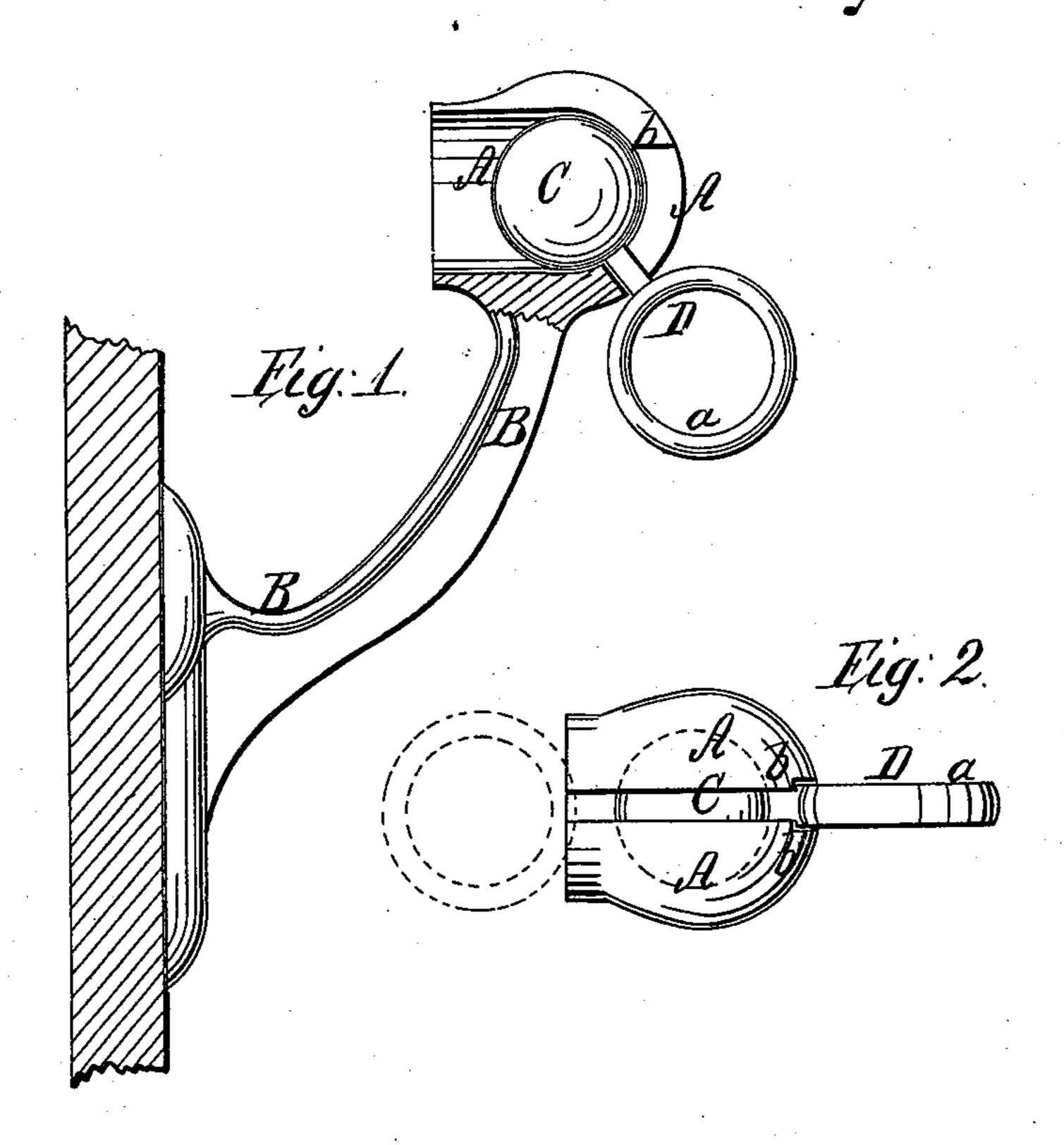
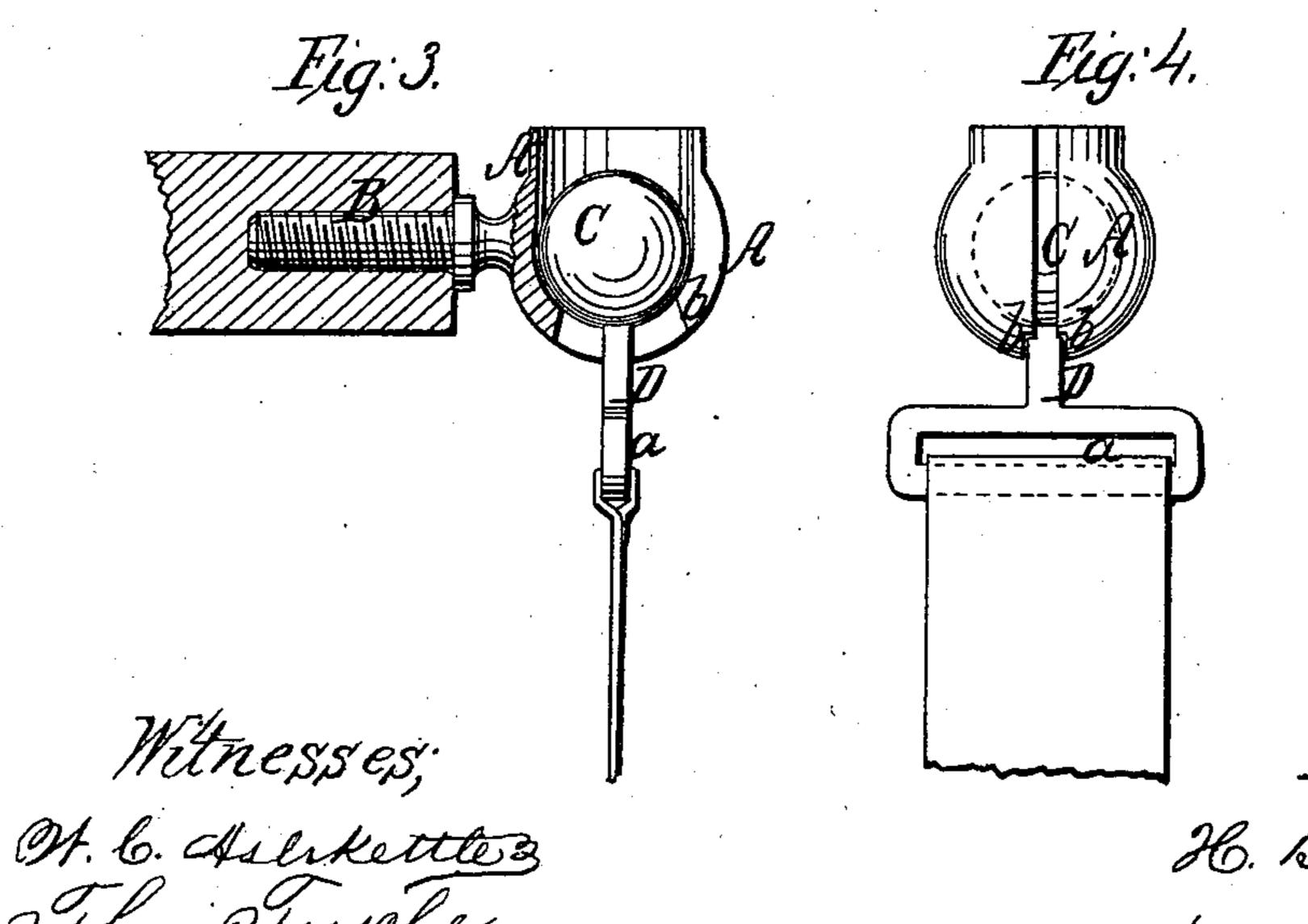
# A. Bienoit,

