

Patented July 7, 1868.

A schematic diagram of a tensile specimen during a tensile test. The specimen is represented by a central necked region with diagonal hatching. Above the neck is a rectangular block representing the upper grip, and below is a rectangular block representing the lower grip. Two arrows, both labeled F , point vertically away from the center of the specimen, indicating the tensile force applied by the grips.

Inventor;
Geo. J. Caprioli
Inventor
By C. H. Wilson
attorney

United States Patent Office.

GEORGE J. CAPEWELL, OF WEST CHESHIRE, CONNECTICUT.

Letters Patent No. 79,635, dated July 7, 1868.

IMPROVED GLASS-PRESSING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, GEORGE J. CAPEWELL, of West Cheshire, New Haven county, and State of Connecticut, have made new and useful Improvements in Glass-Pressing Machines, for making glass beads and other glass ornaments; and I hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications.

The object of my invention is to provide a more expeditious method of forming or pressing buttons and ornaments made of glass, making a partially automatic-working press for that purpose.

Figure 1, side elevation showing arrangement of lever.

Figure 2, side elevation showing the opposite side, with device for operating the pin that forms the holes in the beads.

Figure 3, sectional view on a line, *a b*, showing the form of the dies.

Letter A is the base.

Letter B, standard, the lower part curved so as to form a recess for the working parts or dies of the machine.

Letter C, angular lever, operating a toggle-joint, G, that gives motion to the plunger D, and to the lower part of which is attached the die F, that forms the outer surface of the bead or ornament.

A flange, *e*, on each side of the plunger, working in grooves in the pieces *f f* that are inserted in the standard B for that purpose, guides the plunger in its movements up and down.

Letter E the die that forms the under side of the bead or ornament. In this die are placed one or more nipples. These form the recess or holes, (when more than one is desired,) and also prevent the pin *i*, that makes a hole through the ornament horizontally, from being bent when the glass is pressed around it.

An arm, *h*, is attached to the back part of the plunger or upper die, to which is attached a crooked lever, *j*. A grooved arm, *l*, also extends back from the lower die. In this groove moves the slide *t*, that carries the pin *i*. This pin is kept across the face of the die by the spiral spring *n*, one end being attached to the lever *j*, the other to the plunger. A stop, *k*, is attached to the standard at the proper point, so, when the lever C is raised, the lever *j* comes in contact with it, and carries the pin back clear of the die, and disengages the bead from it, thus making this part of my machine automatic in its operation; and it is so timed in its movements, that it slips under the glass just before the die strikes it, and remains across the face of the dies until the glass is pressed around it.

The pressure is regulated in two ways, by a set-screw, *m*, at the top of the standard, and also by a set-screw, *p*, attached to the lower part of the standard, which forms a stop for the lever C, and can be adjusted so as to bring the two dies to the exact point desired, without bruising the sharp edges of the dies that are necessary to make a smooth edge to the button.

If desirable to have more than one hole through the ornament, another pin *i*, may be added, and also another nipple in the lower die to support the same.

What I claim, and desire to secure by Letters Patent, is—

1. The lever *j*, in combination with the arms *h* and *l*, the spring *n*, and slide *t*, the whole producing the automatic movement of the pin *i*, as and for the purposes specified.

2. Forming glass beads or ornaments with the desired openings or holes, made by pressing the glass around the pin and nipple, the nipple serving as a support for the pins forming said holes, substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE J. CAPEWELL.

Witnesses:

EDW'D A. CORNWALL,

E. B. CORNWALL.