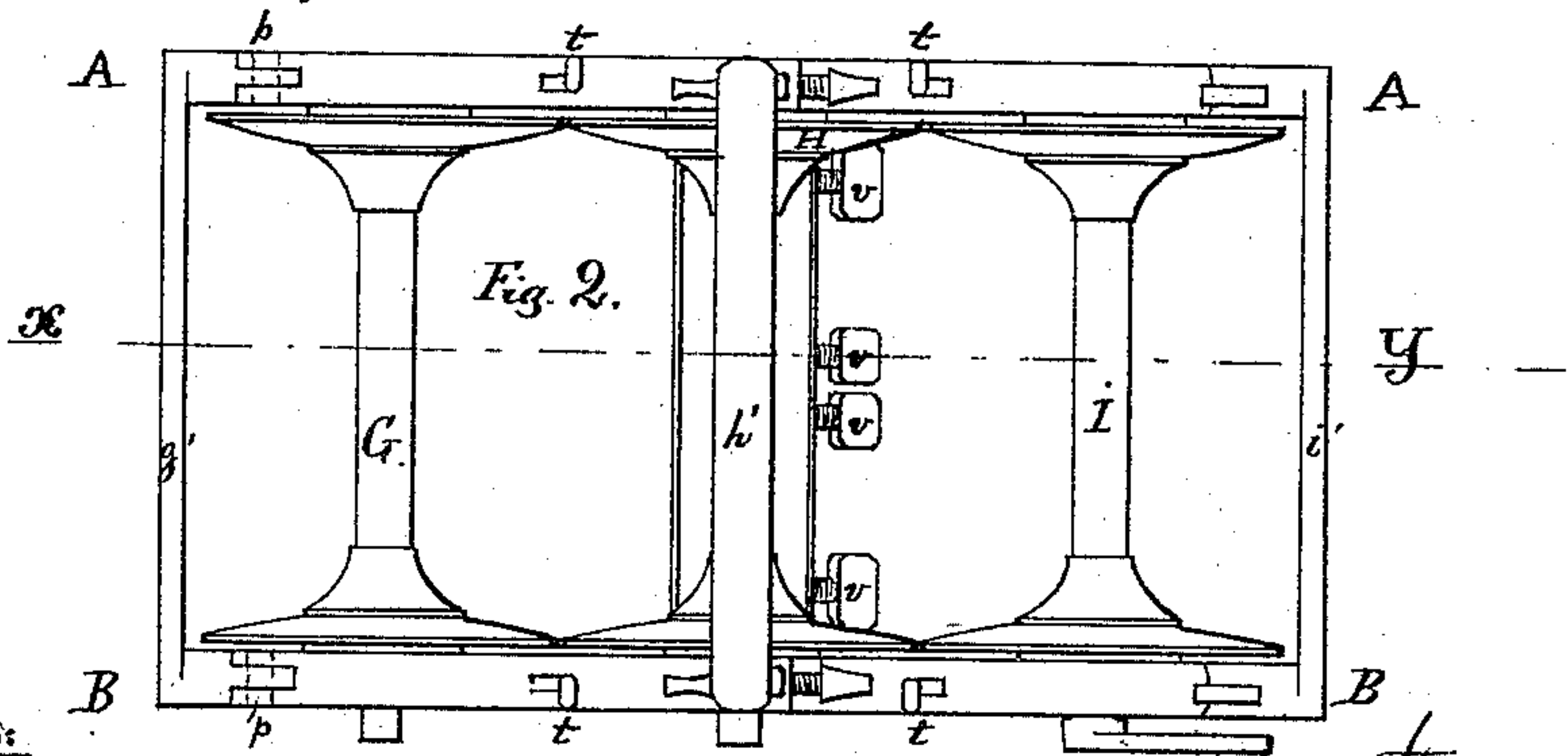
