

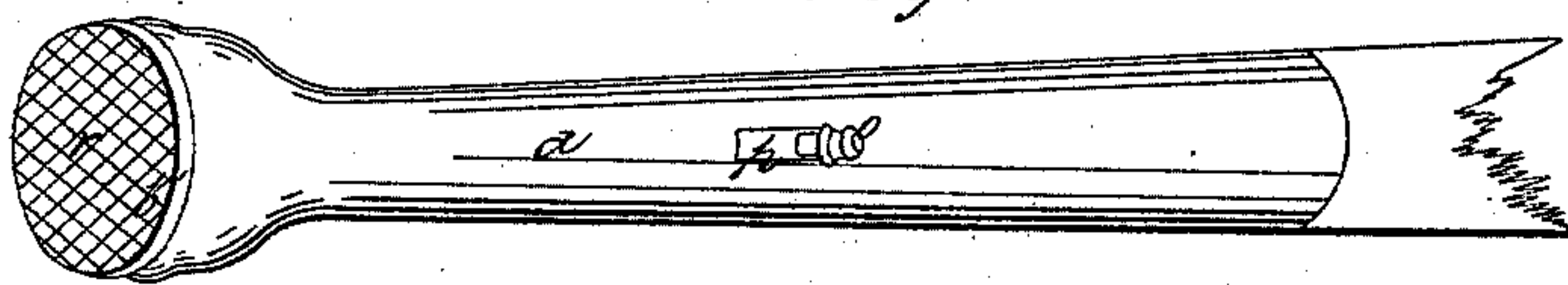
*J. G. Bugbee,*

*Crutch,*

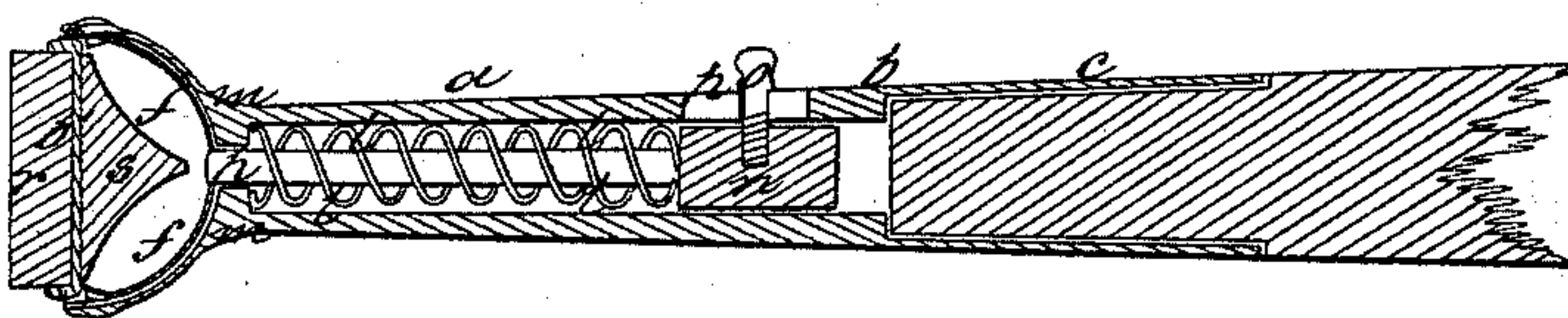
*N<sup>o</sup> 49,371,*

*Patented Aug 15, 1865.*

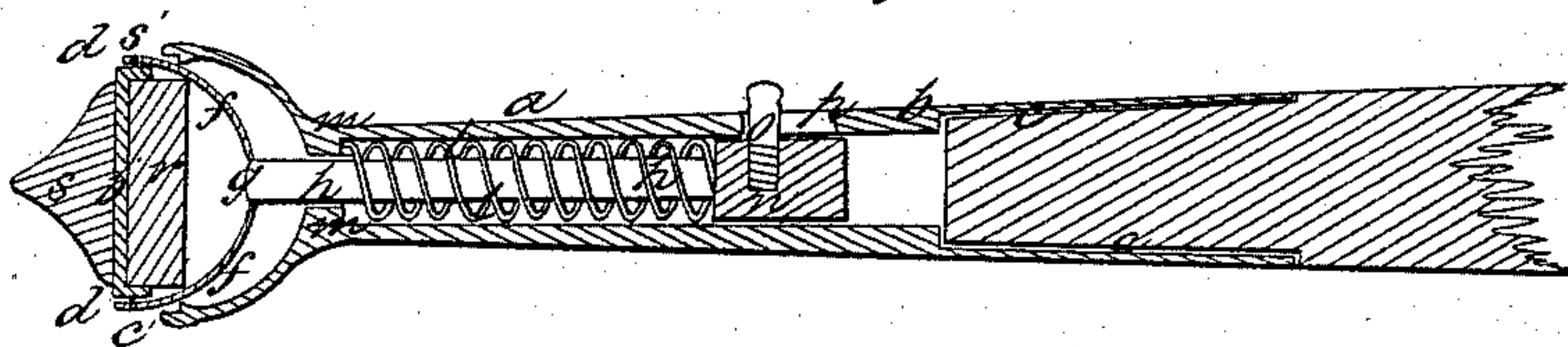
*Fig. 1*



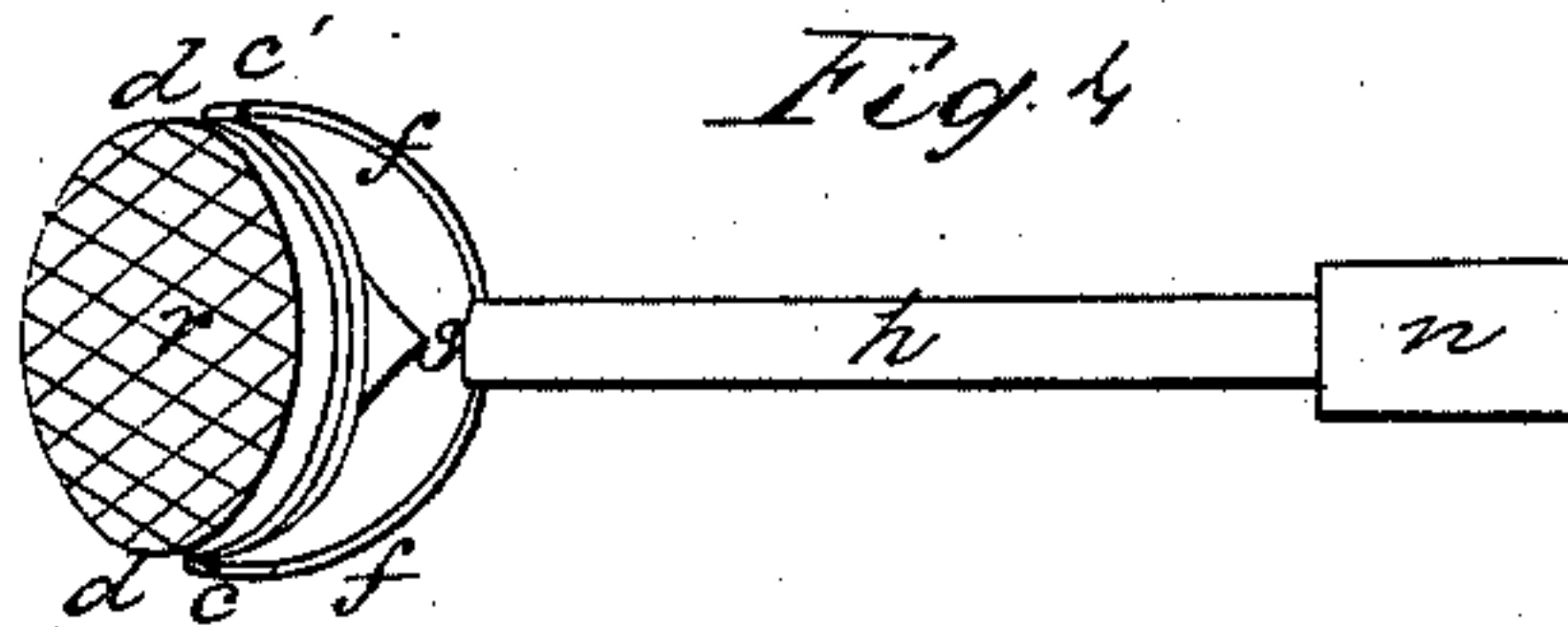
*Fig. 2*



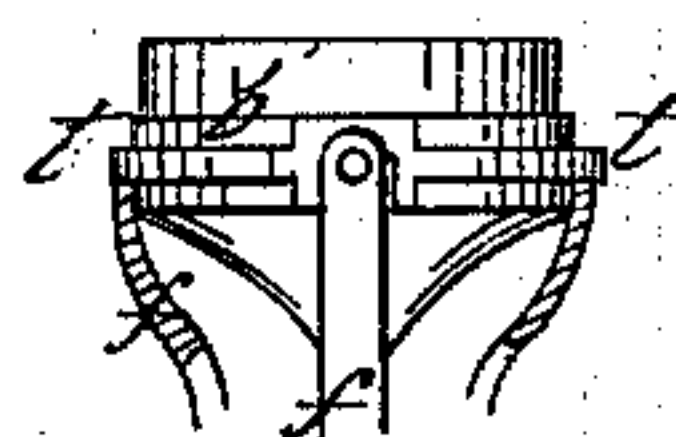
*Fig. 3*



*Fig. 4*



*Fig. 5*



*Witnesses*  
*Thos. Tusch*  
*Wm. Truett*

*Inventor*  
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*By H. H. Co.*



# UNITED STATES PATENT OFFICE.

J. G. BUGBEE, OF BANGOR, MAINE.

## IMPROVEMENT IN REVOLVING CRUTCH-FEET.

Specification forming part of Letters Patent No. 49,371, dated August 15, 1865.

*To all whom it may concern:*

Be it known that I, J. G. BUGBEE, of Bangor, in the county of Penobscot and State of Maine, have invented a new and useful Improvement in Crutch-Feet; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to accompanying drawings, forming part of this specification, in which—

Figure 1 is a view of the crutch-foot with its smooth end out; Fig. 2, a central vertical section of the same; Fig. 3, a similar view with the foot reversed; Fig. 4, a view showing foot and the frame in which it is hung detached from the crutch; Fig. 5, a detail view.

Similar letters of reference indicate like parts.

In the use of crutches it has long been considered quite a desideratum to arrange their feet in such a manner that they can be readily and easily adapted, when so desired, for slippery or icy sidewalks, and therefore the present invention has