

D. Asire,
Soldering Machine.
No. 98835. Patented Jan. 18. 1870.

Fig. 1.

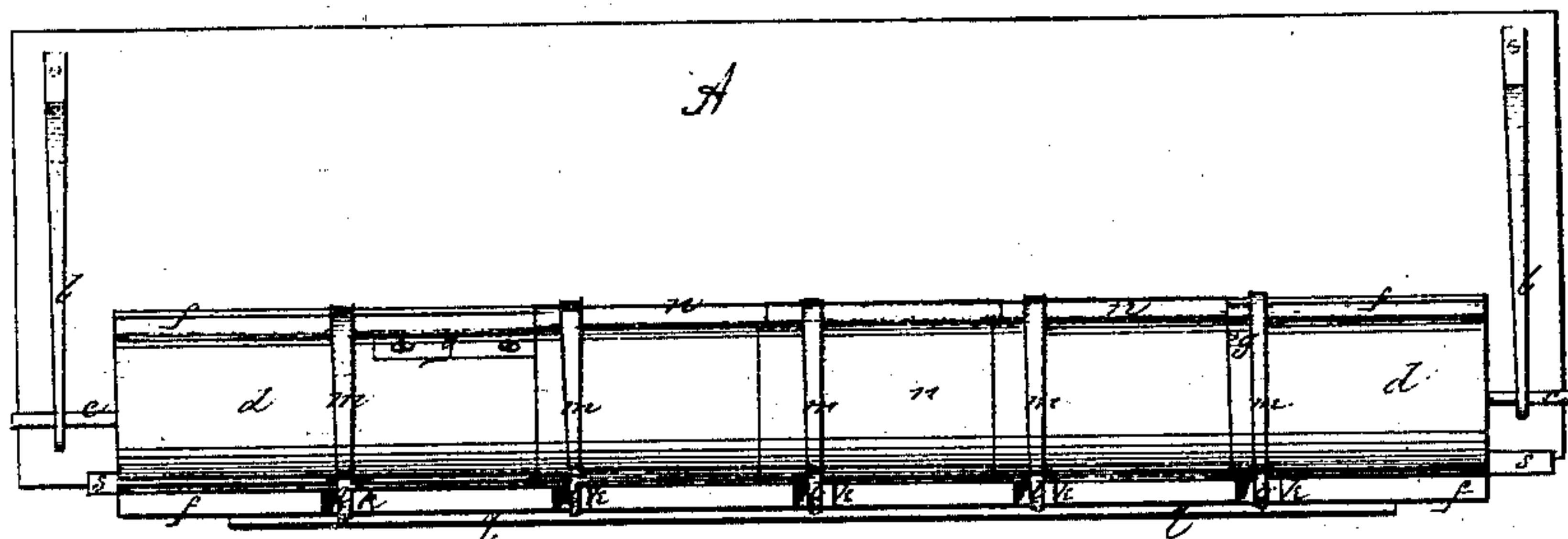


Fig 2

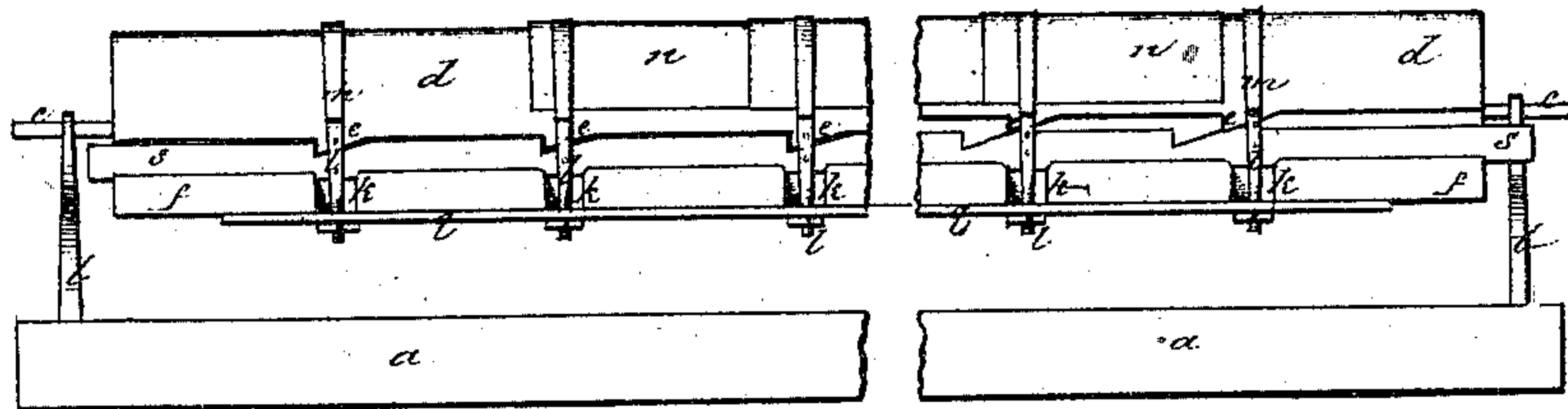


Fig 3.

