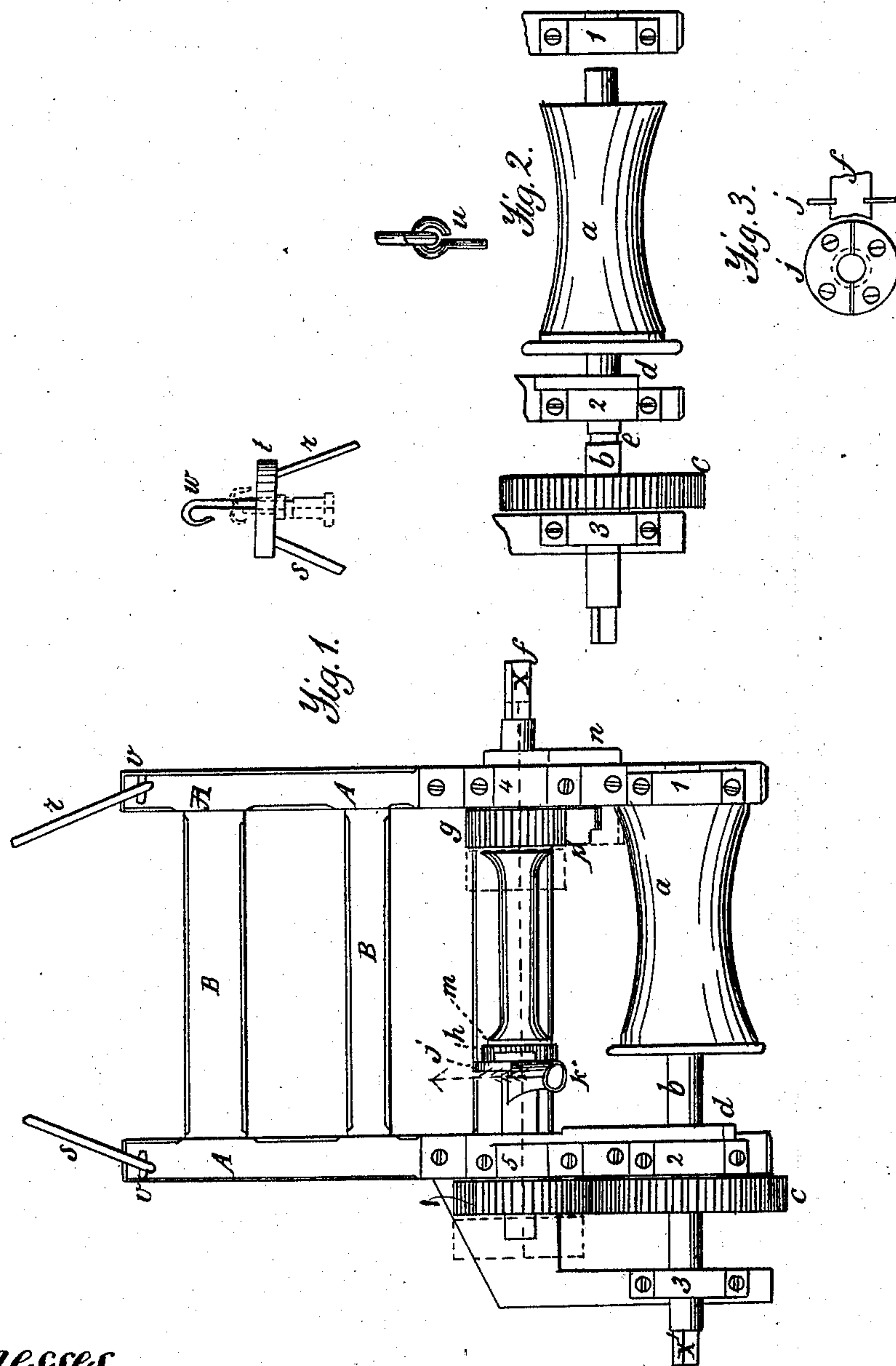


R.D. Rodgers,
Winallass.
N^o 68,702. Patented Sep. 10, 1867.



Witnesses:
W^m. H. Clifford
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Inventor:
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United States Patent Office.

