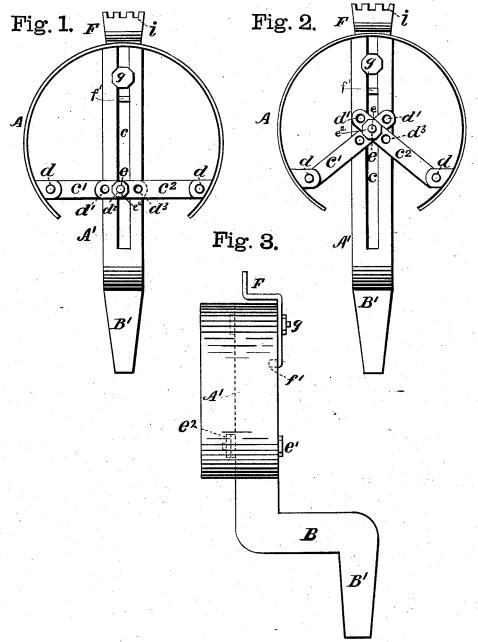
F. FELLINGER.

BOILER FORMER.

No. 260,181.

Patented June 27, 1882.



Witnesses.

Hugh sanghter Joseph Schenk

Inventor.

Friderick Fellinger By James Sangster Atty.

UNITED STATES PATENT OFFICE.

FREDERICK FELLINGER, OF DUNKIRK, NEW YORK.

BOILER-FORMER.

SPECIFICATION forming part of Letters Patent No. 260,181, dated June 27, 1882. Application filed May 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK FELLINGER, a citizen of the United States, residing in Dunkirk, in the county of Chautauqua and State of 5 New York, have invented certain new and useful Improvements in Boiler-Formers, of which

the following is a specification.

The object of my invention is to provide a simple and reliable means for forming boilers 10 of sheet metal; and it consists of an elastic curved former adapted to be enlarged or contracted, so as to be used for different-sized boilers, by means of an adjusting and holding mechanism, which will be fully and clearly 15 hereinafter shown by reference to the accompanying drawings, in which-

Figure 1 is a front elevation, showing the elastic former expanded or enlarged. Fig. 2 is also a front view, showing the same con-20 tracted to a smaller size. Fig. 3 represents a

side elevation.

A represents the elastic former, made of any suitable sheet metal or other material, securely fastened to the vertical slotted bar or support 25 A' by rivets, bolts, or in any other well-known way.

The body or support A' is formed with an offset, B, so as to bring the device forward out of the way of the bench, and it is also provided 30 with a square shank, B', adapted to fit into a tinman's bench in the ordinary way.

c is a longitudinal slot or opening directly

through the bar A'.

c' c^2 represent two arms, jointed by bolts d35 to the former A. Each arm is provided with three or more holes, $d' d^2 d^3$.

e is a screw-bolt, which passes through the slot c and through one of the holes d', d^2 , or d^3 in each arm c' c^2 . It is provided with a head,

The operation of this part of my invention will be clearly understood by reference to the accompanying drawings. When extending

the former or enlarging it for larger boilers the bolt and nut e e^2 are loosened and the arm 45 c' brought to the position shown in Fig. 1, or thereabout, and the bolt fastened, which operation enlarges the former. If it is desired to have it still larger, the bolt may be put through the holes d'; or the adjustment may be made 50 smaller by using the holes d^3 . After the bolt is adjusted to the arms c', as required, the size of the former may be further adjusted by moving the bolt e and the ends of the arms along the opening c and fastening them at any point 55 desired, as shown in Fig. 2. By using an elastic former a more perfect curve is obtained at every point of its adjustment.

F is a cap arranged so as to be moved up or down and fastened at any point. It is pro- 60 vided with an inwardly-projecting piece, f', which fits into the opening c and assists in keeping it in line. It is held in place by a bolt, g,by which it is secured at any point of its vertical adjustment. The upper part of the cap 65 F is provided with notches i for the purpose of bending wire or for other uses. In some

cases the cap F may be dispensed with.

The tin or other sheet metal to be formed is placed over the former and under the cap F, 70 which is secured down on it so as to keep it in place, and it is then bent to conform to the former A, as will be readily understood.

I claim as my invention—

1. In a boiler-former, the combination of the 75 elastic former A, slotted bar A', bolt and nut $e e^2$, and arms e', substantially as and for the purposes set forth.

2. The slotted bar A' and former A, in combination with the bolt e, nut e^2 , and arms e', 80 provided with the holes d' d^3 , for the pur-

poses specified.

FREDERICK FELLINGER.

Witnesses:

D. D. LUDLOW, WM. G. ALLING.