

(No Model.)

J. SCHWERTNER.
REED PIPE FOR ORGANS.

No. 539,595.

Patented May 21, 1895.

Fig. 1.

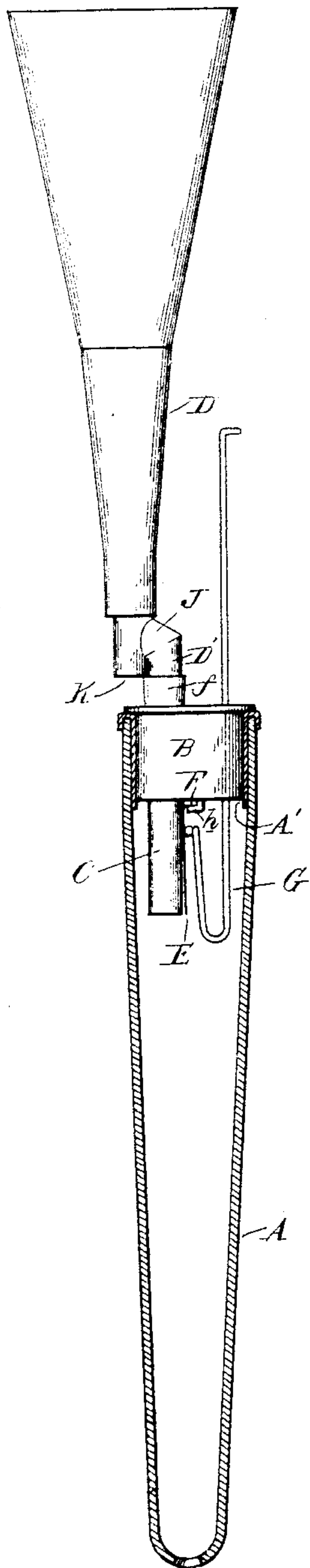


Fig. 2.