RUFUS D. ROGERS, OF CAPE ELIZABETH, MAINE.

Letters Patent No. 68,792, dated September 10, 1867.

IMPROVED WINCH.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, RUFUS D. ROGERS, of Cape Elizabeth, in the county of Cumberland, and State of Maine, have invented a new and useful Improved Winch; and I hereby declare the following to be a full, clear, and exact description thereof, which will enable others to make and use my invention, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan of my invention.

Figure 2 is a detail of the barrel, shaft, and geared wheel, and illustrates the manner in which the same may be thrown out of gear.

Figure 3 shows a side view of the truck to which are connected the lever and pawl by which the winch is operated, and shows also the manner in which the truck is connected with its shaft.

My invention has relation to a new combination and arrangement of devices to constitute an improved winch, the different parts of which, and their operation, I will describe as follows:

a shows a barrel on the shaft *b*, upon which is also the large gear *c*. This shaft revolves in bearings 1 2 3. *d* is a latch which fits into the groove *e* when the shaft is in the position shown in fig. 1, and retains the shaft in such position. *f* is another shaft, having bearings 4 5, also gears *g h i*. Upon this shaft is also set the truck *j*, to which truck is rigidly attached the lever *k* having the pawl *m*. *n* is a latch fitting into a groove on the shaft *f*, similar to the groove *e* on the shaft *b*. This latch *n* may be raised so as to allow the gear *i* to be thrown out from *c*, as indicated by the red lines in fig. 1. *p* is a pawl working in the gear or ratchet *g* to sustain any weight or strain brought upon the barrel *a*. The truck *j* is composed of two parts, one part of which fits around the shaft *f*; the portion in a groove in said shaft, as shown in fig. 3. This portion is composed of two semi-circular pieces, as shown in the same figure, which pieces, being removed from the truck and from their groove in the shaft, will admit of the truck being slipped off from the track. *r s* show two arms secured in the head *t*, each having a bolt and link similar to that illustrated at *u*, for the purpose of connecting the said arms with the frame A B, as shown at *v*. The head *t* has the sliding-bolt *w*, which has the head, rectangular shank, and hook, as illustrated in the drawing. The aperture in the head *t* is also rectangular in form, and the square portion of the bolt *w* fits accurately therein. The purpose of this is, when the arms *r s* are connected with the frame A B, and the hook on the bolt *w* inserted into or connected with any object for the purpose of holding the frame in any desired position, that the said frame may not cant or tip, which would be the case if the bolt-shank were round. Pressing the bolt *w* inward, as shown by the dotted lines, it can be turned to either side, as therein also indicated, in the same way.

The operation of the different parts of my invention is as follows: Connect the hook on the bolt *w* with any fixed object, in order to hold the machine stationary in position; turn the shaft *f* by the lever *k*, which moves the said shaft by means of the pawl *m* in the ratchet or gear *h*, thus revolving the gear *i* which matches the larger gear *c*, and thus revolves the barrel *a*, upon which is attached and wound the cord or other article connected with the object to be moved. By raising the latch *d* and moving the shaft *b*, as shown in fig. 2, the two gears *i* and *c* are thrown out of gear, and the work of the machine may be done directly from the shaft *f*. The shaft *f* may also be thrown out of gear, and either *f* or *b* may be operated alone by cranks applied at *x x'*.

My invention can be usefully employed for various purposes, and among others, on ship-board, in the manner in which similar machines are usually employed.

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

1. The combination and arrangement of the shaft *f*, pawl *p*, ratchet *g*, ratchet *h*, lever *k*, truck *j*, pawl *m*, and gear *i*, with the gear *c*, shaft *b*, and barrel *a*, all as and designed to operate in the manner and for the purposes hereinbefore set forth.

2. In combination with the shaft *f*, the latch *n* and its groove on the said shaft, as and for the purposes set forth.

3. In combination with the shaft *b* and groove *e*, the latch *d*, as and for the purposes set forth.

4. The combination of the arms *r s*, head *t*, and adjustable bolt *w*, as and for the purposes specified.

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Witnesses:

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