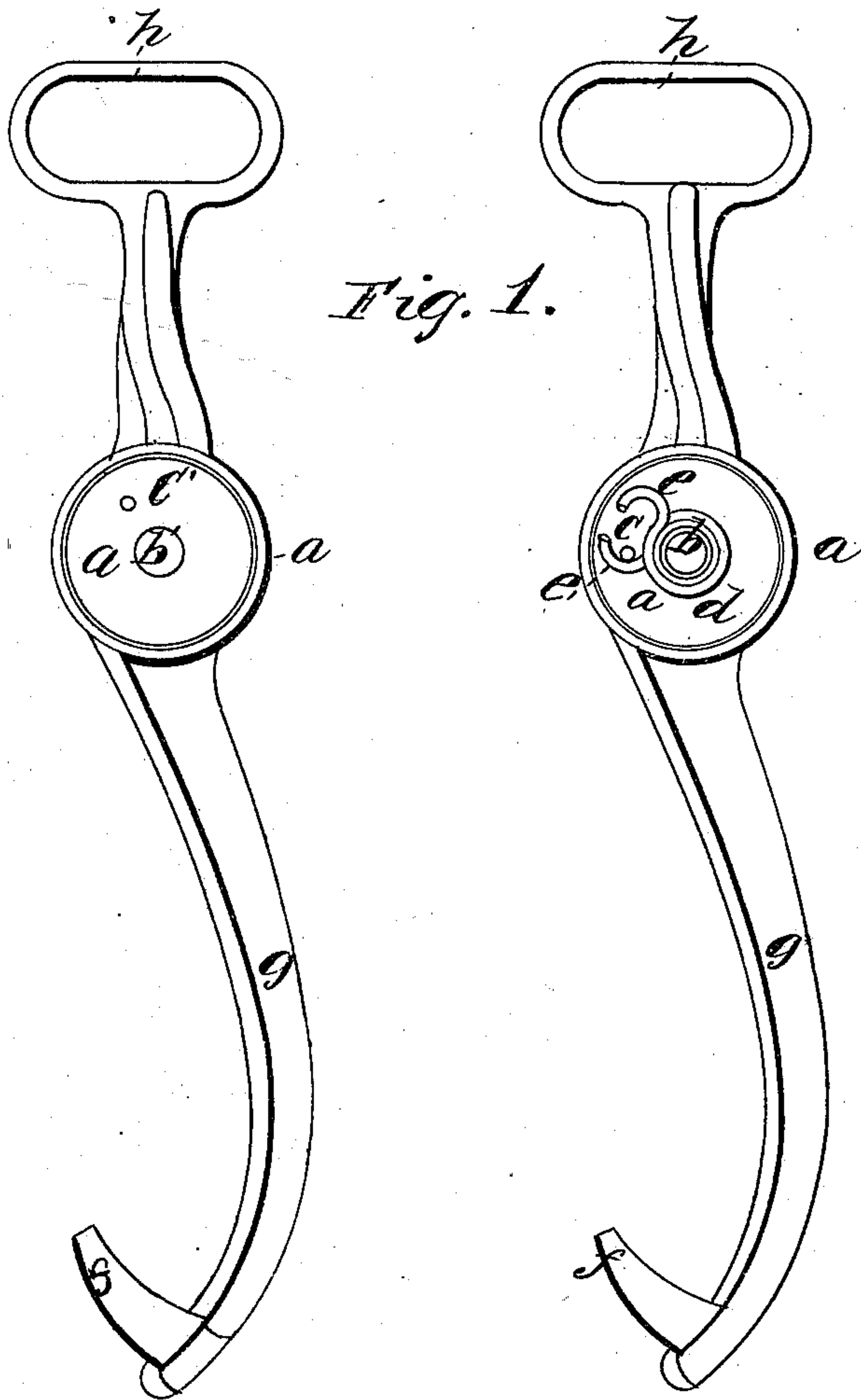


*R. Hayden.*

*Ice Tongs.*

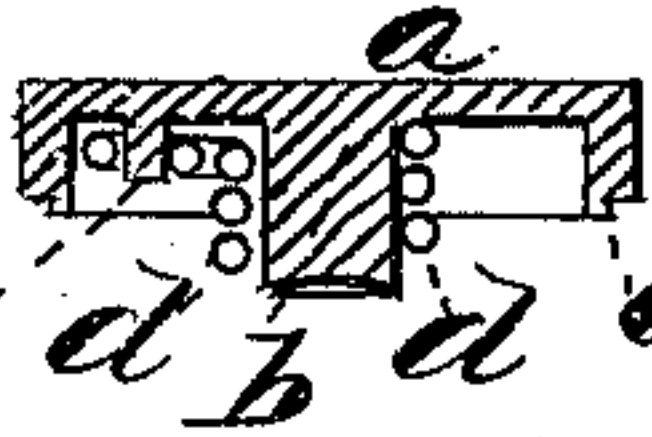
*N<sup>o</sup> 87,491.*

*Patented Mar. 2, 1869.*



*Fig. 1.*

*Fig. 2.*



*Witnesses*

*E. M. Bliss  
J. W. Bliss*

*Inventor*

*Randolph Hayden*

# United States Patent Office.

RANDOLPH HAYDEN, OF MIDDLETOWN, CONNECTICUT, ASSIGNOR  
TO FERREE AND HAYDEN, OF SAME PLACE.

Letters Patent No. 87,491, dated March 2, 1869.

## IMPROVEMENT IN ICE-TONGS.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern :

Be it known that I, RANDOLPH HAYDEN, of Middletown, county of Middlesex, and State of Connecticut, have invented certain new and useful Improvements in the Manufacture of Ice-Tongs; and, to enable others skilled in the art to make and use the same, I will proceed to describe, reference being had to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this invention consists in making ice-tongs of cast-metal, and further, of making them malleable.

It further consists of casting the handle parallel with the face of the joint. Then, after having been rendered malleable, giving the handle a quarter twist, to bring it at right angles with the joint, or parallel with each other.

In the accompanying drawings—

Figure 1 shows the two parts of the tongs as they are cast, and before they are made malleable.

Figure 2 is a section of the joint.

*a* is the joint, chambered out of each half, to receive an actuating-spring.

*a'* is a lip, formed upon one half of the tongs, which is designed to fit into a recess, *a''*, formed in the other half of the tongs, which steadies the two parts in their true relative position with each other.

