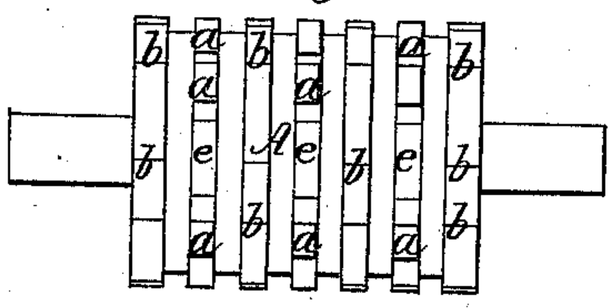
O. Nichols.

Cable Stopper.

No. 10,724. Patented Apr. 4, 1854.

Fig. 3.



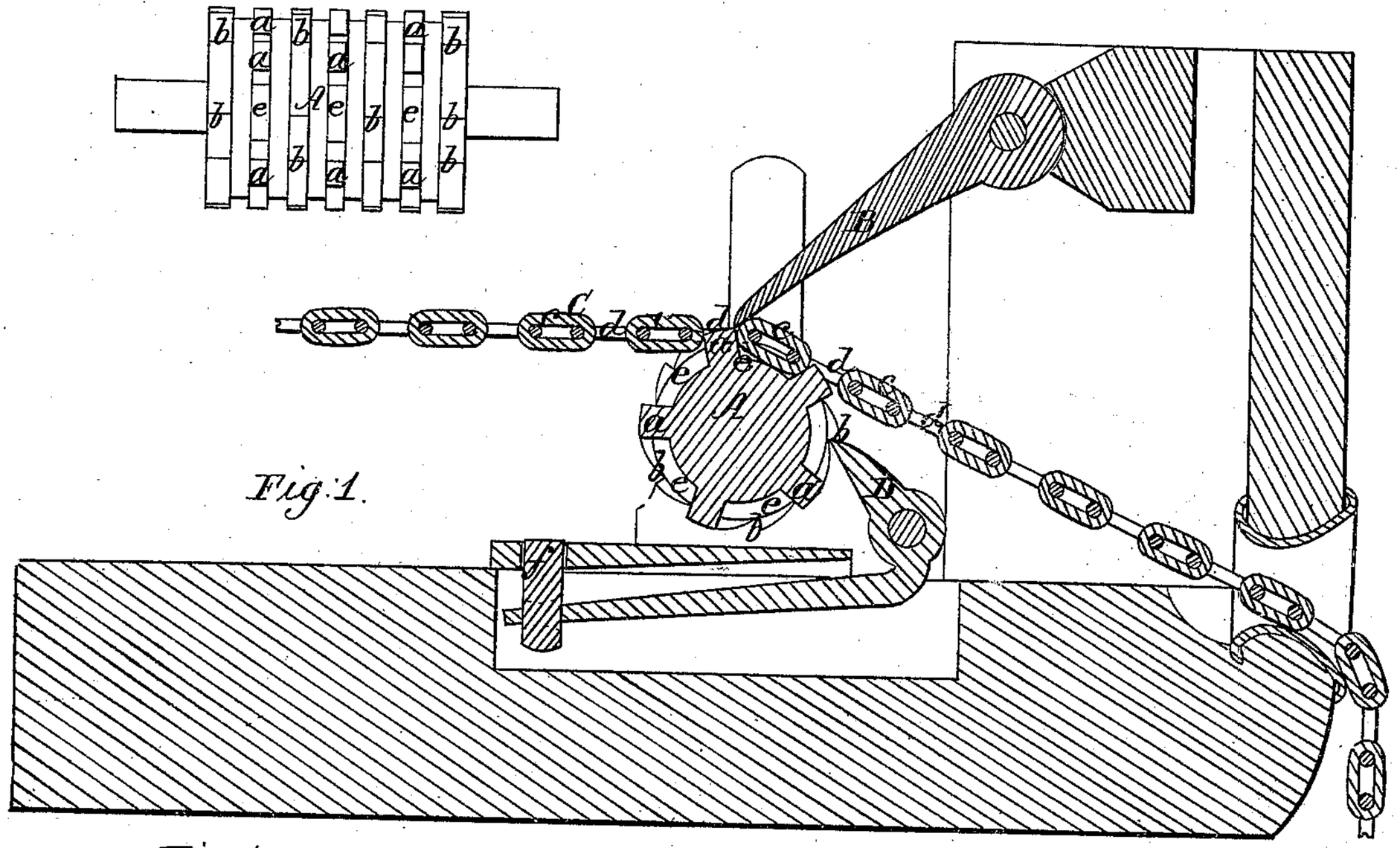
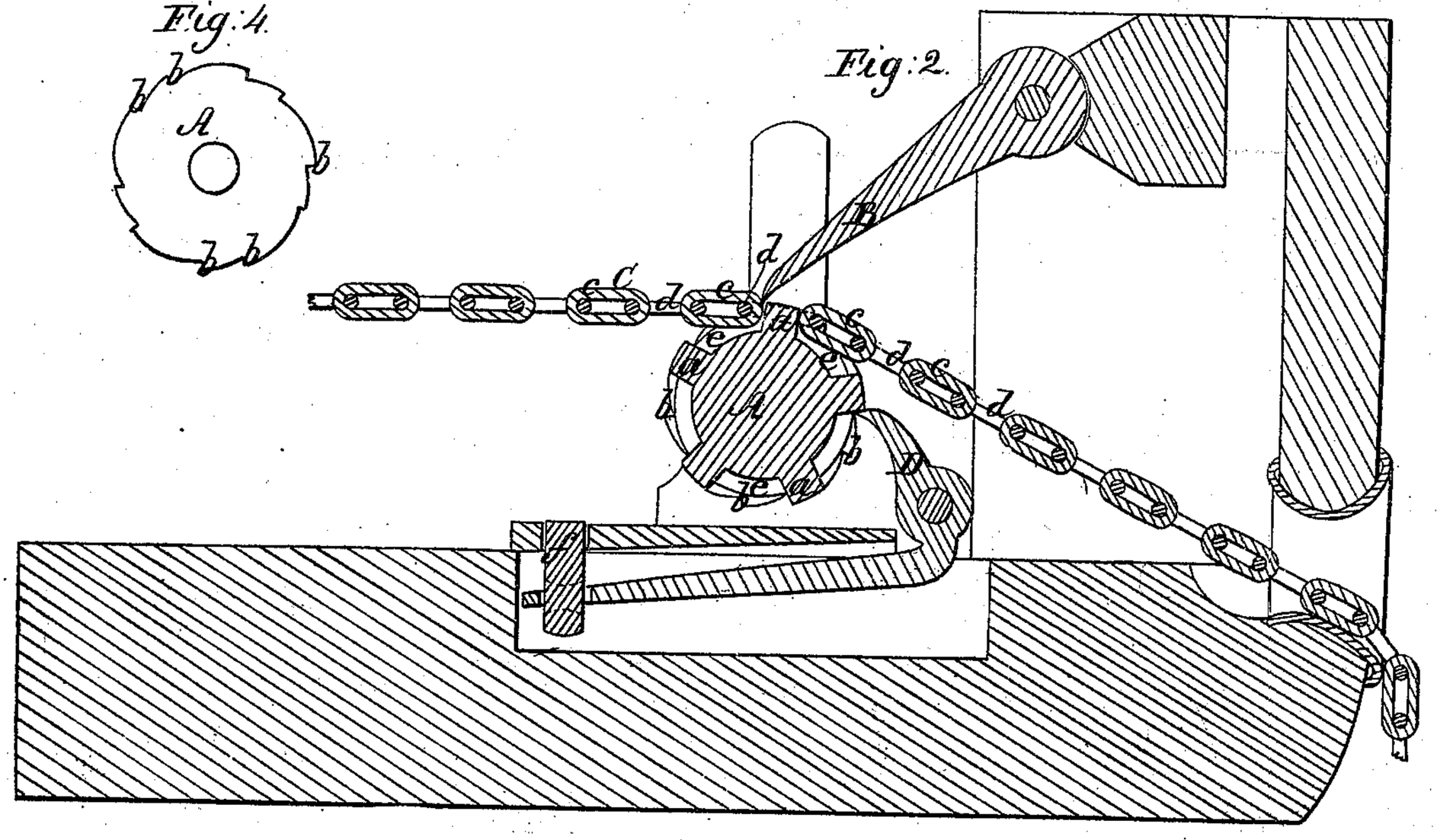


