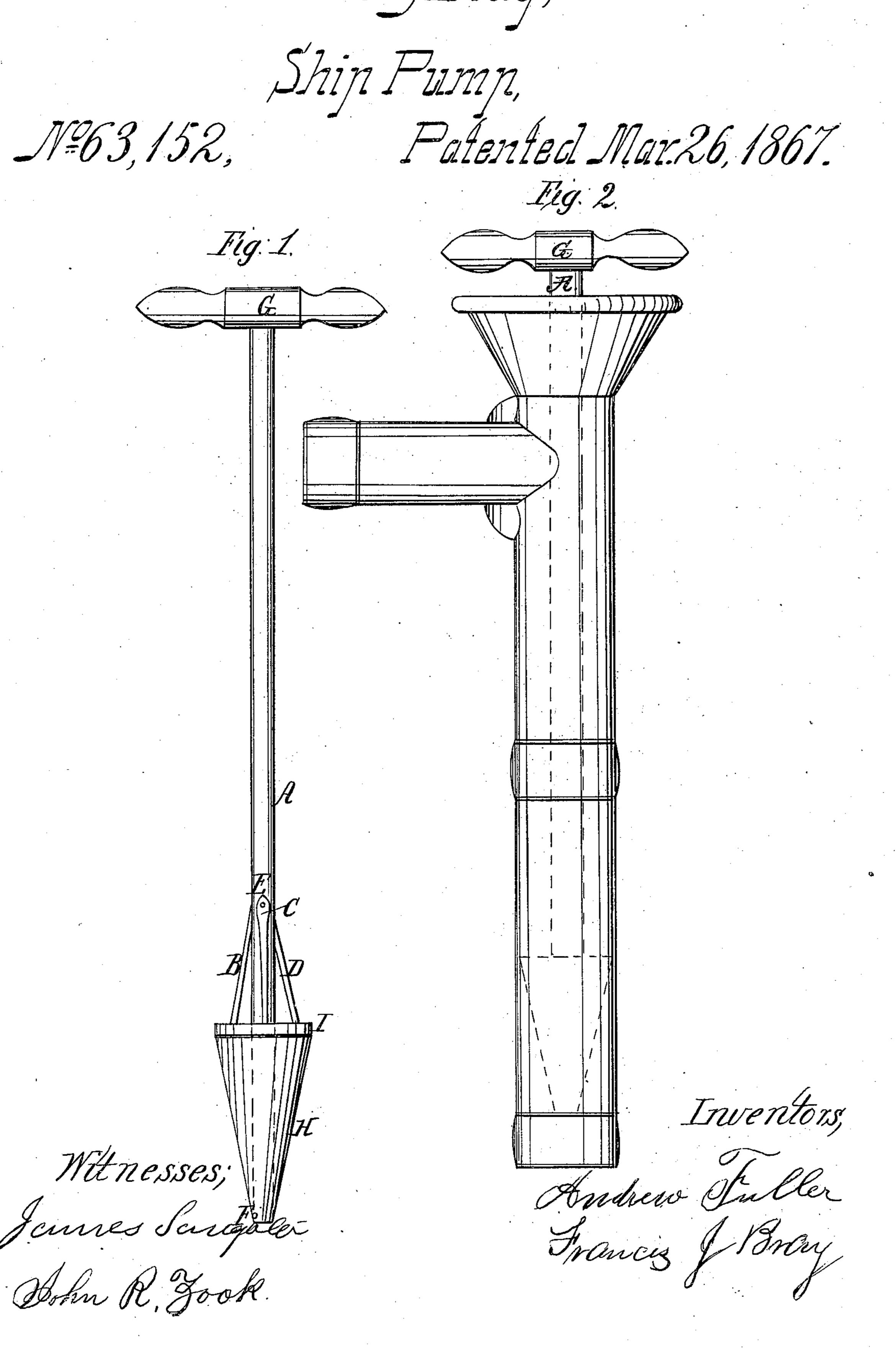
Filler & Bray,

1963,152,



## Anited States Patent Pffice.

## ANDREW FULLER AND FRANCIS J. BRAY, OF BUFFALO, NEW YORK.

Letters Patent No. 63,152, dated March 26, 1867.

## IMPROVEMENT IN PUMPS.

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

## TO ALL WHOM IT MAY CONCERN:

Be it known that we, Andrew Fuller and Francis J. Bray, of Buffalo, in the county of Erie, in the State of New York, have invented certain new and useful Improvements in Suckers for Canal-Boat Pumps; 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.

The nature of our invention consists in providing the staff and sucker with elastic strips, said strips holding

the upper rim of said sucker to the staff.

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

In the drawings, the same letters in Figures 1 and 2 represent similar parts in each.

Figure 1 represents a side elevation of the pump staff and sucker, also the elastic strips for holding the upper part of the sucker to said staff.

Figure 2 is also a side elevation showing the pump complete with the staff and sucker in place, the dotted

lines representing their position within the pump.

In fig. 1, A and G represent the staff and handle to the pump; H the sucker; C B and D the elastic strips for drawing it upward and holding it firmly to the staff. They are firmly fastened at their upper extremities by either tacks or screws, as shown at E; the lower part of the sucker is fastened in a similar manner, as shown at F. These elastic strips, by extending downward during the action of lifting the water, allows the upper rim of the sucker to spread, which effectually closes the space between the sides of the pump and the same. I represents that part of the sucker which is most exposed to wear by rubbing along the sides of the pump during the action of pumping. It is made thicker than the rest of the sucker for the purpose of giving it greater durability.

The old sucker of leather in a short time becomes useless, as the water softens it, and the upper edge or rim is apt to turn over during the action of pumping. Our invention, we claim, overcomes this difficulty, as

the rubber does not soften by standing in water, and it works better and is much more durable.

What we claim as our invention, and desire to secure by Letters Patent, is—

The elastic strips C, B, and D, in combination with the staff A and sucker H, substantially as described.

ANDREW FULLER, FRANCIS J. BRAY.

Witnesses:

JAMES SANGSTER, John R. Zook.