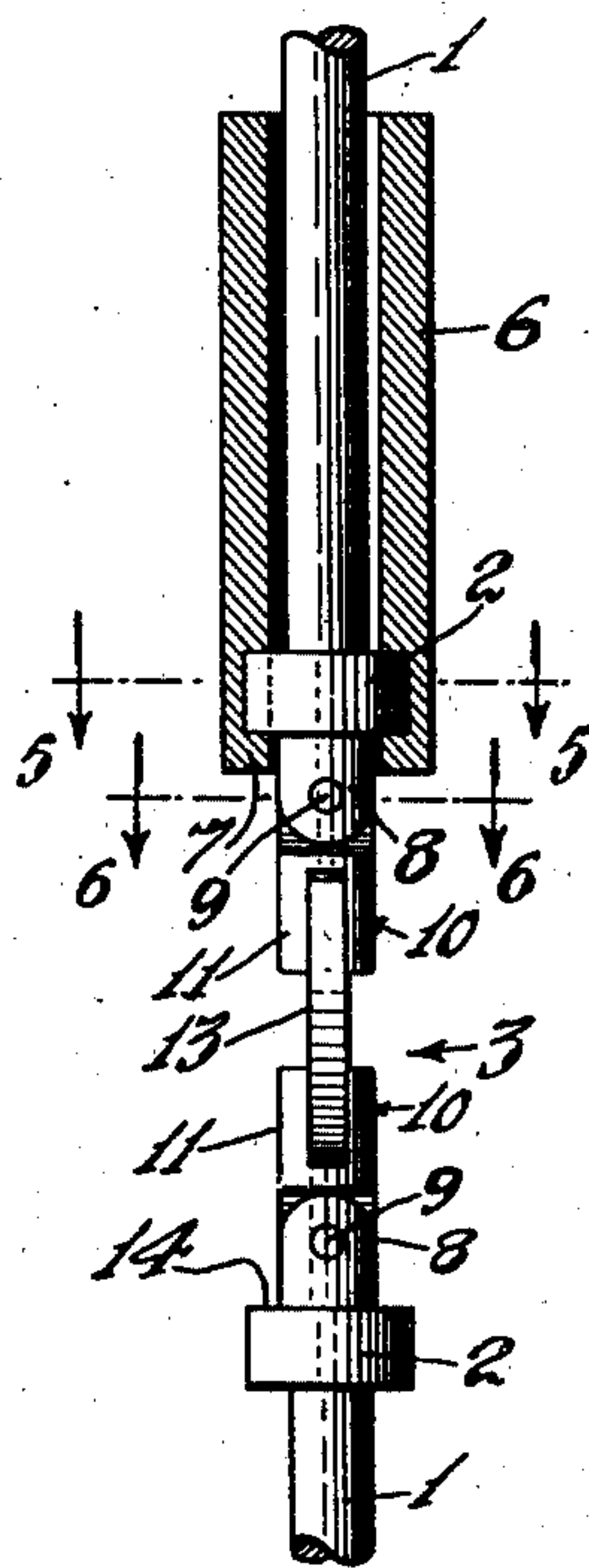
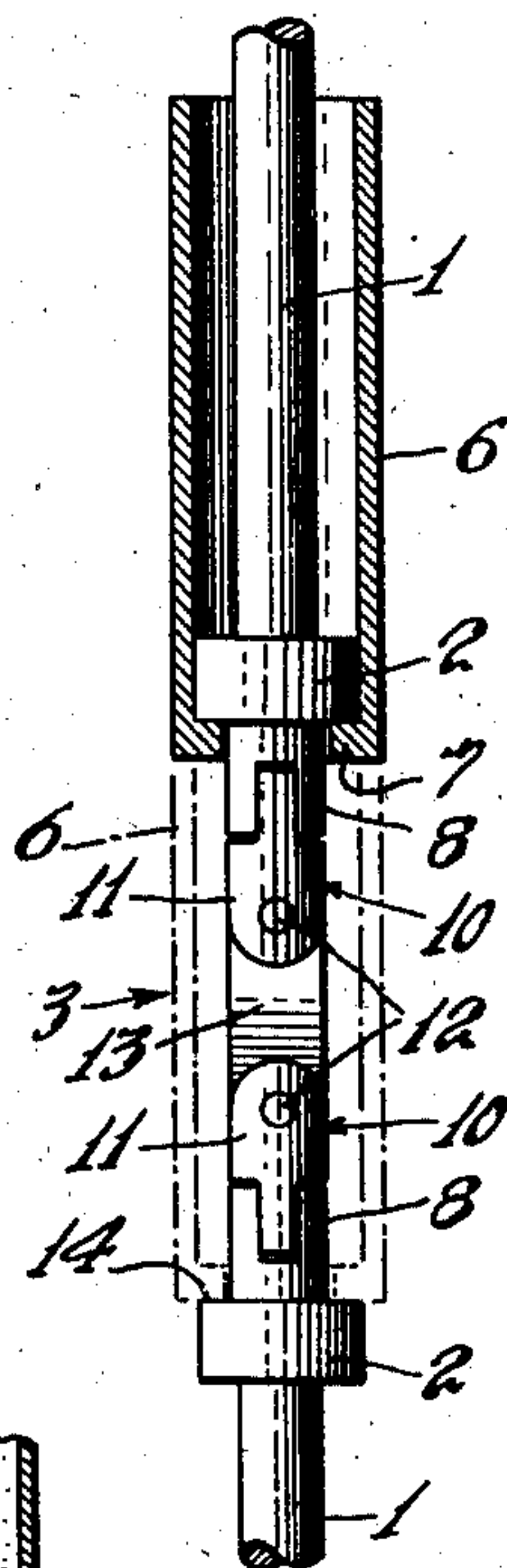