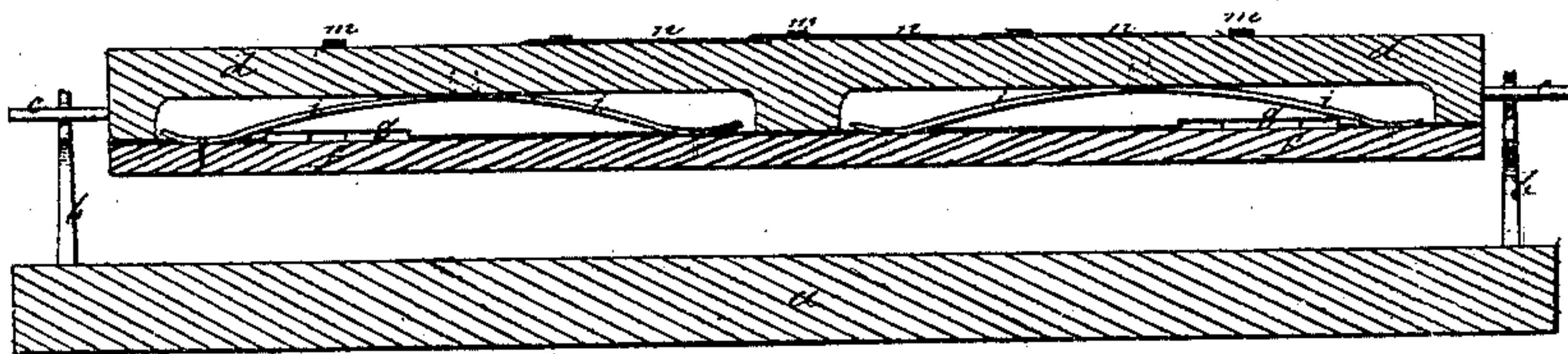


Fig 4

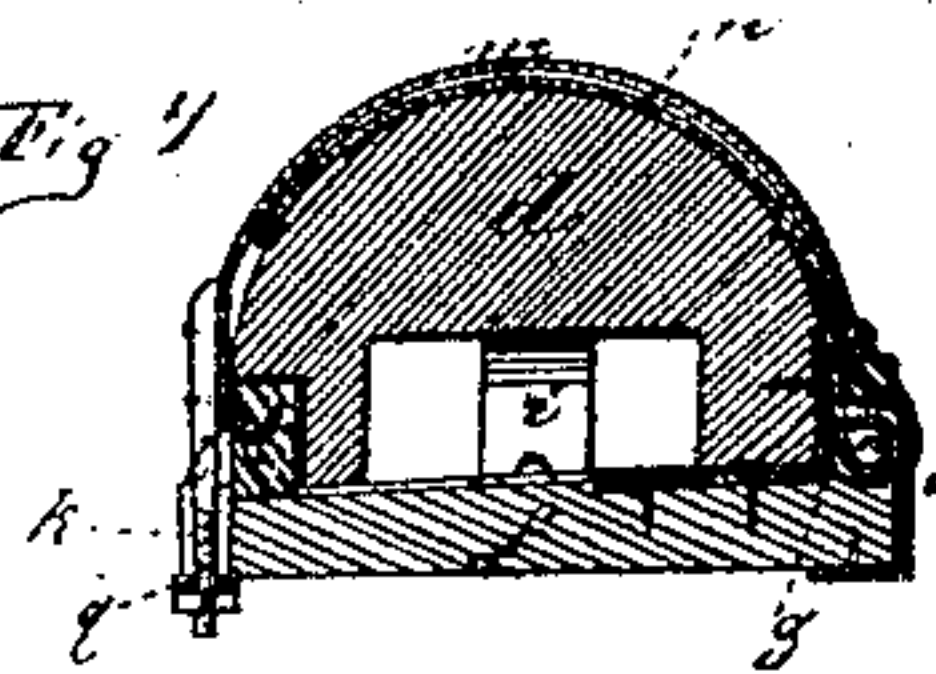
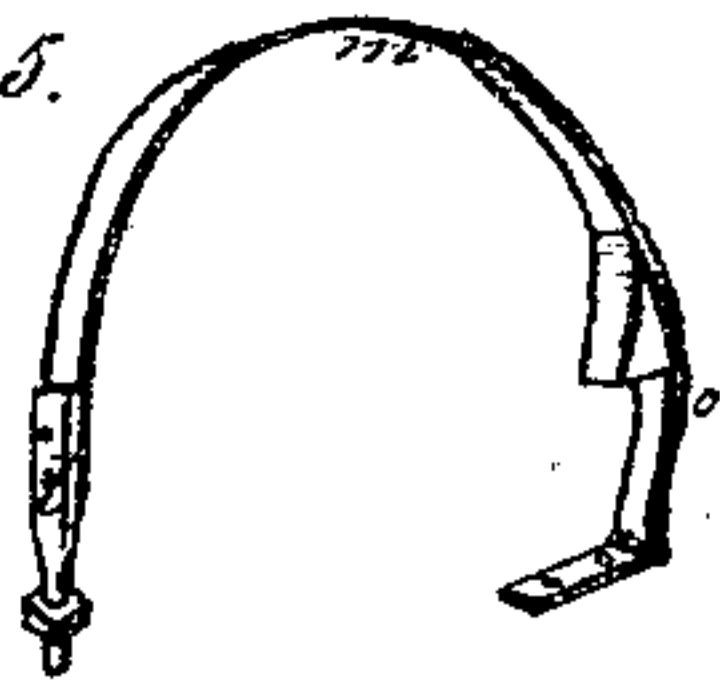


