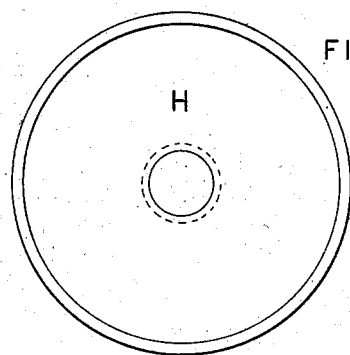
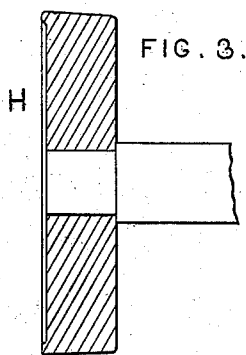
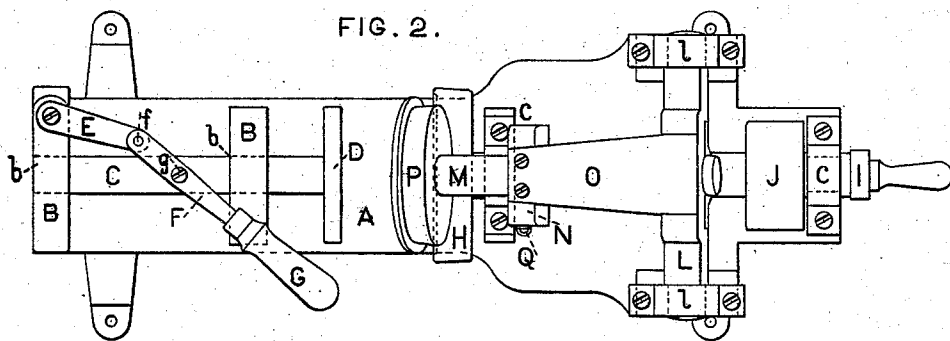
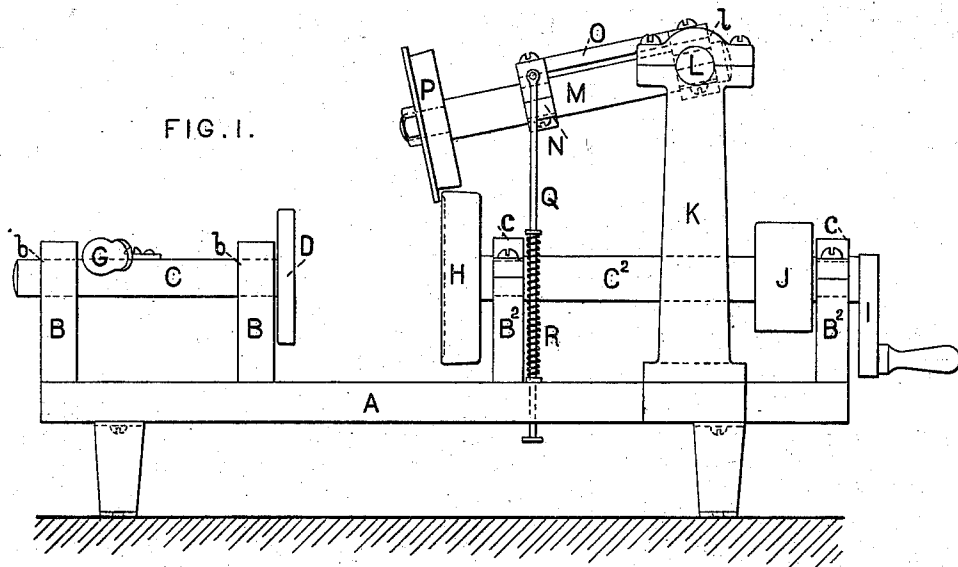


E. HINE & G. W. BENTLEY.

SEAMING-MACHINE.

No. 174,076.

Patented Feb. 29, 1876.



WITNESSES.

John Cook
Thos. F. Stoddard

Edward Hine and Geo W. Bentley by their
attys Alfred Evans INVENTOR.

UNITED STATES PATENT OFFICE.

EDWARD HINE, OF NEW YORK, AND GEORGE W. BENTLEY, OF BROOKLYN,
NEW YORK.

IMPROVEMENT IN SEAMING-MACHINES.

Specification forming part of Letters Patent No. **174,076**, dated February 29, 1876; application filed
December 13, 1875.

To all whom it may concern :

Be it known that we, EDWARD HINE, of the city, county, and State of New York, and GEORGE W. BENTLEY, of Brooklyn, Kings county, New York, have invented, made, and applied to use, a new and useful Machine for Seaming Metal Cans, of which the following is a specification, reference being had to the accompanying drawings making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a side elevation of our invention. Fig. 2 is a top view of the same. Figs. 3 and 4 are views of the roller provided with hollowed face and projecting rim.

In the drawings, like parts of the invention are designated by the same letters of reference.

The nature of the present invention consists in certain improvements, as more fully hereinafter described, in the construction of a machine for seaming metal cans; the object of the invention being the production of a machine for the purpose of seaming metal cans, by which the same shall be rapidly and economically accomplished.

