

No. 622,222.

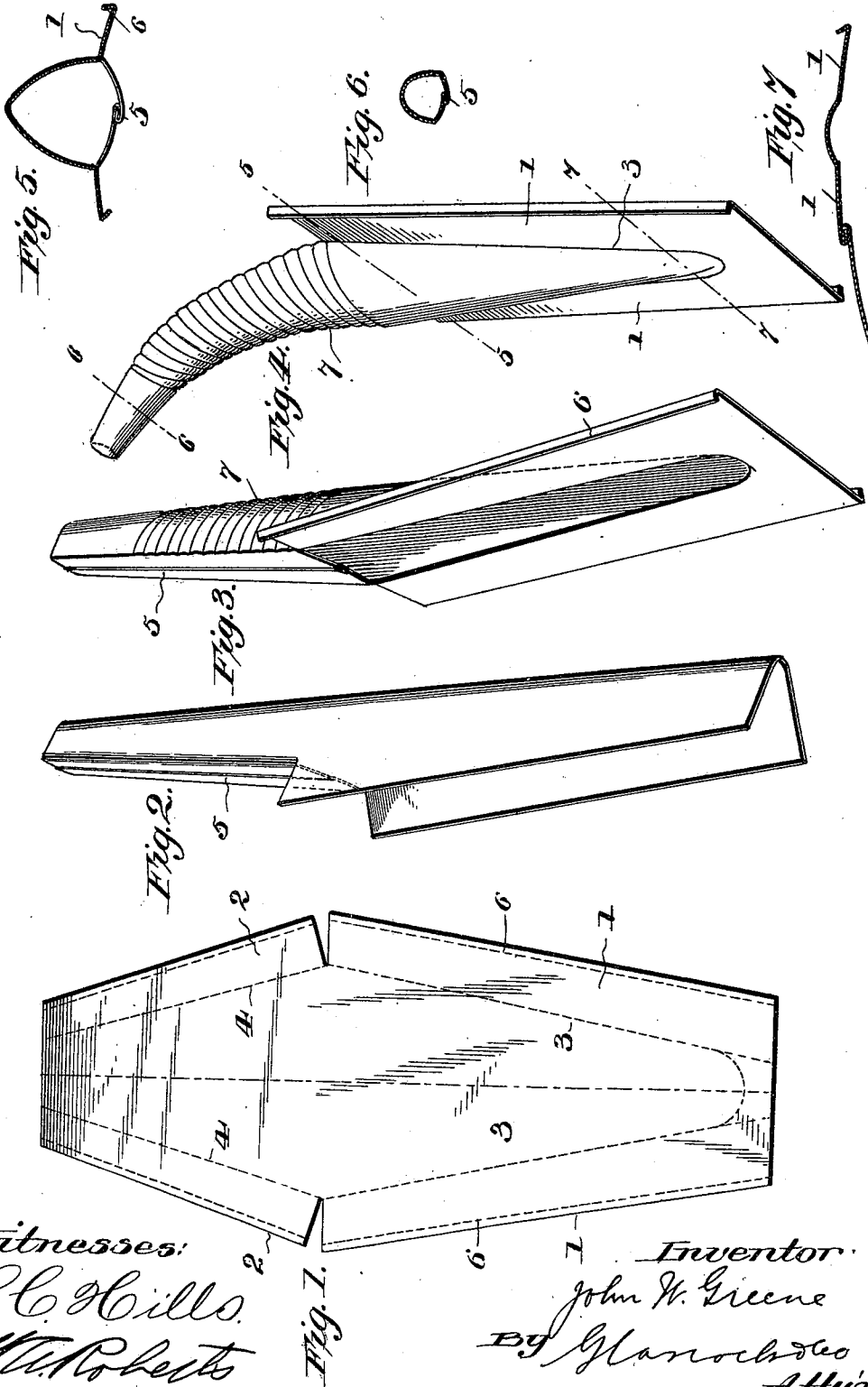
Patented Apr. 4, 1899.

J. W. GREENE.

SINGLE PIECE SHEET METAL SPOUT.

(Application filed Jan. 13, 1898. Renewed Feb. 16, 1899.)

(No Model.)



Witnesses:
L. C. Hills
W. Roberts

Inventor:
John W. Greene
By *Glanville & Co.*
Attys.