Fig. 4



INVENTOR.

Frank H. Johnson, Jr.
BY *Wm. J. Montague*
Agent

UNITED STATES PATENT OFFICE

2,430,512

CLEANING DEVICE FOR CHIMNEYS
OR THE LIKE

Frank H. Johnson, Jr., New York, N. Y.

Application May 22, 1946, Serial No. 671,500

1 Claim. (Cl. 287—98)

1

The invention relates to a cleaning device for chimneys or the like particularly for removing of soot, dust, incrustations or filth usually accumulated in chimneys.

It was necessary before to provide a ladder and it required at least three men to perform the cleaning of chimneys which extend through buildings of several floors. Hand brushes have been suggested before, though, for shorter chimneys, which, however, due to their construction could not pass spirally shaped conduits or channels.

It is, therefore, the main object of the present invention to provide a cleaning device which passes through all kinds of spiral channels without any difficulty.

It is another object of the present invention to provide a cleaning device which operates from the bottom to the top of the chimney regardless of its length, that means when extending through several floors of the building.

It is still another object of the present invention to provide a cleaning device which is labor saving, by allowing to be transported and handled by one man only.

With these and other objects in view which will become apparent in the following detailed description, the present invention will be clearly understood in connection with the accompanying drawing, in which:

Figure 1 shows a perspective view of a casing partly broken off disclosing a portion of the cleaning device in collapsed position;

Fig. 2 is an elevational view of the device partly taken out of the casing and its end having a brush in a portion of a chimney;

Figs. 3 and 4 show elevational and side views of the connection of two members of the device;

Fig. 5 is a sectional view along the lines 5—5 of Fig. 4; and

Fig. 6 is a sectional view along the lines 6—6 of Fig. 4.

Referring now to the drawings, the device comprises a plurality of rod-like members 1 having a collar extension 2, each pair of adjacent members 1 being connected by a universal joint 3. The top member 1 has a threaded end 4 adapted for receiving a brush 5 or any other suitable cleaning instrument.

Each member 1 is equipped with a sleeve 6 having a flanged lower end 7, which sleeves 6 retain the members 1 in about coaxial position when necessary.

The universal joint 3, shown by example in Figs. 3 and 4, comprises an ear shaped end 8 at opposite ends of each pair of adjacent members 1

2

which is connected by a pin 9, rivet, or the like with one end of a joint member 10, the other end of which is of ear-like shape, the ears 11, however, being set at an angle of 90° to the ears 8 of the members 1. A pin 12, or the like, connects the joint members 10 with a link 13, thus allowing any relative position between two adjacent members.

As stated before sleeves 6 are provided for retaining the members 1 in coaxial position, when necessary. The shoulder 14 of the upper collar 2 of the member 1 supports in this case the sleeve in its lowered position, as shown in dotted lines in Fig. 3.

It is clearly disclosed in Fig. 2, that the feeding of the members 1 into the chimney can be performed by one worker only, even if they have to be fed through spiral channels.

The present cleaning device for chimneys is adapted for use in chimneys of unlimited length, can be handled by one single worker, and can be transported in space saving manner, in a casing 15, valise or the like, when the members 1 are in collapsed position.

While I have disclosed the principles of my invention in connection with one embodiment, it will be understood that this embodiment is given by way of example only and not as limiting the scope of the invention as set forth in the appended claim.

I claim:

In a cleaning device, a plurality of rod members, a collar extension near the ends of each of said rod members, ear shaped ends on each of said rod members, a lug member connected with the end of each rod member, said lug members being pivotally connected with said rod members, a link member pivotally connected to each of said lug members, said link member turning in a plane 90° to the plane of the movement of the said lug members, and a sleeve member on each of said rod members, a shoulder of said collar extension supporting said sleeve in its lowered operative position, said rod members to be collapsed in inoperative position.

FRANK H. JOHNSON, JR.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,169,496	Knauff	Jan. 25, 1916
1,468,771	Arnold	Sept. 25, 1923