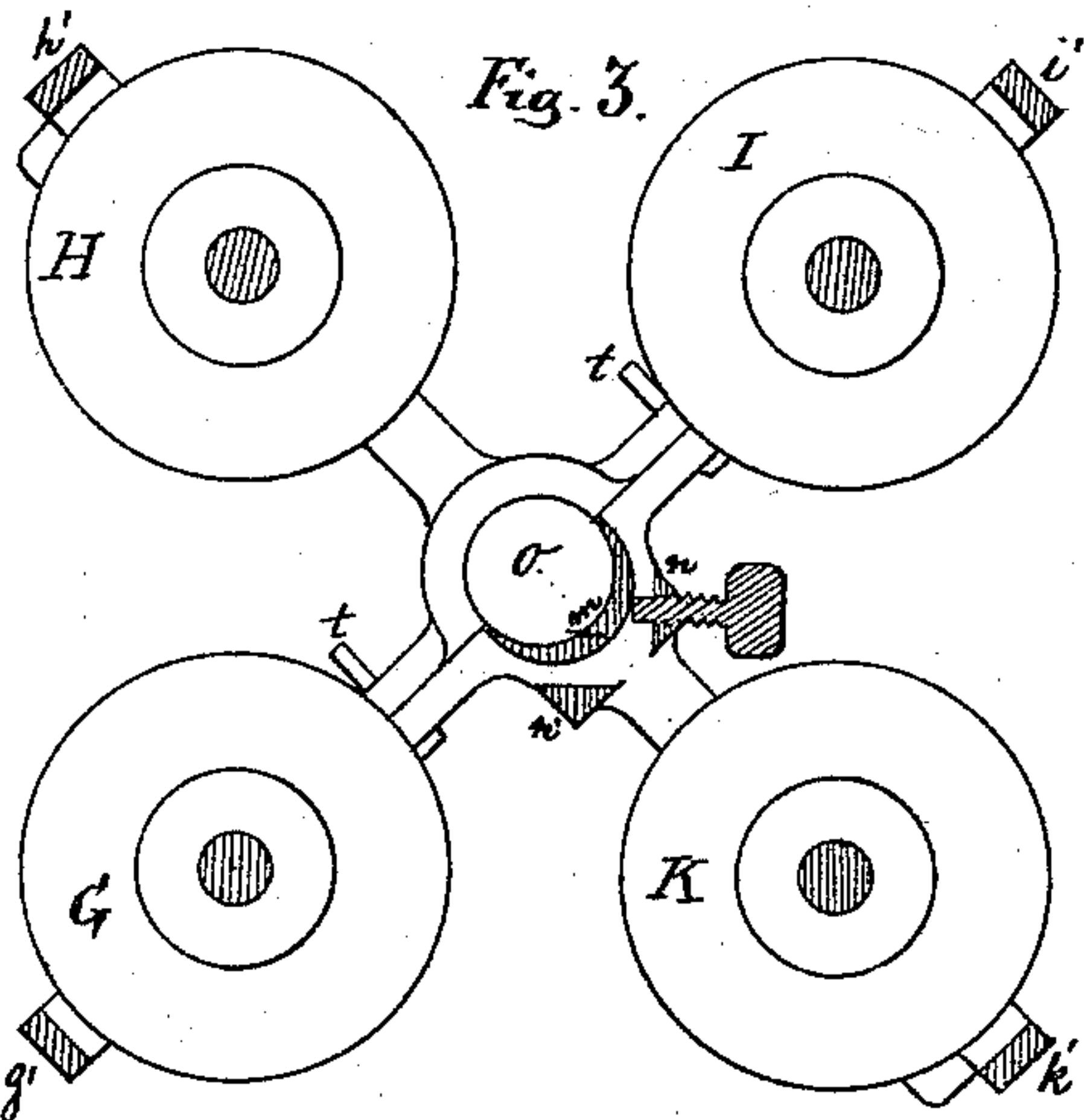
