

J. Ryals,

Shears.

No. 87,369.

Patented Mar. 2. 1869.

Fig. 1.

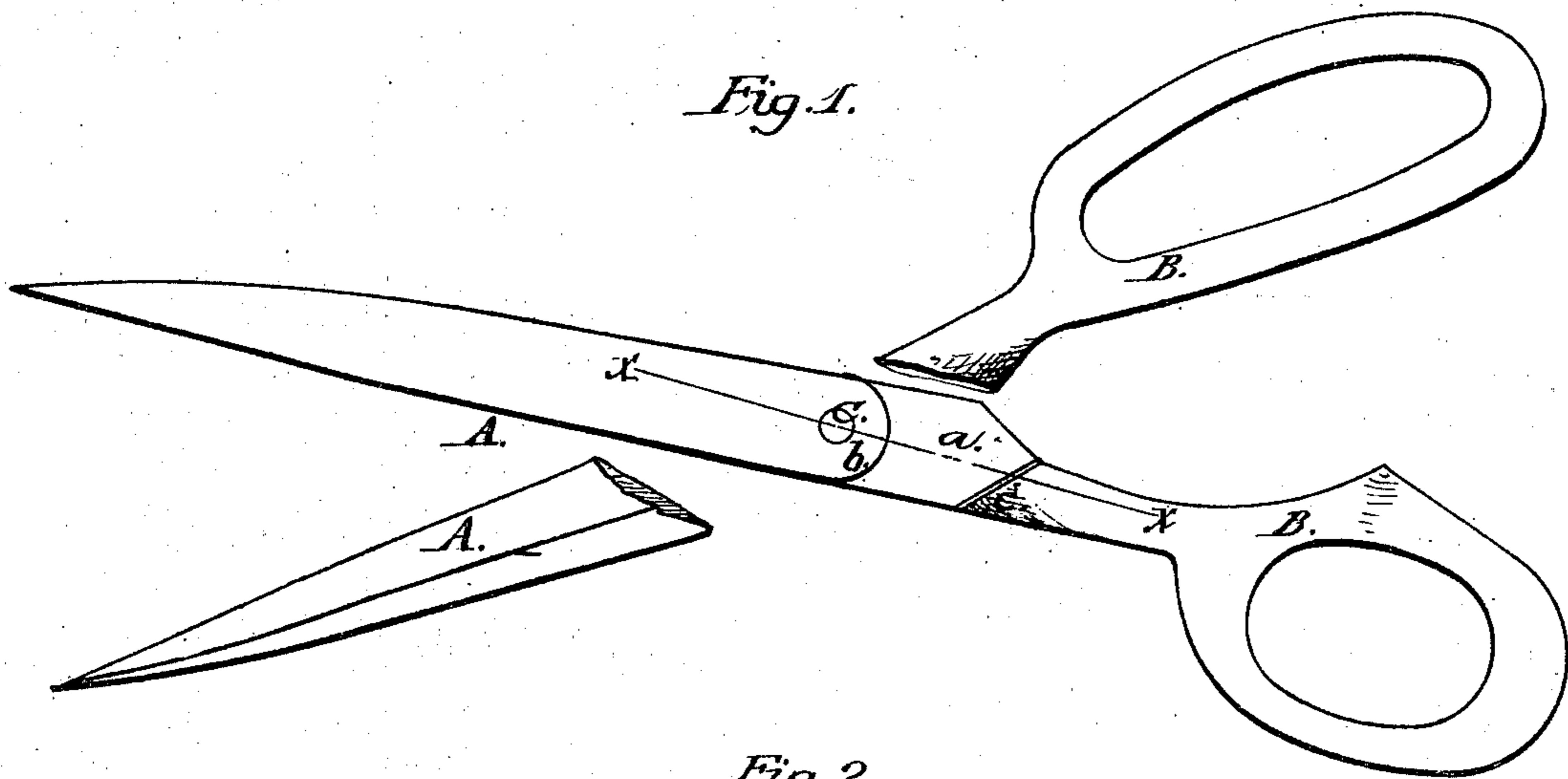


Fig. 2.



Witnesses:

Theo. Fische  
Wm. F. F. F.

Inventor:

Jo. Ryals  
Per. H. H. H.  
Attys

# United States Patent Office.

JOSEPH RYALS, OF TERRYVILLE, CONNECTICUT.

*Letters Patent No. 87,369, dated March 2, 1869.*

## IMPROVEMENT IN THE CONSTRUCTION OF SHEARS.

*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, JOSEPH RYALS, of Terryville, in the county of Litchfield, and State of Connecticut, have invented a new and useful Improvement in Shears; and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and useful improvement in that class of shears which are constructed of malleable cast-iron, and have blades of steel welded thereon to form the cutting-portion.

The present invention consists in casting the handles, recesses, stops, and bearings, in such a smooth and perfect manner that they can be fitted together, without further grinding, filing, or fitting than that required to fit and polish the steel portion of the blades.

In the accompanying sheet of drawings—

Figure 1 is a side view of my invention, partly in section.

Figure 2, a section of the same, taken in the line  $x$ , fig. 1.

Similar letters of reference indicate like parts.

A A represent the two blades of a pair of shears, and B B, the handles thereof.

These two parts are connected by a pivot or rivet, C, and the handles B B, near where the pivot or rivet passes through, are cast with recesses, in such smooth and perfect manner as to fit without grinding or filing.

By this means a great deal of labor is saved in filing up the shears, after being cast, and in fitting the two parts together.

At present the handles are cast so that the surfaces or spaces between the pivot or rivet C, and the steps or ledges  $c$ , work in contact with each other, and all to be filed and made perfectly true, in order that they may work freely over each other. This is attended with considerable labor and expense, so much so, that finishing up a dozen pairs of shears, a file, worth fifty cents, is completely used up or worn out.

By my improvement, this labor and expense are nearly fully obviated.

I claim, in the construction of shears, with malleable cast-iron handles, having steel cutting-surfaces welded thereto, the handles, with their stop and bearings cast so as to fit without grinding or filing, as set forth.

JOSEPH RYALS.

Witnesses:

ALEXANDER POND,  
WILLIAM LEVICK.