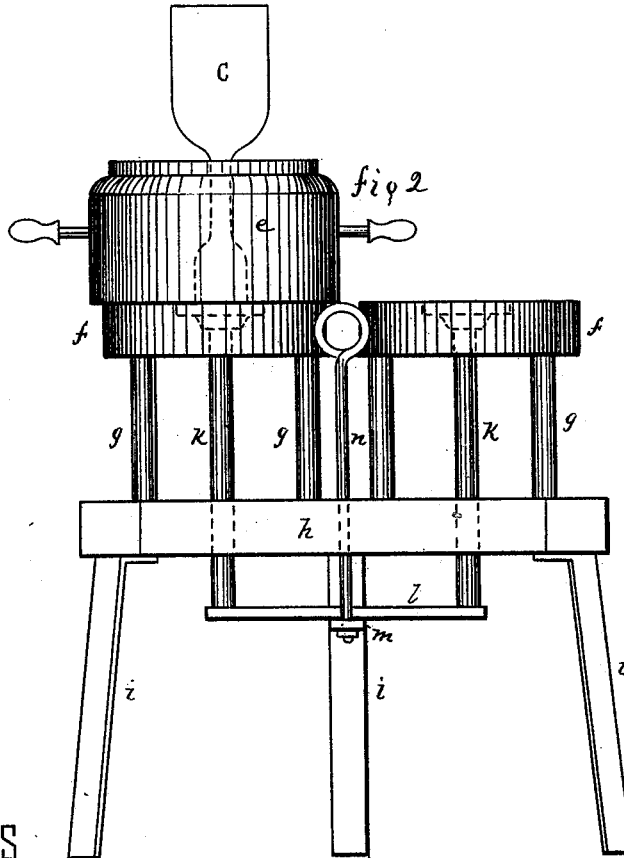
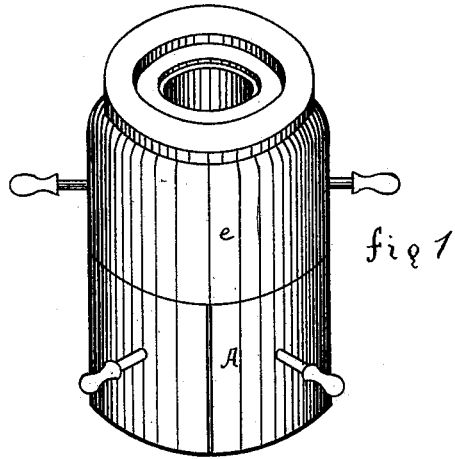


J. ANDERSON & A. SPERBER.
Lifts for Glass-Molds.

No. 204,519.

Patented June 4, 1878.



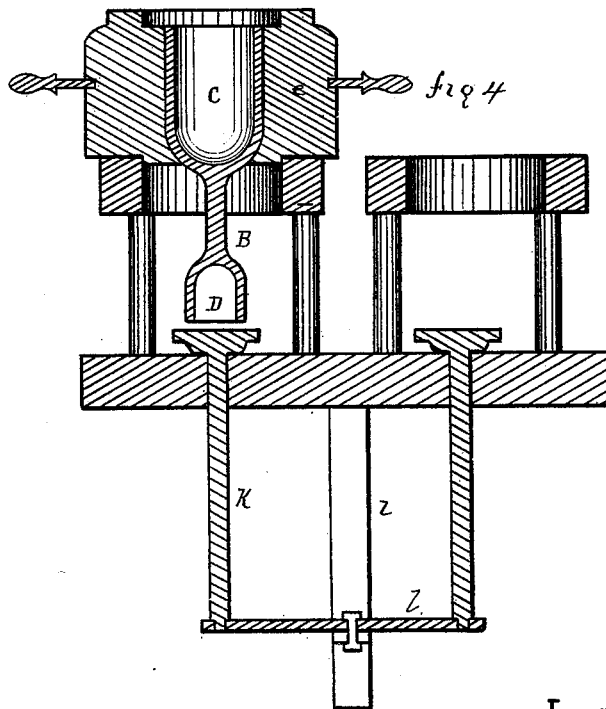
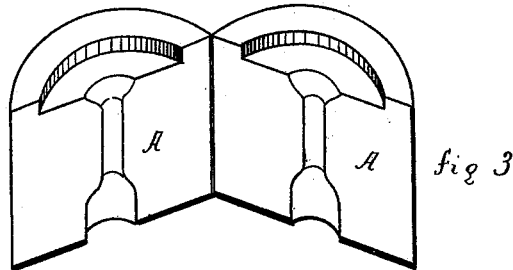
Witnesses
A. L. Johnston
A. S. Johnston

