G. H. LOOMIS.

PRESSURE APPARATUS FOR GAS BAGS.

No. 183,690. Patented Oct. 24, 1876.

Fig. 4.

Fig. 1.

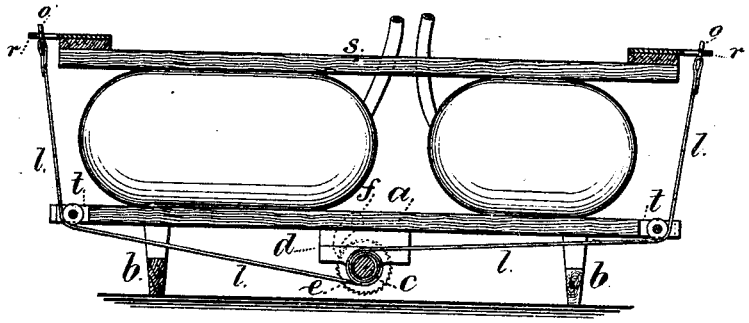


Fig. 2.

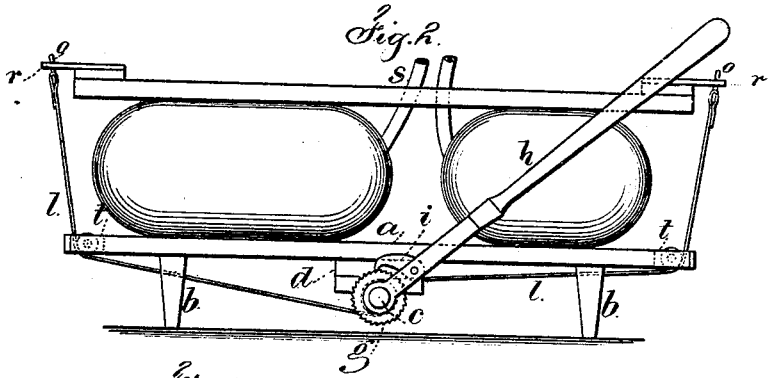
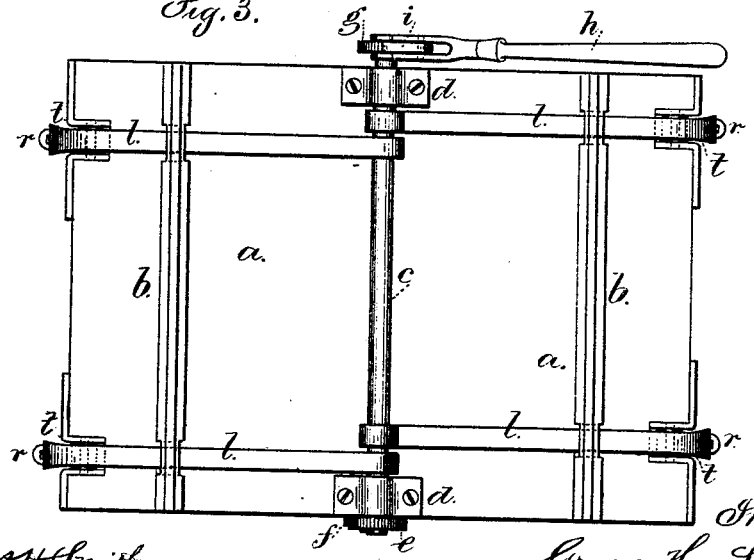


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

GROVE H. LOOMIS, OF EAST CAMBRIDGE, MASSACHUSETTS, ASSIGNOR TO E. AND H. T. ANTHONY & CO., OF NEW YORK, N. Y.

IMPROVEMENT IN PRESSURE APPARATUS FOR GAS-BAGS.

Specification forming part of Letters Patent No. **183,690**, dated October 24, 1876; application filed September 22, 1876.

To all whom it may concern:

Be it known that I, GROVE H. LOOMIS, of East Cambridge, in the State of Massachusetts, have invented an Improvement in Pressure Apparatus for Gas-Bags, of which the following is a specification:

In stereopticons it is usual to employ an oxyhydrogen flame, and the gas for this is stored in separate gas-bags, and ejected by pressure resulting from weights placed upon the bags. These weights are cumbersome to handle, difficult to transport, liable to slip and injure the gas-bags, and difficult to apply and regulate so as to give the proper pressure to the gas-bags.

My improvement is for applying a regulated pressure to the gas-bags, in such a manner that the attendant upon the stereopticon can apply whatever pressure is desired. The apparatus is light and portable, and the gas-bags are protected from risk of injury by the contact of heavy weights.

In the drawings, Figure 1 is a vertical section of the pressure apparatus complete for use. Fig. 2 is an elevation, and Fig. 3 is an inverted plan, of the same.

The platen *a* is supported upon two or more cross bearing-pieces, *b*, that lift it up sufficiently to allow the cross-shaft *c* to be introduced below the platen, the same being sustained in the journal-boxes *d d*, and having at one end a ratchet-wheel, *e*, and stationary pawl *f*, and at the other end the ratchet-wheel *g*, lever *h*, and pawl *i*, the pivot of which pawl is upon the lever *h*. By these means the operator can revolve the shaft *c* by swinging the lever *h* and pawl *i* back and forth, and the pawl *f* and wheel *e* hold the shaft from turning back. Passing off from the shaft *c* in opposite directions are the straps *l l*. It is preferable to employ four of these straps *l*, the inner ends of which are attached to the shaft, and the outer ends are formed with T heads or hooks *o*, (see Fig. 4,) that are received into the loops *r*, that are upon the edges of the follower *s*, and the straps pass around the edges of the platen *a*, in guide-notches at *t*, that are either rounded or have rollers; and it will generally be necessary to provide mortises in the bearing-pieces *b* for the straps *l* to pass through.

After the two gas-bags have been placed in proper position between the platen *a* and follower *s*, the operator turns the shaft *c* by the lever *h*, pawl *i*, and ratchet-wheel *g*, and in so doing he winds the straps *l* upon the shaft *c*, and draws the follower *s* toward the platen *a*, and compresses the gas in the bags to whatever extent may be required for correctly supplying the flame at the oxyhydrogen jets.

This apparatus is light, and can be easily packed into a small compass for transportation.

I claim as my invention—

The platen *a*, with the cross-shaft *c* beneath it, in combination with the ratchet-wheels *e* and *g*, pawls *f* and *i*, lever *h*, straps *l*, and follower *s*, the parts being constructed as set forth, and adapted to receive and compress the gas-bags of an oxyhydrogen light, substantially as set forth.

Signed by me this 8th day of August, A. D. 1876.

GROVE H. LOOMIS.

Witnesses:
MERWIN LOOMIS,
D. LAMBERTON.