To enable those skilled in the arts to make and use our invention, we will describe the construction and operation of the same.

A shows a frame formed of any suitable material, preferably of iron, for supporting the working parts of the machine. The frame A has mounted upon it, properly positioned, the uprights B B² for supporting the shafts C and C². The uprights B are provided with openings *b*, through which the shaft C passes, and the uprights B² are hollowed to receive the shaft C², and provided with cap-pieces *c*, by which the shaft C² is kept in position. C is a shaft inserted in the openings *b*, in the uprights B, and free to slide to and fro in the same. This shaft C has secured upon its forward end a disk of metal, D, or the disk may be shipped over the shaft C and allowed to revolve upon the same, being retained in position by a collar passed over the end of the shaft, and retained in position by a set-screw. E is a plate of metal attached to the end upright B, and F is a lever provided with a handle, G, pinned, as at *f*, to the plate of metal E,

and fastened, as at *g*, to the shaft C. This lever F moves freely upon the pin *f*, and by moving it forward or back, as desired, a reciprocating movement is imparted to the shaft C. C² is a shaft supported by the uprights B², and retained in position by the cap-pieces *c*. This shaft C² has secured upon its forward end a disk of metal, H, having its face hollowed, and provided with a projecting rim, as clearly shown in Figs. 3 and 4 of the drawings, while at its opposite end is attached a crank, I, so that it may be turned by hand, or a pulley, J, may be held upon the shaft so that it may be driven by power, if desired. K are standards secured to the bed of the frame A, having their upper ends hollowed about centrally to receive the rounded ends of a cross-piece, L, maintained in position in the standards K by the cap-pieces *l*. Through the center (properly opened to receive it) of this cross-brace L is inserted the shaft M, passing also through an opening in the plate N, the plate N being supported by and attached to the cross piece L by means of a plate of metal or cap-piece, O, let into the grooved portions of the plate N and cross-piece L, and secured to them by means of screws. Upon the end of this shaft M is held a flanged roller, P, and the shaft M is so positioned that the roller P will be brought directly over or above the disk H, the flanged portion of the roller P projecting over or beyond the rim of the disk H. Attached upon one side of the plate N is a rod, Q, the lower end of said rod passing through the bed-plate of the frame A, and to the same a treadle may be attached if desired. A spiral spring, R, is passed over the rod Q, and retained in position by the collars upon the rod between which it is placed.

Such being the construction, the operation is as follows: That our invention may be fully understood, a description of the metal can made by us, and to the seaming of which our invention is more particularly applicable, is now introduced. The can is composed of a section of a cylinder having its ends rolled over, and that a bottom and top may be united to this section of a cylinder, having its ends rolled over, our machine may be more partic-

ularly employed. The top or bottom to be united to the section of a cylinder forming the body of a can consists of a disk of metal having its outer edge turned up at right angles to the body. The section of a cylinder forming the body of a can, and having its ends rolled over, has either the bottom or the top formed of the disk of metal having its outer edge turned up at right angles to the body, placed over the end of the body of the can by the operator, and is then placed upon the machine, the bottom or top, as the case may be, being received within the hollowed portion of the disk H. Motion is then imparted to the shaft C², upon which the disk H is secured, either by turning the crank I, or by connecting the shaft C² with a suitable motor by a belt passed over the pulley J. The flanged roller P is then brought down for operation by depressing the cross-brace L and the plate N, supporting the shaft M through the rod Q, to which may be attached a treadle, and the shaft C² continuing to revolve, and the can, and top or bottom, being held in position within the hollowed disk H, the flanged portion of the roller P, as it is brought into contact with the metal of the top or bottom of the can, revolves and turns the same down upon the rolled end of the body of the can, and thus seams the metal. When a top has been seamed to the body of the can, and a bottom is to be seamed to the same, or vice versa, in order that the can and disk of metal may be held in position for the seaming process, the disk D may be thrown forward by moving for-

ward the shaft C by means of the lever F pinned upon the plate of metal E, and the disk is brought forward until it bears upon the seamed end of the can. As the shaft M is depressed through the rod Q the spiral spring R is contracted, and when the foot of the operator is removed from the treadle the expansion of the spring R causes the shaft to return to its former position.

By the use of a machine constructed as described, the seaming is expeditiously and cheaply accomplished, and much labor is saved.

Having now set forth our invention, what we claim as new is—

1. In a machine for seaming metal cans the combination of a hollowed disk, H, supported upon a revolving shaft, C², a flanged roller, P, supported by a rock-shaft, M, and a suitable frame, A, for supporting the same, constructed and operating substantially as and for the purposes indicated.

2. In a machine for seaming metal cans, the combination of a hollowed disk, H, supported upon a revolving shaft, C², a flanged roller, P, supported by a rock shaft, M, a disk, D, supported by the shaft C, and a frame, A, constructed and operating substantially as and for the purposes set forth.

EDWARD HINE.

GEORGE W. BENTLEY.

In presence of—

HENRY BISCHOFF,
CARL CLAUSER.