Fig. 1.

Fig. 4.

Fig. 2.



UNITED STATES PATENT OFFICE.

OLDIN NICHOLS. OF LOWELL, MASSACHUSETTS.

CHAIN-CABLE STOPPER.

Specification of Letters Patent No. 10,724, dated April 4, 1854.

To all whom it may concern:

Be it known that I, OLDIN NICHOLS, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Chain-Cable Stopper; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, Figure 1 being a vertical section of the stopper and a portion of the deck of a vessel in the line of the chain cable, representing the action of the stopper in one position; Fig. 2, a similar view showing the action of the stopper in another position; Fig. 3, a side view of the stopper roller detached, and Fig. 4 an end view thereof.

Like letters designate corresponding parts in all the figures.

The nature of my invention consists in preventing the backward slipping of the cable, as it is drawn inward, by my improved method of providing a catch for every link by means of the roller A, supplied with the projections *a*, *a*, recesses *e*, *e*, and ratchet teeth *b*, *b*, in connection with the pawls B and D, all arranged and operating together upon the cable substantially as hereinafter set forth.

The horizontal roller A, over which the chain cable C passes, is situated in a proper position between the hawse-hole and windlass, and is provided with a series of projections, *a*, *a*, &c., around on its periphery, at proper distances apart to fit into the alternate horizontal links *d*, *d*, &c., of the chain, as they are successively brought over the roller. Between these projections are formed depressions *e*, *e*, &c., of suitable size and depth to receive the lower portion of each vertical link *c*, so as to allow the horizontal links to rest upon the surface or periphery of the roller. As the chain cable is drawn in, the pawl B, slides over it, and, falling behind each alternate, vertical link thereof, (as shown in Fig. 2) securely holds the cable. The cable is also hove in, or run out, with much greater ease and with much less wear and injury, than in the ordinary way, because a large amount of friction is avoided by the use of the roller.

In Fig. 3, three series of the above described projections and depressions are represented on the roller, for the purpose of shifting the position of the cable when required. A second pawl D, (arranged as exhibited in the drawings), is made to play into a series of ratchet teeth *b*, *b*, &c., on the roller A, by means of a horizontal arm projecting from said pawl and operating by its own weight together with that of a pedal *f*, by which it is controlled. The teeth *b*, *b*, &c., are arranged alternately at different distances apart, (as shown in Figs. 3 and 4,) to correspond with the difference between the lengths of the vertical links *c*, *c*, &c., of the chain, and their distances apart, in order that said pawl D, may operate in harmony with the pawl B, *i. e.*, when the latter just arrives at the ends, of the vertical links, or when in the two positions represented respectively in Figs. 1 and 2.

What I claim as my invention and desire to secure by Letters Patent, is—

Preventing the backward slipping of the cable, as it is drawn inward, by my improved method of providing a catch for every link by means of the roller A, supplied with the projections *a*, *a*, recesses *e*, *e*, and ratchet teeth *b*, *b*, in connection with the pawls B and D, all arranged and operating together upon the cable substantially as herein set forth.

The above specification of my improved chain cable stopper signed and witnessed this 28th day of Feb., 1854.

OLDIN NICHOLS.

Witnesses:

Z. C. ROBBINS,

J. S. BROWN.