for its object the accomplishment of the above result, and which is secured thereby, it consisting in hanging and arranging the foot, formed upon one end with one or more sharp points or projections, and upon the other with a flat or even surface, within the lower end of the crutch in such a manner that it can be easily revolved therein, and thus adapted to the condition of the sidewalk upon which the person using the same is walking.

*a a* in the drawings represent the foot portion of a crutch, having at its end *b* a socket, *c*, in which the leg or main portion of the crutch is inserted and fastened in any proper manner. *b'* is the foot, hung by pivots *c' c'* in and between the outer ends, *d d*, of the bent bar *f*, secured at *g* to a rod, *h*, passing upward through the foot portion *a*, around which is wound a spiral spring, *l*, resting at one end upon the shoulder *m* of the foot portion, upon the other end of which rests the collar *n* of the said rod *h*. *o* is a thumb-screw inserted in said collar *n*, passing through the slot *p* of foot portion *a*, for convenience in moving the rod *h*, as will be presently described.

In one end of the foot *b* a rubber cushion or pad, *r*, is inserted and held in any proper manner, its exterior surface being made of a flat shape, while the other end portion of the foot is made to come to a point, as seen at *s*, a projecting rim, *t*, being formed upon and around the foot *b*, which comes to a bearing against the outer end of the main portion *a*, thus holding the foot stationary thereon.

If the sidewalks are icy, or for any other reason it should be desired to use a foot of such a form as to prevent any possibility of its slipping when used in walking, it is only necessary to reverse the position of the foot by simply turning it within its frame, first, however, having moved it away from the main portion *a* by pressing down upon the pin *o* and bringing the pointed end thereof upon the outside, when the spring retracts the foot, bringing it again to a bearing and holding it firmly against the main portion of the crutch, as hereinbefore described.

The foot *b* may be made in various shapes other than that herein described, and its pointed end may be formed with a series of points if desired; and also the rubber cushion may be dispensed with, but I deem it best to use it; and there are many other variations which can be made in the foot, not only in its construction, but in the manner of hanging it to and within the end of the main portion of the crutch, without departing from the principle of the present invention as hereinbefore stated, and therefore I do not intend to limit myself to the particular construction and arrangement described.

I claim as new and desire to secure by Letters Patent—

A reversible crutch-foot, arranged and operating substantially in the manner described, and for the purposes specified.

The above specification of my invention signed by me this 6th day of April, 1865.

J. G. BUGBEE.

Witnesses:

E. F. DILLINGHAM,  
D. D. STEWART.