UNITED STATES PATENT OFFICE.

JOHN W. GREENE, OF WAVERLY, NEW YORK.

SINGLE-PIECE SHEET-METAL SPOUT.

SPECIFICATION forming part of Letters Patent No. 622,222, dated April 4, 1899.

Application filed January 13, 1898. Renewed February 16, 1899. Serial No. 705,694. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. GREENE, a citizen of the United States, residing at Waverly, in the county of Tioga and State of New York, have invented certain new and useful Improvements in Single-Piece Sheet-Metal Spouts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to an improvement in corrugated spouts for vessels, said spout consisting of a single piece of sheet metal having the corrugations in the end of the convexed side thereof at an intermediate section between the end of the spout and the lower point of junction with the vessel, the said corrugations extending transversely across the under side of the spout and pitching the spout at the proper angle.

My present invention is an improvement over my prior patent, No. 530,597, issued December 11, 1894.

In the accompanying drawings, Figure 1 is a plan view of the blank from which the spout is made. Fig. 2 is a perspective view of the spout, showing the first step in the operation of forming the same. Fig. 3 is a perspective view of the spout, showing the second step in the operation of forming the same. Fig. 4 is a perspective view showing the completed spout. Fig. 5 is a sectional view cut on the line 5 5 of Fig. 4. Fig. 6 is a sectional view of the spout cut on the line 6 6 of Fig. 4; and Fig. 7 is a sectional view of the spout cut on the line 7 7 of Fig. 4.

The blank is cut as outlined in Fig. 1. The lower portion of the blank is provided with the side flanges 1 1, and the upper portion of the blank is provided with the side flanges 2 2, the flanges 1 1 being formed upon the lines 3 3, and the flanges 2 2 being formed upon the lines 4 4. The flanges 2 2 are locked together at their edges, forming a seam 5, (see Figs. 2 and 3,) the said seam extending the entire length of the upper side of the spout. The flanges 1 1 are provided with the locking edges 6 6, the said edges 6 6 being adapted to lock with similar locking edges of the body

of the vessel, as indicated in Fig. 7. The said edges 6 6 extend one on one side of the spout and the other on the opposite side, as indicated in Fig. 7, thus bringing the flanges 1 1 of the spout more nearly in the same circumferential line with the body of the vessel. Thus the spout is secured to the body of the vessel. The under side of the spout proper is provided at an intermediate section with a series of corrugations 7, the said corrugations extending transversely across the end of the convexed side of the spout, thus pitching the spout at the proper curve or angle and adding greatly to its strength.

The following is a process by which the spout is formed up. The locking edges of the flange 2 2 are first turned up, and the said flanges 2 2 are then bent upon the lines 4 4, and the blank being flat the said flanges 2 2 extend up at ring angles to the same. The blank is then put into a forming-machine and is rounded along its longitudinal axis. This brings the locking edges of the flanges 2 2 together, and they are secured together, forming the seam 5, the blank then being in the shape as shown in Fig. 2. The blank thus formed is then placed in a press and the corrugations, as shown in Fig. 3, are formed on the under side of the spout. At the same time the flanges 1 1 are turned out, and the locking edges 6 6 are bent up at the edges of the flanges 1 1. The spout as thus formed is then put in a press with a proper-shaped die, the lower portion of the spout being firmly secured, the spout proper, together with the corrugations, as shown in Fig. 3, being substantially straight. A tool is then placed over the upper small end of the spout, and the spout is given the proper angle or curve by slightly bowing the corrugations.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a single-piece sheet-metal spout, the spout proper having a convexed portion forming its underside, the edges of the sheet forming an unbroken interlocking seam in the upper side of the spout, a number of alternately-arranged ridges and furrows extending transversely across the under convexed

portion of the spout, the ends of said ridges and furrows terminating at the edges of the upper side of the spout, said ridges and furrows adapted to pitch the spout at the proper
5 angle and add strength thereto, laterally-extending flanges located at the base of the spout, locking edges located at the edges of said flanges, one of said edges extending on

one side of the flanges and the other edge extending on the opposite side of the flanges. 10

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

JOHN W. GREENE.

Witnesses:

W. S. THAYER,

S. B. SHIPMAN.