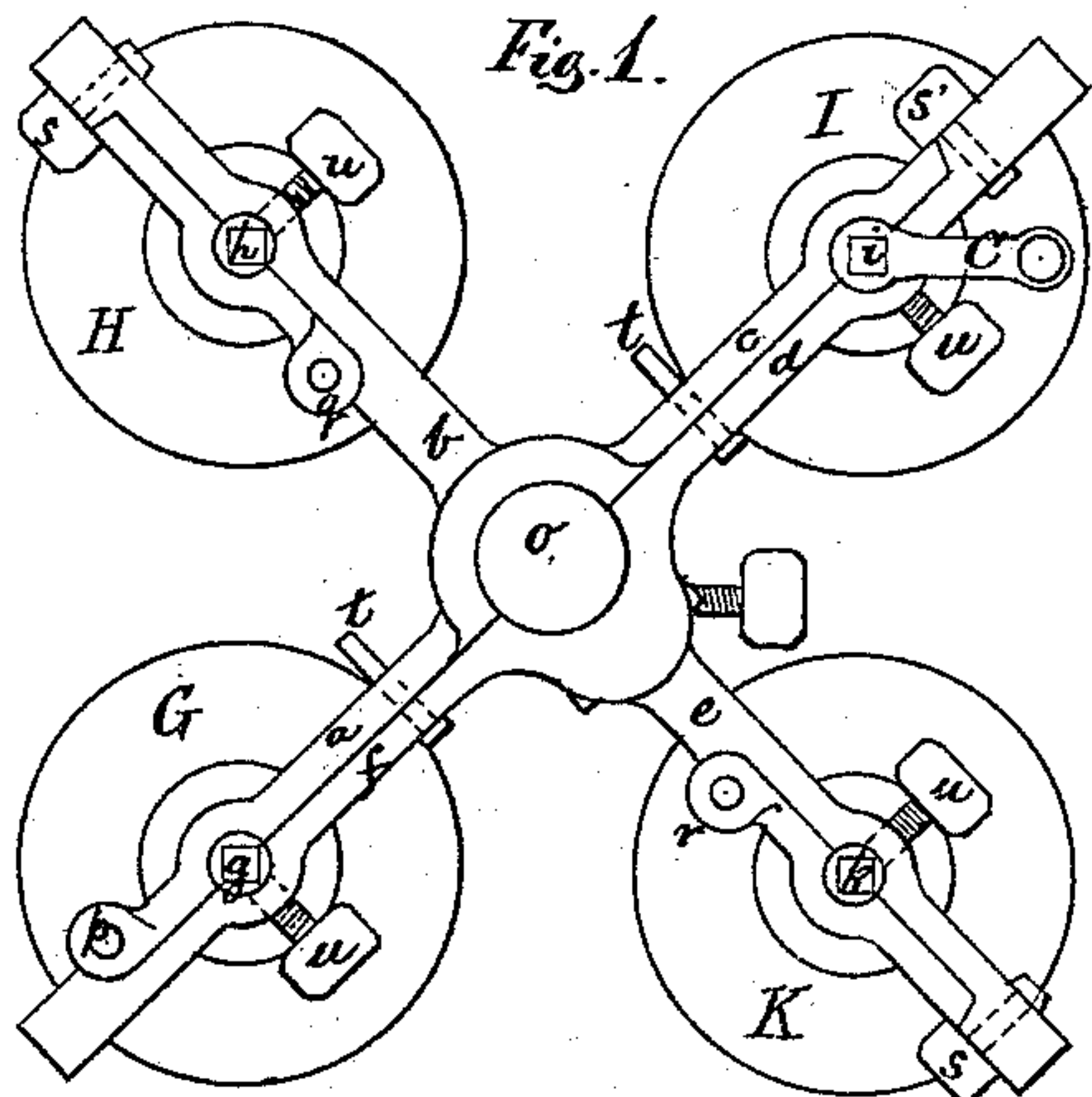