*b* is a hub, formed in one half, which enters the orifice *b'* in the other half, and when the two parts are put together, they will be firmly secured by heading the outer end of said hub *b*.

*c* are stud-pins, cast in the chamber of the joint-plate.

*d* is a spiral spring, wound closely, and having hooks, *e*, formed on each end thereof.

This spring is placed over the hub *b*, and one of the hooks takes hold of one of the pins *c* in one half of the tongs, while the other hook takes hold of the pin *c'* in the other half, the office of which is to draw the claw-points together.

*f* are the claw-points, formed upon the lower ends of the arms *g*.

I propose sometimes to provide these claws with steel points, in order to produce a harder or sharper claw, if it shall be found necessary.

*h* are the handles, cast parallel with the face of the union joint.

After these two parts have been cast, as described, they are subjected to the process of being rendered malleable, after which the handles *h* are twisted a quarter turn from the position as shown, which will bring them parallel with the hub, or at right angles with the face of the joint-plate.

Thus, I am enabled to produce a better, cheaper, and more desirable article for use and trade.

I believe I have thus shown the nature, construction, and advantage of this invention, so as to enable others skilled in the art to make and use the same therefrom.

What I claim, and desire to secure by Letters Patent, is—

Cast-metal ice-tongs, constructed substantially as shown and described, as an improved article of manufacture.

Witnesses: RANDOLPH HAYDEN. [L. s.]

E. W. BLISS,

JEREMY W. BLISS.