

(No Model.)

F. G. NIEDRINGHAUS.

ATTACHING SPOUTS TO VESSELS OF ENAMELED SHEET IRON.

No. 302,223.

Patented July 15, 1884.

Fig. 1.

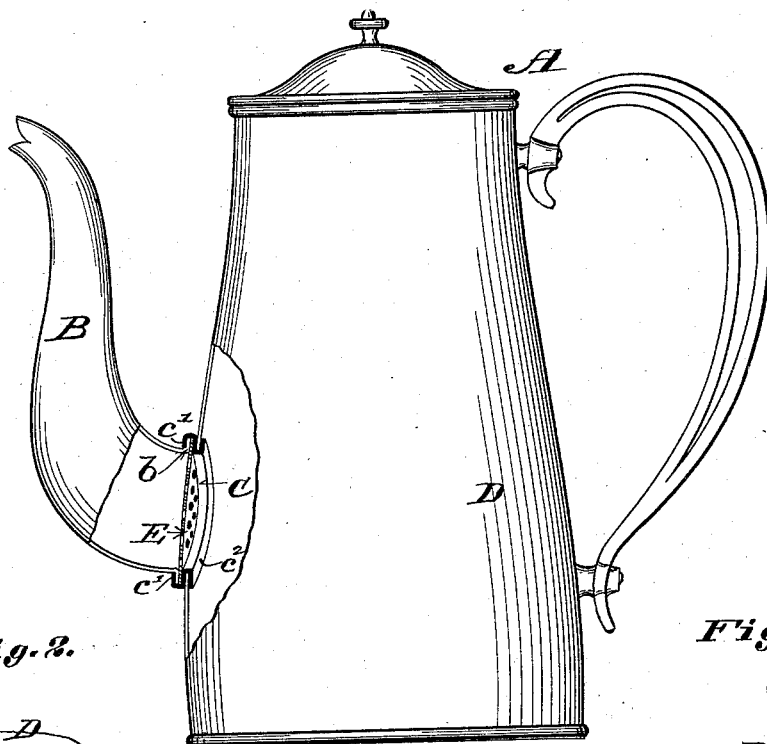


Fig. 2.

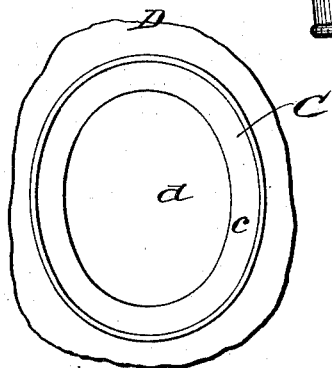


Fig. 4.

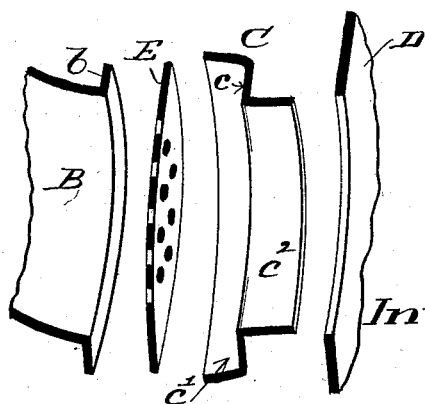
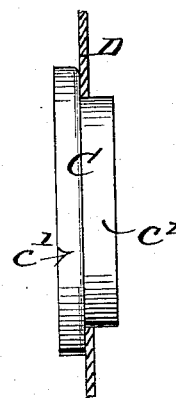


Fig. 3.



Attest:

A. D. Freeman
Charles Pickles

Inventor:

Frederick G. Niedringhaus
by C. D. Moody atty

UNITED STATES PATENT OFFICE.

FREDERICK G. NIEDRINGHAUS, OF ST. LOUIS, MISSOURI.

ATTACHING SPOUTS TO VESSELS OF ENAMELED SHEET-IRON.

SPECIFICATION forming part of Letters Patent No. 302,223, dated July 15, 1884.

Application filed August 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK G. NIEDRINGHAUS, of St. Louis, Missouri, have made a new and useful Improvement in Attaching Spouts and Strainers to Vessels of Enameled Sheet-Iron Ware, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation of a vessel having the improvement, the portion of the construction with which the present improvement is immediately connected being shown in section; and Figs. 2, 3, 4, details.

The same letters denote the same parts.

I have heretofore, (April 17, 1877, No. 189,641,) in conjunction with W. F. Niedringhaus, obtained a patent for a mode of attaching spouts and strainers to vessels of enameled sheet-iron ware. In the construction referred to the spout is corrugated to receive the strainer, and at its inner end the spout is provided with a flange, which is turned down upon the inside of the body of the vessel. The present construction is an improvement upon the one referred to, and in this:

A represents the vessel having the improvement.

B represents the spout. The spout at its lower end is provided with a flange, *b*. A collar, C, of the shape shown in Fig. 2 in front elevation, and in Fig. 3 in side elevation, is inserted in the spout-opening *d* in the body D of the vessel. The strainer E is then laid against the offset *c* of the collar C. The flange *c'* of the collar is then turned down upon the flange *b* of the spout, and the flange *c''* of the collar is turned down upon the inside of the body of the vessel, thereby fastening the spout to the body and securing the strainer in place.

I am aware that heretofore collars have been used to attach spouts to the bodies of

enameled vessels, and that strainers have been combined with the collars; so as to be held in place thereby; but, so far as I am aware, these collars have always been wholly on the outside of the vessel-bodies, and have been attached to the latter by flanges around the openings therein. In my invention, on the contrary, the inner flange of the collar is within the vessel-body and no flange on the body is necessary. A more slightly as well as a stronger and more readily-made joint is thus secured.

The advantages of the new construction over that shown in Patent No. 189,641, above referred to, consist in the strength of the fastening or joint and the facility of making the same. The corrugation in the spout has a very small bearing upon the outside of the body, whereas the offset *c* of the collar C has a large and ample one, and therefore the collar will be more firmly bound to the said body; secondly, the collar C, being short, does not interfere with the application of the tools in making the joint.

I claim—

1. In a vessel of enameled sheet-iron as a means for attaching a spout to the body of the vessel, the collar permanently united to the body by a flange inside of said body, and an offset outside the same, and connected with the spout by an exterior flange turned down upon the flange on the spout, substantially as described.

2. The collar united to the body by a flange inside the said body, and an offset outside the same, in combination with the strainer, and the spout held in place by an exterior flange on said collar, substantially as described.

F. G. NIEDRINGHAUS.

Witnesses:

SOLOMON N. SAPP,

THOS. K. NIEDRINGHAUS.