J. H. Westcott,
Serving Reel.
No. 111,160. Patented Jan. 24. 1871.



Witnesses:

Geo. F. Langer
C. P. Daniels

Inventor:

Joseph Henry Westcott
by his attorney, A. H. Audie

United States Patent Office.

JOSEPH HENRY WESTCOTT, OF MEDFORD, MASSACHUSETTS.

Letters Patent No. 111,160, dated January 24, 1871.

IMPROVEMENT IN SERVING-REELS.

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

I, JOSEPH HENRY WESTCOTT, of Medford, in the county of Middlesex and State of Massachusetts, have invented a new and useful "Serving-Reel," of which the following is a specification.

Nature and Objects of my Invention.

The nature of my invention relates to a number of spools or spindles, arranged, concentric to the rope that is to be "served," in a frame or frames having bearings for the ends of said spools or spindles to move in, with adjustable tension, for the purpose of "serving" ropes of any description, as herein will be fully shown and described.

On the drawing—

Figure 1 is a side view;

Figure 2 is a ground plan; and

Figure 3 is a longitudinal section over the line *x y*, taken on fig. 2.

Similar letters refer to similar parts wherever they occur on the drawing.

The only apparatus heretofore in use for serving ropes has been what is practically called a "serving-mallet," requiring always two men to work it to advantage, and then only serving one thread at a time, whereas with my "serving-reel" one man can alone serve any sized rope, and can serve as many threads at a time as the reel contains spools or spindles.

a b c d e f is a frame or reel, having bearings, *g*, *h*, *i*, and *k*, for the spools or spindles *G*, *H*, *I*, and *K*, movable in said bearings.

At the opposite ends of said spools is a similar frame, for the same purpose, as shown in *A B*, fig. 2.

The said frames *A B* are coupled together by means of cross-bars, *g' h' i' k'*, outside the spools *G H I K*.

The frame marked *d e f* is also connected to its mate, on the opposite side, by means of a bar of semicircular section, as shown at *m* on fig. 3, as well as by the bars *n n'*, shown in section on the same figure.

The central hole *o* in both frames, as well as the semicircular connection *m*, is made to serve as a guide for the rope that is to be served.

The frame marked *a b c*, as well as its mate on the other end of the spools, is made to turn around the hinges *p p*, as shown on figs. 1 and 2, by the arrangement of which the reel can be opened for the purpose of embracing the rope to be served, and for the purpose of taking out or inserting the spools *G* and *I* when needed.

The arms marked *b* and *c* have also hinges, *q* and *r*, by which means the spools *H* and *K* can be taken out or replaced, as may be required.

Locking apparatus *s s' s'* are attached to the extreme ends of the arms marked *b*, *c*, *d*, and *e*, for the

purpose of locking the different parts of the frames together when ready for use.

Similar ones, marked *t t*, attached to the arms *f* and *d*, and playing through slot-holes in the arms *a* and *c*, serve for the purpose of locking and strengthening the main parts *a c d f* together in a substantial manner.

On each bearing *g h i k* is a set-screw or regulator, *u u u u*, for the purpose of increasing the friction of the shafts in their bearings, whereby a greater or lesser tension is obtained on the threads wound upon the spools *G*, *H*, *I*, and *K*.

The bars *n n'*, with their screws, are for the purpose of guiding the threads from the spools onto the rope that is to be served.

To operate my serving-reel, fill the spools *G*, *H*, *I*, and *K*, with the thread, yarn, or wire that is to be used to serve with, and place the spools in their respective bearings.

The filling of the spools can also be done by means of a portable crank, *C*, as shown, attached to the spool *I* on figs. 1 and 2.

When the spools are filled with the thread needed, open the locks *s' t t*, and turn the frame *a b c* around the hinges *p p*, when the rope to be served can easily be placed in its position *o*, and the whole locked again in the position as shown on fig. 1.

After the threads from the spools have been placed in the guides *n n'*, the operation may commence simply by turning the whole reel around the rope as a center, when the threads, yarns, or wires from the spools will be wound or served around the rope in question.

The necessary tension of the threads may be had simply by screwing up the regulators *u u u u*, as described previously.

One spool, with its frame, may also to advantage be attached to the extreme end of the handle of a common serving-mallet, but will, of course, not do the work as quick as with the above-named serving-reel, where I am able to work at a time with as many threads as I choose to employ spools or spindles.

Having thus described the nature, construction, and operation of my invention,

I wish to secure by Letters Patent and claim—

1. A serving-reel, composed of a frame with one or more spools or spindles, with their regulators *u u u u*, as herein shown and described.

2. In combination with a serving-reel, the hinges *p*, *q*, and *r*, locking apparatus *s s' t t*, the guiding-bar *m*, and guides or their equivalents *v v v v*, for the purpose as herein fully set forth and described.

JOSEPH H. WESTCOTT.

Witnesses:

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