Inventor
Joseph Anderson
August Sperber
By Johnston & Down
attys

J. ANDERSON & A. SPERBER.
Lifts for Glass-Molds.

No. 204,519.

Patented June 4, 1878.



Witnesses
A. C. Johnston
A. S. Johnston

Inventor
Joseph Anderson
August Sperber
By *Johnston & Davis*
Attys

UNITED STATES PATENT OFFICE.

JOSEPH ANDERSON AND AUGUST SPERBER, OF PITTSBURG, PA.

IMPROVEMENT IN LIFTS FOR GLASS-MOLDS.

Specification forming part of Letters Patent No. **204,519**, dated June 4, 1878; application filed November 1, 1877.

To all whom it may concern:

Be it known that we, JOSEPH ANDERSON and AUGUST SPERBER, both of Pittsburg, county of Allegheny, State of Pennsylvania, have invented a new and useful Improvement in Lifts for Glass-Molds; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Our invention relates to an improvement in lifts for glass-molds; and consists in the arrangement hereinafter described for elevating articles formed in glass-molds, so that the attendant can remove the article from the mold.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

In the accompanying drawings, which form part of our specification, Figure 1 is a side elevation of a mold for forming a wine-glass or goblet. Fig. 2 is a side elevation of the upper part of the mold set upon a rest or support for the upper portion of the mold. Fig. 3 represents the lower portion of the mold open. Fig. 4 represents a vertical section of the upper portion of the mold, supports, and lifts.

The portion of the mold represented in Figs. 1 and 3, and marked A, is for forming the foot and stem B of the goblet C. The portion D is subsequently flared for the purpose of forming the base or foot of the goblet, which will be well understood by the glass-blower and glass-presser. The mold being arranged on the press in the usual manner, the article is pressed in the usual way. The lower portion of the mold is then opened, as is the common practice. The upper portion of the mold is then removed and placed upon one of the supports *f*, both of which have central openings, as shown in Fig. 4, secured to standards *g*, as shown in Figs. 2 and 4, which standards are secured to the table *h*, supported on legs *i*. Through the table *h* project two lifts, *k*,

which are connected at their lower ends to a bar, *l*, from which projects an arm, *m*, to which is attached the rod *n* for elevating the lifts *k*.

The lifts *k* may be elevated by other mechanism, such as a treadle or other device, which will readily suggest itself to the mechanic.

The operator draws upward the rod *n*, which will elevate the lifts *k* and raise the formed article out of the mold, as shown in Fig. 2. The attendant or boy then removes the article from the mold.

By the aid of the lift hereinbefore described the glass-presser is relieved from the labor of turning the mold, as is the ordinary practice, whereby he is saved from lifting several tons of weight during each turn, the mold weighing considerable—say from fifteen to twenty pounds—which has to be lifted and turned every time an article is formed in it.

By the simple arrangement hereinbefore described this lifting and turning is entirely avoided and a considerable portion of the time of the pressman saved.

The convenience and advantage of the hereinbefore-described lift will be apparent to the skillful pressman and glass-blower without further description.

Having thus described the nature, construction, and operation of our improvement, what we claim is—

The supports *f*, formed with central openings, and adapted to sustain the glass-mold, substantially as shown, said supports being mounted upon a common bed-plate by means of suitable standards, in combination with the lifts *k k*, arranged upon a cross-bar, *l*, and passing upward through the bed-plate and openings in the supports, all adapted to operate substantially as herein shown and described.

JOSEPH ANDERSON.
A. SPERBER.

Witnesses:

A. C. JOHNSTON,
JAMES J. JOHNSTON.