Iniversal Joint.

N°76,706.

Patented Anz.14, 1868.





Inventor; H. Brevoort par munifo auomelys

## Anited States Patent Office.

### HENRY BREVOORT, OF BROOKLYN, NEW YORK.

Letters Patent No. 76,706, dated April 14, 1868.

#### IMPROVEMENT IN DETACHABLE BALL-JOINT.

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

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, Henry Brevoort, of Brooklyn, in the county of Kings, and State of New York, have invented a new and improved Detachable Ball-Joint Chains, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents a sectional side view of my invention.

Figure 2 is a top view of the same.

Figure 3 is a horizontal sectional view of a modification of the same.

Figure 4 is an end view of the modification.

Similar letters of reference indicate corresponding parts.

This invention relates to a new device for securing the ends of straps, cords, chains, or other articles, to some stationary or other device in such a manner that the attachment may be perfectly secure, and may still be easily disengaged whenever desired.

The invention consists in the use of a ball-joint, in which the ball has a shank which is attached to the strap or cord to be fastened, while the shell is open at one end to receive the ball, and is slotted to receive the shank, and when the shank is moved to the end of the slot, so that the ball rests against the closed end of the shell, the shank may be turned in the enlarged end of the slot, and may thus be locked, so that it cannot pass by the shoulders of the slot. But even if the slot is not enlarged, will the connection be satisfactory for all practical purposes.

A represents a tubular shell, having one semispherical closed, and one open end, as shown. This shell is fixed on a suitable shank or holder, B, by means of which it is attached to any suitable device. In fig. 1 this holder B is represented as a bracket projecting from a stationary wall; in fig. 3, as a screw or pin, by means of which the shell is secured to the end of a whiffle-tree, or other device. The shell A is slotted, as shown, the slot extending in a straight or other direction from the open end to about the centre of the closed end, or further.

C represents a ball, of such diameter that it will fit into the shell A. From the ball projects a shank or handle, D, having an eye, a, or some other device, by means of which it can be attached to a strap, cord, chain, or even to a bar, if desired.

The shank D is moved in the slot until it rests upon the end of the same, as shown in fig. 1, or until it is as far as required, as in fig. 3. The inner end of the slot may be widened, as shown in figs. 2 and 4, so that the shank D, when turned in the wider part of the slot, will strike against the shoulders b b of the slot, and will thus be locked in the shell until turned again, so that a narrow part of the shank may enable the same to be drawn out of the slot.

This invention may be applied for various purposes. In fig. 1, A is represented as being a device for hitching animals, the shell being secured to a wall, while the ball is secured to a strap attached to the animal. In figs. 3 and 4, the device is represented as a trace-fastener, the shell being attached to the end of a whiffle-tree, while the ball is secured to the end of a trace, as shown.

I claim as new, and desire to secure by Letters Patent-

1. The ball-joint, constructed as described, consisting of the shell A, open at one end, and provided at its opposite end with the slot having the shoulder b, whereby, as the ball is introduced into the shell, and its shank turned in the wider part of the slot, it will strike said shoulders, and be locked in the shell until turned again, so that its narrower part will enable the ball to be withdrawn from the slot, as herein shown and described.

2. The ball-joint, constructed as described, in combination with the bracket B or screw B, as herein described for the purpose specified.

HENRY BREVOORT.

Witnesses:

WM. F. McNamara, ALEX. F. ROBERTS.