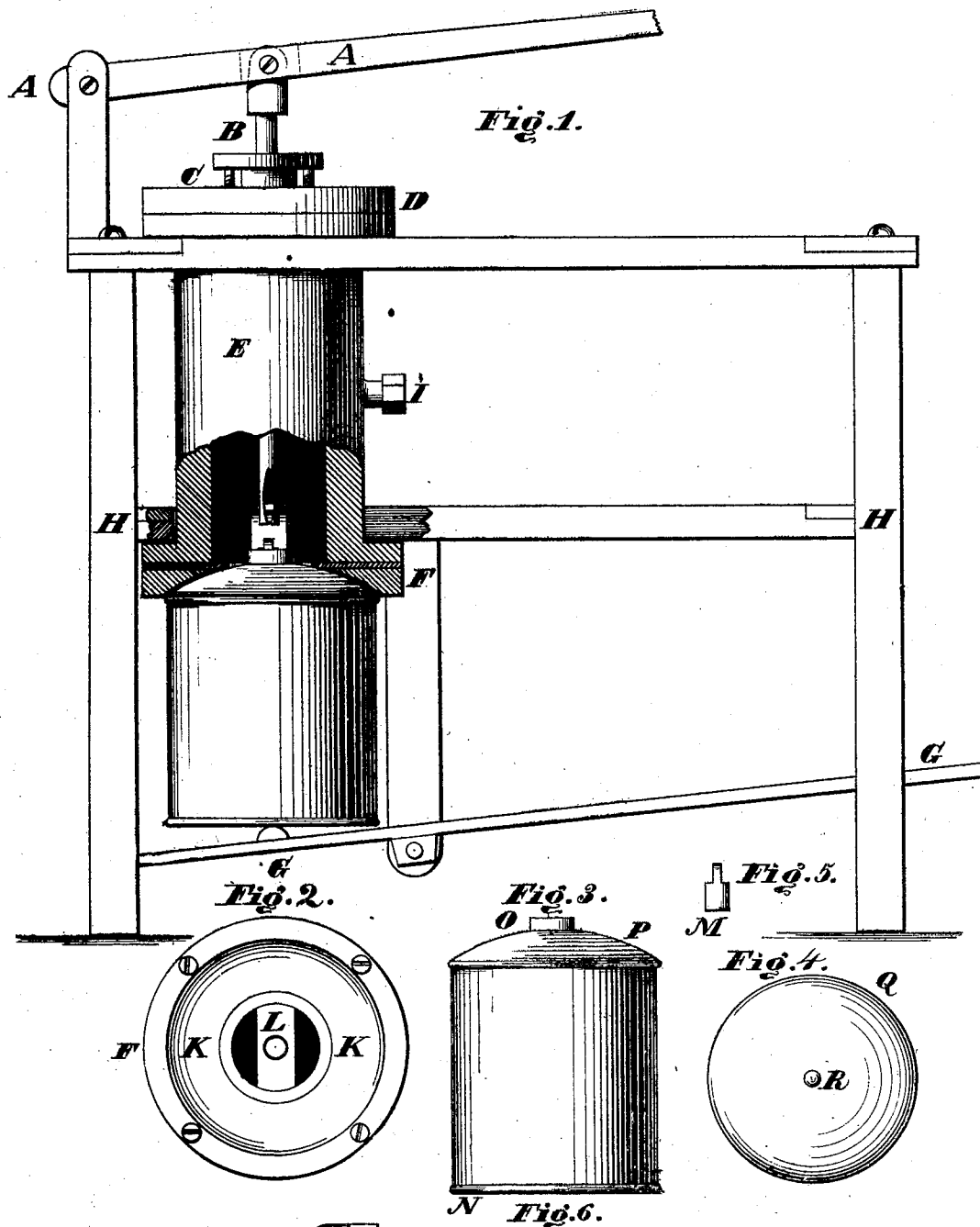


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Improvement in Machines for Closing Fruit-Cans.

No. 130,989.

Patented Sep. 3, 1872.



Witnesses.
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN MACHINES FOR CLOSING FRUIT-CANS.

Specification forming part of Letters Patent No. **130,989**, dated September 3, 1872.