Fig 5.



Witnesses.
Henry F. Street
Jos. P. Stanton

Daniel Asire, Inventor
by Theodore Munger,
his Attorney.

United States Patent Office.

DANIEL ASIRE, OF ADA, OHIO.

Letters Patent No. 98,835, dated January 18, 1870.

IMPROVEMENT IN DEVICE FOR SOLDERING EAVES-TROUGHS.

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, DANIEL ASIRE, of Ada, in the county of Hardin, and State of Ohio, have invented certain Improvements in Machines for Soldering Eaves-Trough, of which the following is a specification.

Nature and Object of the Invention.

My invention consists in the combination of a half cylinder of wood, fastened to a base of wood, by hinges and internal springs, operated by a horizontal wedge-bar of wood, and a set of semicircular clamps, one end of which is provided with hinges, and the other inserted into a horizontal iron bar; the object of the invention being to facilitate the operation of soldering together sheets of tin that have been previously prepared, for the formation of eaves-trough.

Description of the Drawings.

Figure 1 is a top view of a machine embodying my invention.

Figure 2 is a side view of the same machine.

Figure 3 is a longitudinal section, showing the internal construction of the invention.

Figure 4 is a transverse section.

Figure 5 is a view of a semicircular clamp.

General Description.

A is a section of a common work-bench.

b are arms or bearings, in which the shafts c are inserted when the invention is used.

d is a half cylinder of wood, provided with projections, e, at its front, and connected to the base f at its rear, by the hinges g, and at the centre by the flat springs i, of steel, or other suitable material.

The base f projects beyond the sides of the half cylinder d.

The front side of the base f has notches, k, cut in the projection, in which the clamps m rest, when pressed upon the sheets of tin n.

The clamps m are made of straps of sheet-iron, or other suitable material, each one being bent in the form of a semicircle, and provided with a hinge, o, having a shoulder at its upper end, which is riveted to one end of the sheet-iron strap, and a screw, l, provided with a nut, riveted to the other.

The hinged end o is fastened to the under side of the base f, at the rear, the shoulder of the hinge o

fitting over the roll formed on one edge of the sheet of tin n, the screw-end l being run through a horizontal iron bar, q, and fastened there by the nut.

The iron bar q is pushed under the edge or projection of the base f as far as the screw-ends l, of the clamps m, will permit, when resting in the notches k.

S, a horizontal wedge-bar of wood, is placed between the base f and the half cylinder d, provide with notches to receive the corresponding projections e, on the front of the half cylinder d.

Operation of the Invention.

By drawing the bar q forward, until it can be raised upward over the front projection of the base f, the clamps m can all be raised together; the sheets of tin n are placed on the half cylinder d, their ends being properly lapped for soldering the roll on the edge of the tin being placed to the rear, so that the shoulder of the hinge o will fit over it; the clamps m are then replaced, the bar q pushed under the projection of the base f, and the bar s is driven in, as shown at the right-hand of fig. 2, in the drawing.

By driving the bar s in, it operates as a wedge, and forces the half cylinder d, upon which the sheets of tin are placed, against the clamps m, which hold the sheets of tin firmly, and in a position that they may be easily and quickly soldered together upon the outside. The shafts c enable the workman to turn the machine, as convenience requires. To prevent the seams from rusting upon the inside of the eaves-trough, I give them a coat of pitch or asphaltum.

Claim.

I claim, as my invention—

The half cylinder d, fastened to the base f by the hinges g and the springs i, provided with the wedge-bar s, the shafts c, the clamps m provided with the hinges o and screws l, operated by the bar q, arranged in the manner and for the purpose specified.

In testimony that I claim the foregoing improvement in machines for soldering eaves-trough, as above described, I have hereunto set my hand and seal, this 16th day of November, 1869.

DANIEL ASIRE. [L. s.]

Witnesses:

H. S. SHANNON,
P. W. STUMM.