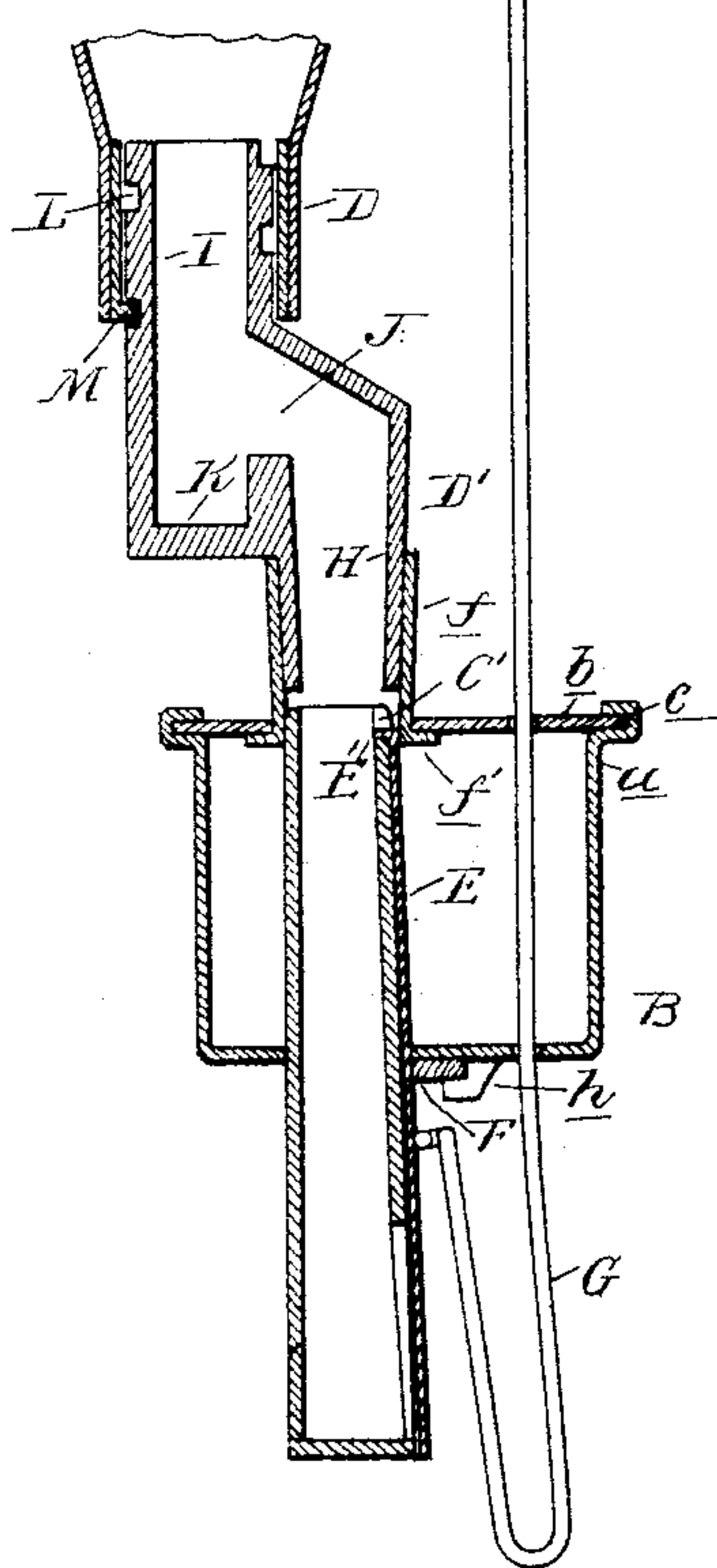


Fig. 5.

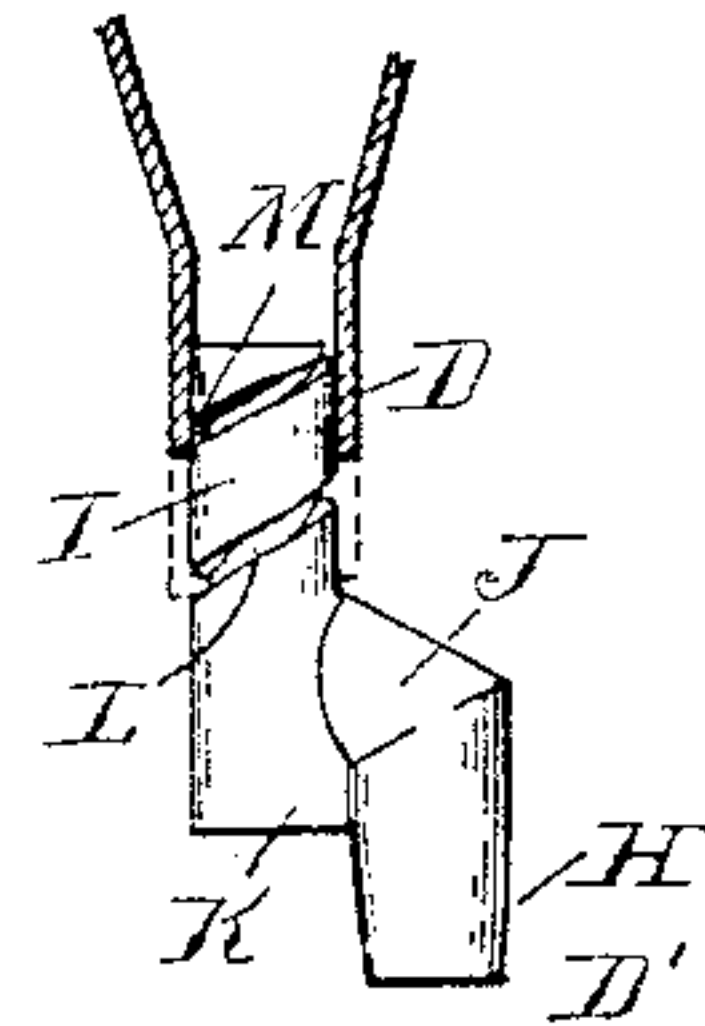


Fig. 3.

