

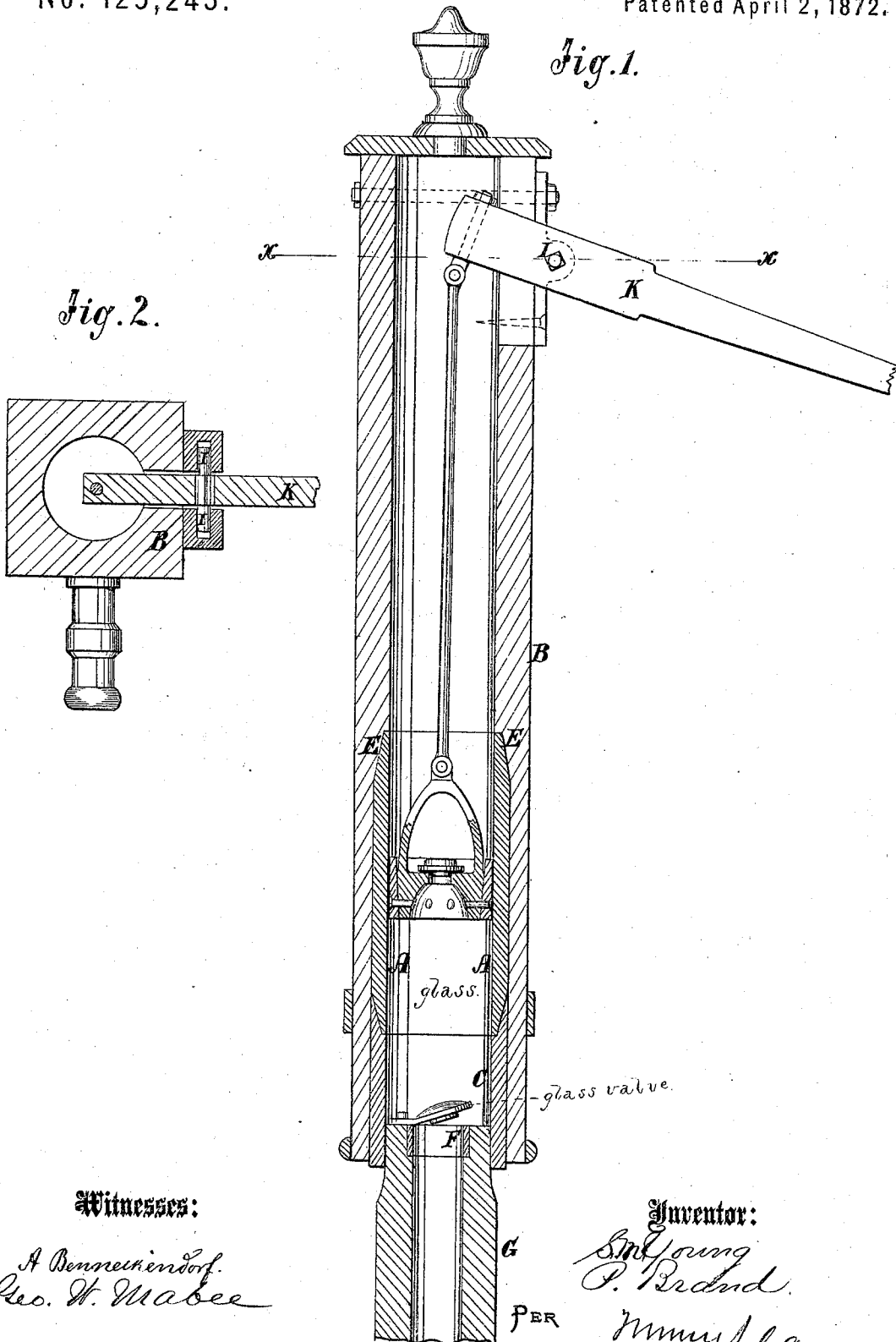
S. M. YOUNG & P. BRAND.
Improvement in Pumps.

No. 125,243.

Patented April 2, 1872.

Fig. 1.

Fig. 2.



Witnesses:

A. Bennekeindorf.
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S. M. Young
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PER

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UNITED STATES PATENT OFFICE.

SAMUEL M. YOUNG AND PHILIPP BRAND, OF JACKSONVILLE, ILLINOIS.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. 125,243, dated April 2, 1872.

Specification describing certain Improvements in Lining Pump-Barrels, invented by SAMUEL M. YOUNG and PHILIPP BRAND, of Jacksonville, in the county of Morgan and State of Illinois.

The invention will first be fully described and then clearly pointed out in the claim.

Figure 1 is a sectional elevation of our improved pump, and Fig. 2 is a horizontal section on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the glass lining with tapered ends, which we insert from the lower end of the barrel or stock B, which is bored enough larger thereat than at the upper part, and we insert a tubular plug, C, of wood or other suitable substance, below, which fits in snugly, and is flared at the upper end, as shown, to wedge in tight between the stock and the barrel and the said tapered end, and the upper end of the barrel wedges similarly with the flaring shoulder E of the bore. The plug C may be tapered, if preferred. The bore of the lining and the wedge is the same size as that of the barrel above the lining. We band the stock firmly at the lower end to prevent splitting, and keep the plug C and lining tightly. This lining is employed for its superior wearing qualities, and for the same reason we introduce a cylindrical glass valve-seat, F, in the top of the joint of pipe G, which connects with the lower end of the barrel B by being insulated

in it, as shown. The pivot I is made square or of other angular shape in the part which fits in the lever K, and round at the ends, which are fitted in bearings to turn instead of having the lever turn on it, which makes a very much more durable arrangement, for the boxes and journals do not wear as fast as the lever when working on the pivot, and the lever is prevented from vibrating laterally as much as when turning on the pivot.

We are aware that a patent for a glass pump-lining was granted to one Parkhurst on the 16th day of January, 1866; but his lining is straight to the end, as well as the bushing which fastens it, while ours is beveled at the ends and fastened by wedges. His lining is forced together with iron rods, which rust and in a few months cannot be tightened, loosened, or repaired without great difficulty, while ours is without rods or screws, and easily taken apart. His lining is clamped to its place, while ours is driven into position; hence,

What we desire distinctly to disclaim is the Parkhurst patent, and to claim as new, and protect by Letters Patent, is—

A glass lining for pumps, edge-beveled and fastened by wedges, as and for the purpose described.

SAMUEL MANSKER YOUNG.

PHILIPP BRAND.

Witnesses:

J. PIERSON,

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