

JOSEPH SHARP.

Leather Hose.

No. 123,365.

Patented Feb. 6, 1872.

Fig. 4

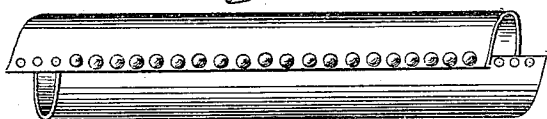


Fig. 3

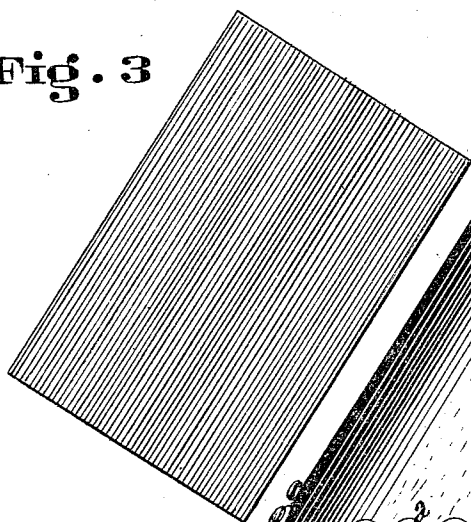


Fig. 1

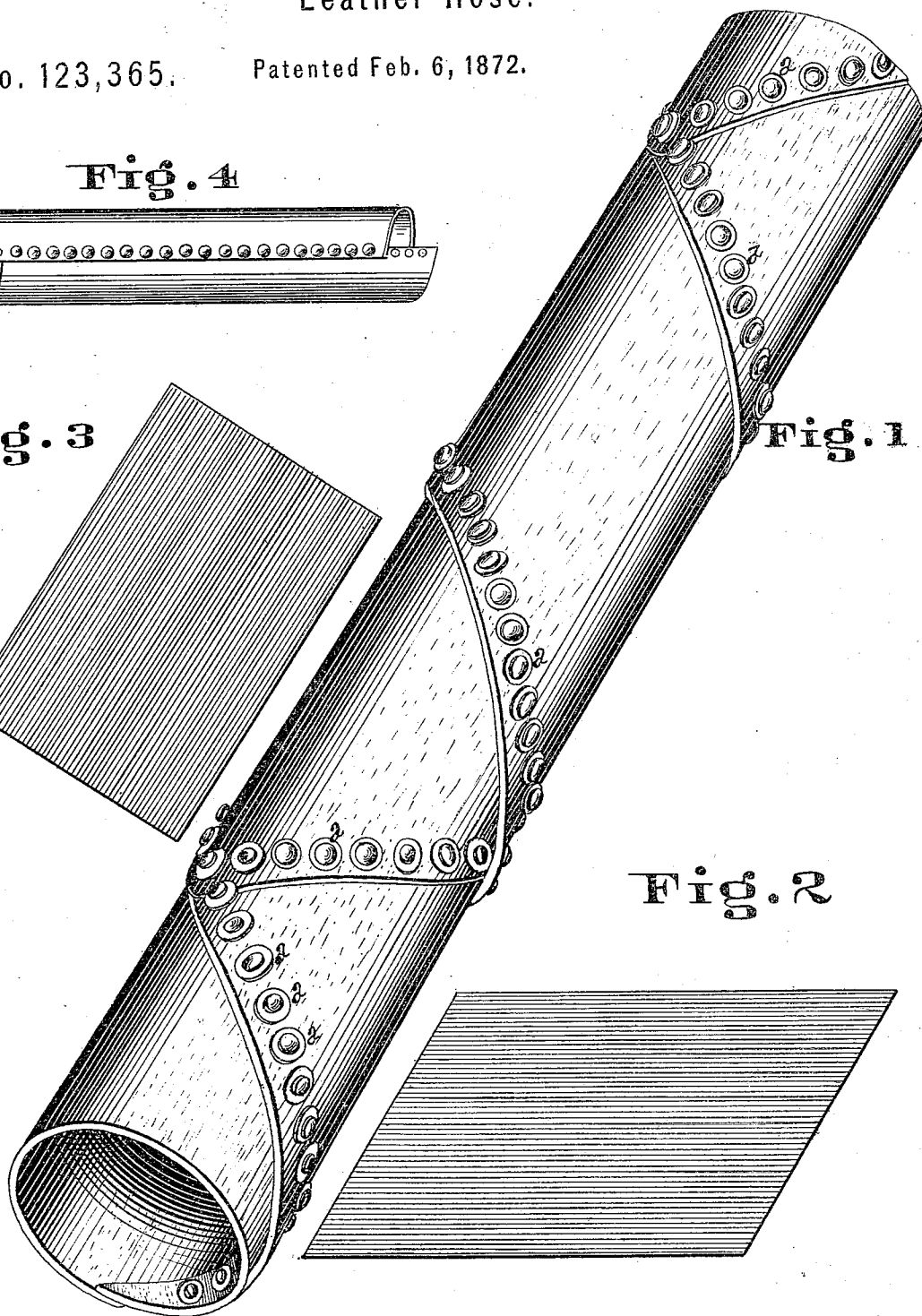
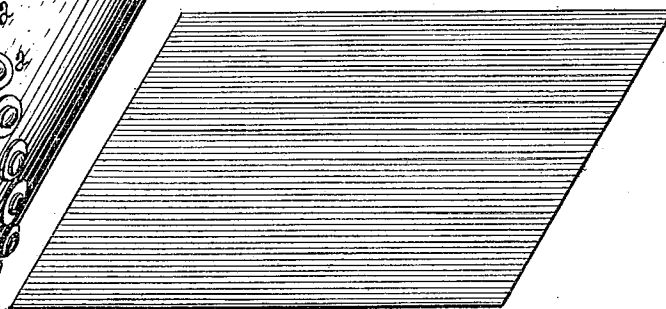