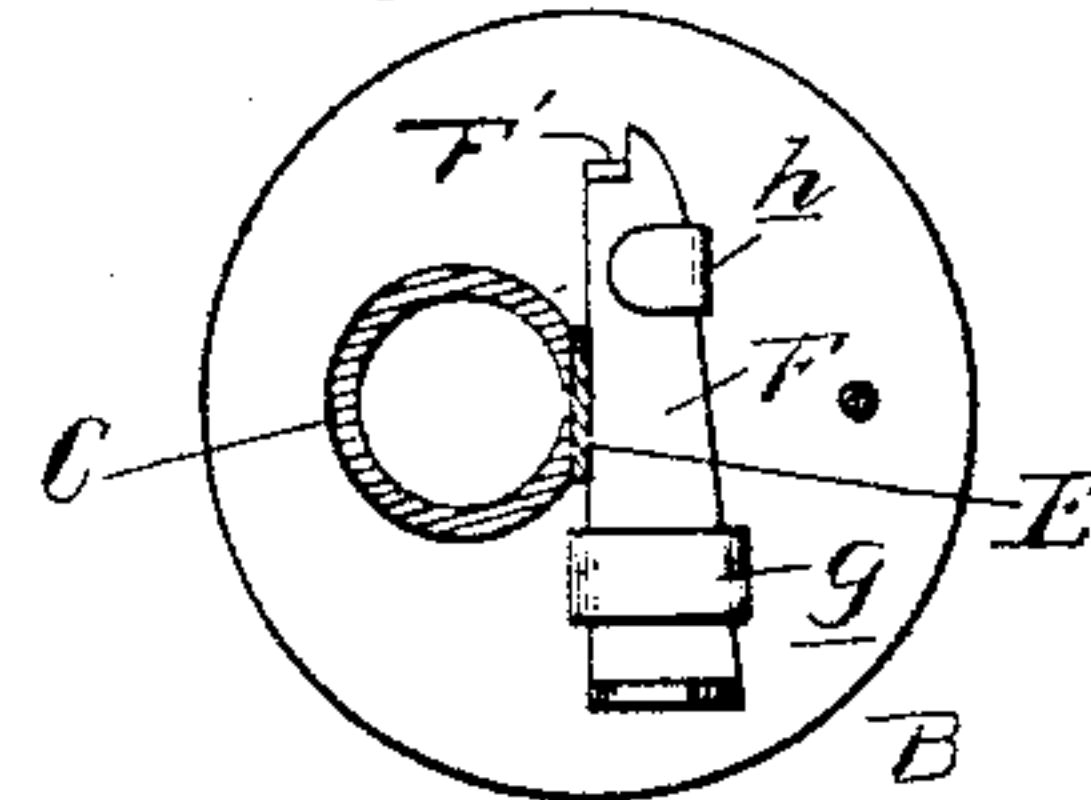
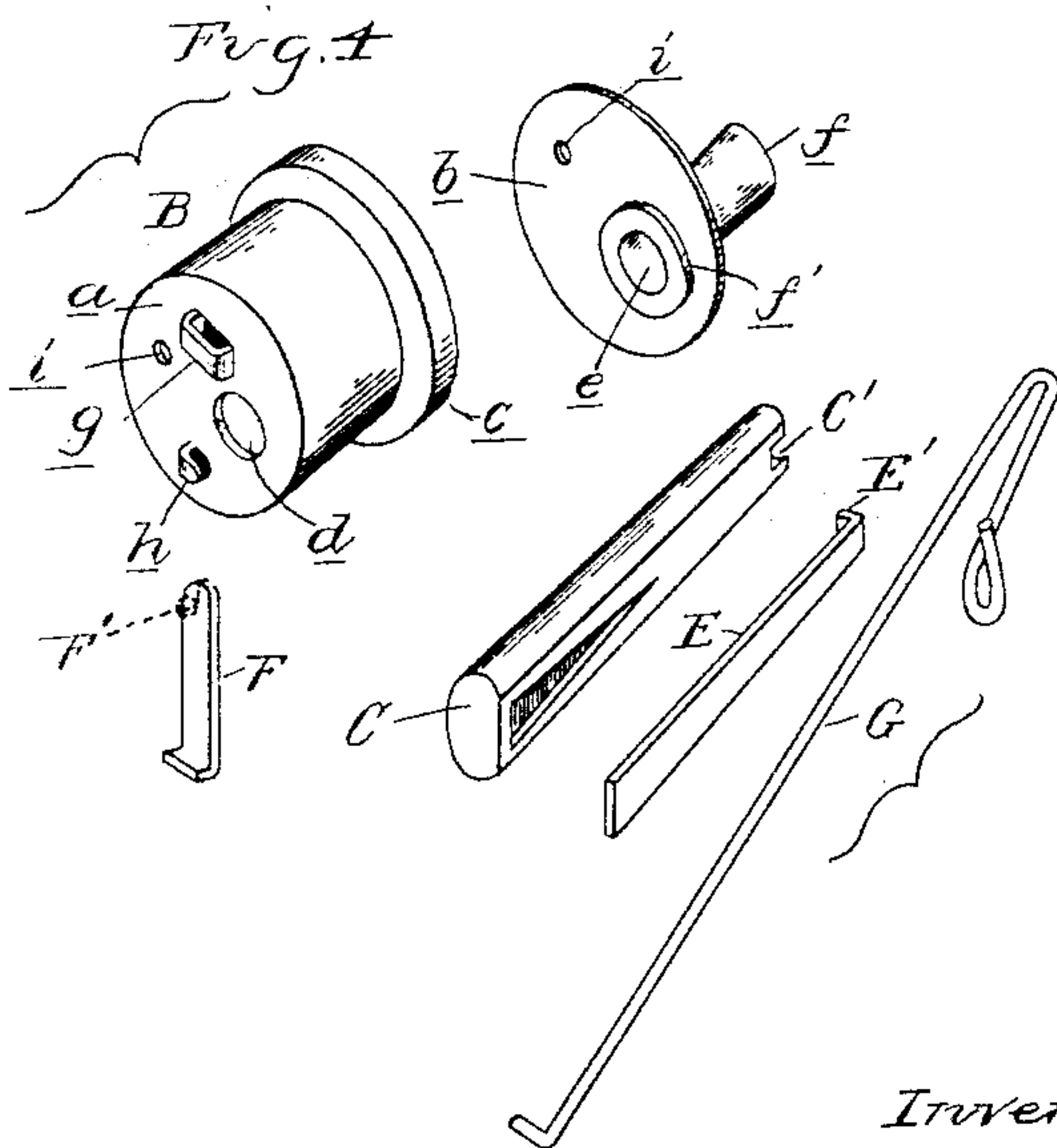