To all whom it may concern:

Be it known that I, G. C. GRODHAUS, of Jamestown, in the county of Monroe and State of Ohio, have invented a new and useful Machine for Closing Fruit-Cans; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification.

Figure 1 is a side view of the frame H H holding the flanged cylinder E, the upper part of which is closed by top D, the same being packed with India rubber or other sufficient packing, and screwed down air-tight. In the center of this top D is sunk a seat to hold the packing of India rubber or other sufficient packing, which is held and screwed down air-tight by the follower C against the sides of rod B. This rod is made of steel, perfectly round and polished; the lower end is nipper-shaped, as shown in Fig. 6, B B at C.

Fig. 2 is the bottom annular disk F of flanged cylinder E. It is open at the center and beveled in, as shown in Fig. 2. It is packed with India rubber and screwed air-tight on cylinder E. This packing is of sufficient thickness and extends far enough inside to form a collar, as shown at K K, Fig. 2. L in Fig. 2 is a cross-bar, fastened inside of the lower end of cylinder E, so as not to interfere with collar K K or the can N when inserted. In the center of this cross-bar is a hole just big enough to let the lower end of rod B B pass through.

Fig. 6: B B is a steel rod, perfectly round and well polished. It has a shoulder and joint at the upper end to attach it to lever A A, Fig. 1, and the shoulder is to prevent it from passing too far through cylinder E; and the lower end is nipper-shaped, as shown at C, Fig. 6, in order to hold plug M, Fig. 5, or lid Q, Fig. 4.

The *modus operandi* is as follows: To cylinder E, (which is held by frame H H), Fig. 1, is screwed on (air-tight) an exhaust-pump of sufficient capacity at I, and it is also fastened to frame H H, Fig. 1. Can N, Fig. 3, is filled with the thing to be preserved. The lid P, same figure, is soldered on air-tight. An operator stands ready within reach of the outer end of lever A A, Fig. 1, and the treadle G G, Fig. 1, and the handle of the exhaust-pump.

By the lever he presses down rod B B till it passes far enough through the hole in cross-bar L, Fig. 2, to enable another hand to insert the pin or catch of plug M, Fig. 5, endwise into the partially-opened pincher-end of rod B B. The lever is then lifted and the pinchers coming in contact with the hole in cross-bar L, will close enough to hold the plug. This plug is made of India rubber, block tin, or other suitable material. It is tapering and well fitted into the hole in the neck of can N at O, Fig. 3, so that when pressed in it will hermetically close the can. The can N is then put on the treadle at G, under the cylinder at F. The lever end of the treadle at G is forced down and the can up, so that the concave part of the lid at P presses air-tight against the India-rubber collar K K, and the hole O in the neck of the can is accurately under the plug M, without coming in contact with it yet. A prop is put under the lever A A at A D, to keep the rod B from moving down while the air is pumped out. The rod B being well packed at C, and the can or other vessel being pressed well against the India-rubber collar K K, Fig. 2, so as to make the whole machine air-tight, the exhauster is set to work, and as soon as all the air is pumped out the prop is taken from under the lever at A D, and the plug M, held by the pinchers at the lower end of rod B B, is forced into the hole in the neck of can N at O. A faucet in the top D (which I do not claim) is opened to admit air, and the can N taken away, and the stopper or plug, so forced air-tight into the can or vessel, soldered over for better security. The bottom disk F and the collar K K can be so altered as to suit other cans or jars in use at present. Instead of plug M the concave lid Q, Fig. 4, with a pin or catch in the center, as at R, Fig. 4, can be inserted into the pincher of rod B B, Fig. 6, the collar K K pressing against the shoulder of the neck of the can or jar. The crevice where the lid fits in can be lined with India rubber or filled with some stiff wax, and when the exhausting process is over, the lid can be forced down by lever A A, as above, and the can sealed over, or a screw-rim passed over, as in self-sealers. Flowers, &c., can be put in glass vases through the bottom, that made air-tight, and the air

exhausted at the top, a glass stopper put in by the pincher-rod B B, and then sealed or melted over.

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

The machine for sealing cans, consisting of the frame H H, treadle G, annular bottom F,

collar K K, cross-bar L, cylinder E, top D, follower C, rod B, and lever A, combined and arranged in relation to an air-pump, as shown and described.

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Witnesses:

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