Fig. 2



Attest

*Henry Millward*  
*Alex. Fiedicke*

Inventor

*Joseph Sharp*  
By *F. Millward*  
Attorney

# UNITED STATES PATENT OFFICE.

JOSEPH SHARP, OF CINCINNATI, OHIO.

## IMPROVEMENT IN HOSE.

Specification forming part of Letters Patent No. 123,365, dated February 6, 1872.

I, JOSEPH SHARP, of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Improvement in Leather Hose, of which the following is a specification:

### *Nature and Object of Invention.*

My invention consists of a new construction of leather hose, by which the joints are formed spirally both lengthwise and crosswise of the sheets of leather of which the hose is formed, the purpose and effect being to give greater strength with a given thickness of leather and form all the joints without waste of material.

### *Description of the Accompanying Drawing.*

Figure 1 is a perspective view of a short length of hose constructed in accordance with my improvement. Fig. 2 is a representation of a sheet of leather cut to the necessary form to form hose of ordinary construction. Fig. 3 is a representation of a sheet of leather cut to form hose of my improved construction, showing it to be of such form as to avoid waste of material. Fig. 4 illustrates the old style of hose formed from the sheet shown in Fig. 2.

### *General Description.*

The sheets of leather necessary to form my improved spiral-joint hose are cut of the shape shown in Fig. 3, the width and length being such as to use the material to the best advantage. The form being rectangular and not beveling, like the old form, at the end, there is no waste of material in the construction of the hose. The sheets are bent spirally, as shown at Fig. 1, and connected by rivets *a* both at the

sides and ends of the sheets without any corner joints being occasioned or waste of material rendered necessary. In the old construction of hose having a longitudinal seam throughout its entire length it is necessary that the ends of the sheets be cut beveling and the material be thus wasted in order to avoid the corner-joints, which are difficult to make tight and impossible to avoid if the sheets are cut square at the ends. The formation of the ordinary hose is illustrated in Fig. 4, the inclined cut of the sheet causing an overlap which avoids the corner-joint.

Hose constructed in accordance with my improvement will possess greater strength for a given thickness of material than if made like Fig. 4, as I have conclusively proved by careful experiments; and, in addition to this advantage, has the additional one of protection to the hose by having rivet-heads to rest upon the ground in all directions.

### *Claim.*

A riveted hose, composed of sheets of leather or other suitable material, the sides of which are cut parallel and their ends at a right angle to their sides in order that when their edges are riveted together, as shown, the joints shall be formed spirally both lengthwise and crosswise of the sheets, for the purpose specified.

In testimony of which invention I hereunto set my hand.

JOSEPH SHARP.

Witnesses:

FRANK MILLWARD,  
J. L. WARTMANN.