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH SCHWERTNER, OF DETROIT, MICHIGAN.

REED-PIPE FOR ORGANS.

SPECIFICATION forming part of Letters Patent No. 539,595, dated May 21, 1895.

Application filed February 10, 1894. Serial No. 499,756. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH SCHWERTNER, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Reed-Pipes for Organs, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the peculiar construction of the so-called "block" forming the stopper or cap for the foot tube, further in the construction of the securing device for the eschallot and reed, and further in the construction of a socket for the foot of the pipe in the block, formed by a tubular neck or nozzle, and further in the peculiar construction of the foot of the pipe, having means for the vertical adjustment of the pipe thereon, and comprising a dust trap between the pipe and reed, and further in the peculiar construction, arrangement and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a sectional elevation of my pipe. Fig. 2 is a vertical central longitudinal section through the block and the foot of the pipe. Fig. 3 is a bottom plan of the block, showing the manner of securing the eschallot and reed. Fig. 4 is a detached perspective view of the various parts. Fig. 5 is an elevation of the foot of the pipe.

A is the foot tube of ordinary construction preferably provided at its upper end with the lining A' of leather or other soft material.

B is the block forming the stopper or cap for the foot tube A. This block I form of sheet metal, preferably by pressing out a cup-shaped body *a* of a size to fit into the end of the foot tube, and then securing thereto the cap *b* having its edges projecting beyond the sides of the block to form an annular flange *c* which acts as a stop to limit the inward movement of the block. *d* is an aperture formed in the end of the body through which the eschallot is engaged, its inner end being fitted into the inner end of a sleeve or socket *f* secured in the aperture *e* of the cap, preferably by turning the flange *f'*. This sleeve is preferably tapered to receive the lower end of the pipe D, or the lower end of the foot D' thereof, thus forming a connection or coupling between the eschallot and tube. This

sleeve I make of sheet metal of suitable length to give a long bearing for the lower end of the pipe or its foot, and sufficiently flexible to prevent the danger of breakage of the pipe which occurs with a solid block.

In the present state of the art the eschallot and reed are secured in a solid block, by a wedge driven longitudinally into the block. These wedges frequently loosen and drop out, especially in tuning, as the reed spring is drawn longitudinally upon the reed. I overcome this objection by clamping the reed and eschallot in position by a wedge or other device, which clamps the eschallot against the block by a movement at substantially right angles to the longitudinal movement of the eschallot and reed spring, so that the movement of the parts in tuning, &c., cannot affect the clamp. I also secure the reed in position upon the eschallot against end movement.

The construction I prefer is shown and consists of the transversely moving wedge F on the end of the block, bearing with one face against the reed and with the other against the stationary abutment on the block. This abutment I show formed by lugs *g* and *h*, which also serve as guide bearings for the wedge. The wedge is prevented from accidental displacement by bending up a stop F' at its end. G is a reed spring, passing through apertures *i* in the ends of the block. The reed E is provided with a hook or stop E' at its inner end, engaging a notch C' in the eschallot C. When the wedge or clamp is in position the hook will be held in the notch and thus lock the reed in position.

It will be observed that this structure of the block of sheet metal makes a light article, which is easily manufactured. The eschallot is held in position at two points which holds it firmly in the block. The sleeve *f* not only gives a long flexible support for the end of the tube, but forms a coupling between the eschallot and tube or its foot.

The parts when assembled, as shown in Fig. 1, operate in the usual known manner.

Between the block or the sleeve *f* and the pipes proper is the foot D' consisting of the nipple H adapted to engage in the sleeve *f*, the foot tube I arranged out of line with the nipple H and the connecting passage J between the two. The foot tube I has an ex-

tension K below the passage J which acts as a dust trap.

At the upper end of the tube I is a spiral groove L with which a lug or lugs M on the lower end of the pipe D is adapted to engage. By turning the pipe D it is evident that a vertical adjustment thereof will be effected on its foot tube. It is evident also that any dust falling into the pipe D will be caught in the trap K and therefore cannot reach the reed.

While I have shown my tube adjustable in relation to its foot of a special construction it is evident that this adjustment may be applied to other constructions, and still come within the spirit of my invention.

What I claim as my invention is—

1. In a reed pipe for organs, the combination with the eschallot of the block formed of sheet metal, consisting of a cup shaped body and a cap, the body and cap being apertured to receive the eschallot, substantially as described.

2. In a reed pipe for organs, the combination with the eschallot and foot tube, of a block formed of sheet metal consisting of a cup shaped body, a cap extending beyond the body and forming a marginal flange adapted to bear against the top of the foot tube, substantially as described.

3. In a reed pipe for organs, the combination with the pipe, eschallot and block, of a sleeve projecting from the block and in the opposite ends of which the ends of the eschallot and pipe are engaged, substantially as described.

4. In a reed pipe for organs, the combination with the pipe and eschallot of a hollow block apertured at top and bottom, a tapering sleeve secured in the aperture in the top, in the top of which the lower end of the pipe engages, and the eschallot entered through the aperture in the bottom and engaged with the lower end of the sleeve, substantially as described.

5. In a reed pipe for organs, the combina-

tion of the longitudinal apertured block of the eschallot and reed detachably engaged therein, and a laterally movable clamp for securing them in the block, substantially as described.

6. In a reed pipe for organs, the combination of the longitudinally apertured block of the eschallot and reed detachably engaged therein, a wedge movable at right angles to the movement of the reed, and an abutment on the block against which said wedge bears, substantially as described.

7. In a reed pipe for organs, the combination of the eschallot, the reed, the sheet metal block apertured to receive the same, of guide bearings struck up from the block beside the eschallot, and a wedge engaging said guide bearings and the reed, substantially as described.

8. In a reed pipe for organs, the combination of the eschallot having a notch at its end, of a reed having a hook engaging said notch, substantially as described.

9. In a reed-pipe for organs, the combination with a pipe, of a foot having a lateral bend and a central channel, and a vertical wall located at the bend projecting upwardly into the channel and located laterally beyond the center of the tube to form a pocket beneath the tube, substantially as described.

10. In a reed-pipe for organs, the combination with a pipe, of a foot having a lateral bend and a central channel, and a vertical wall located at the bend projecting upwardly into the channel and located laterally beyond the center of the tube to form a pocket beneath the tube, and a longitudinally adjustable and removable connection between the pipe and foot, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH SCHWERTNER.

Witnesses:

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O. F. BARTHEL.