

No. 660,879.

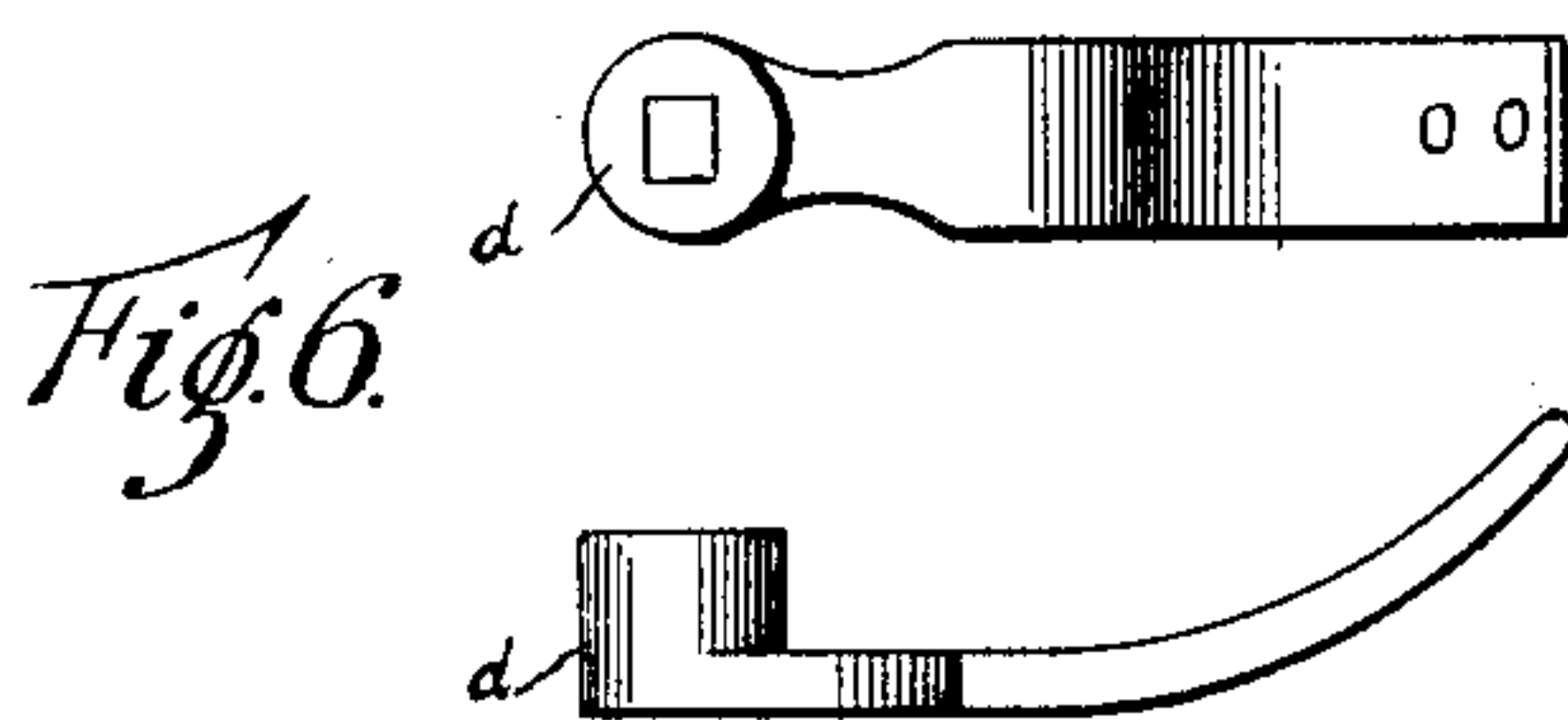
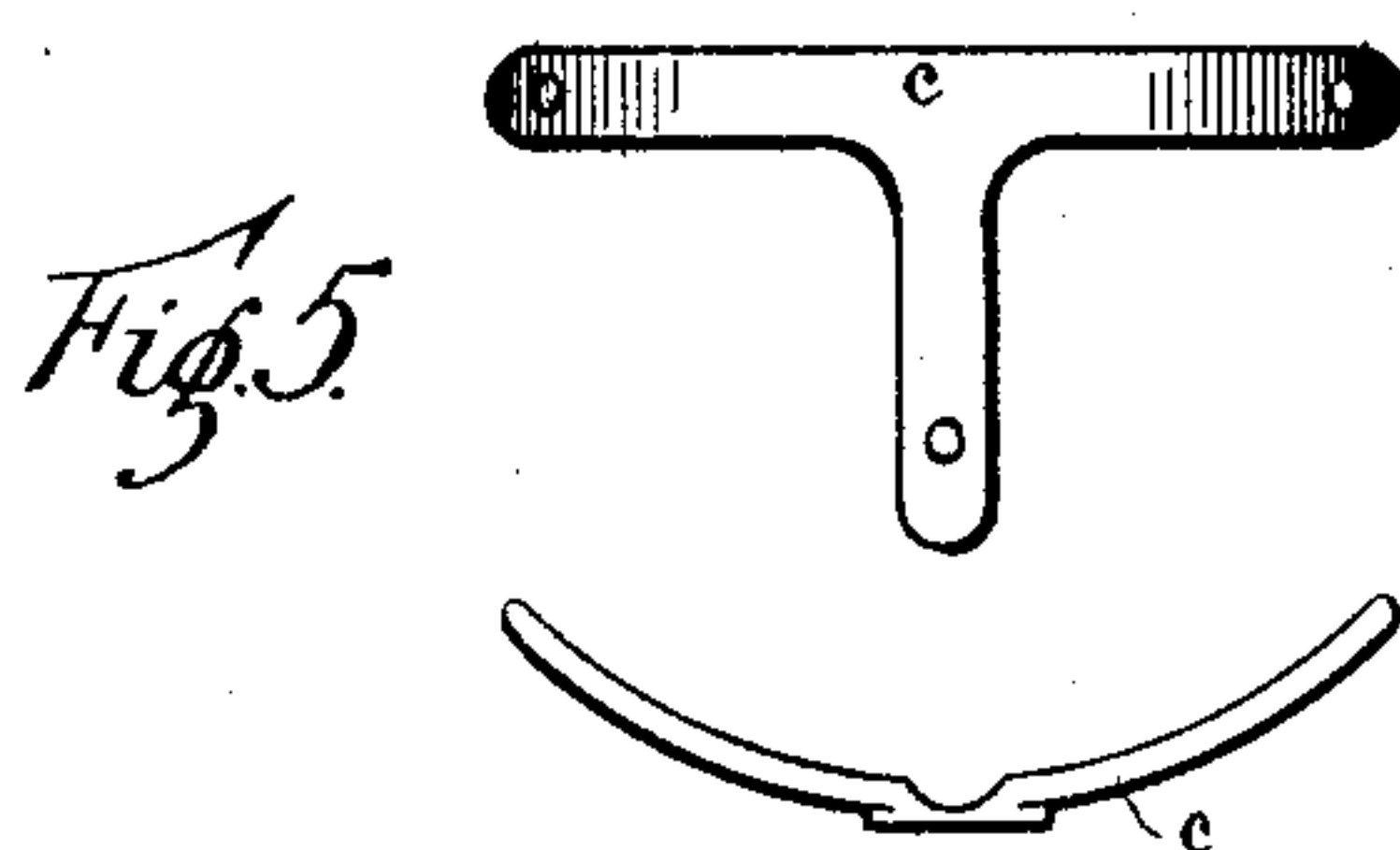
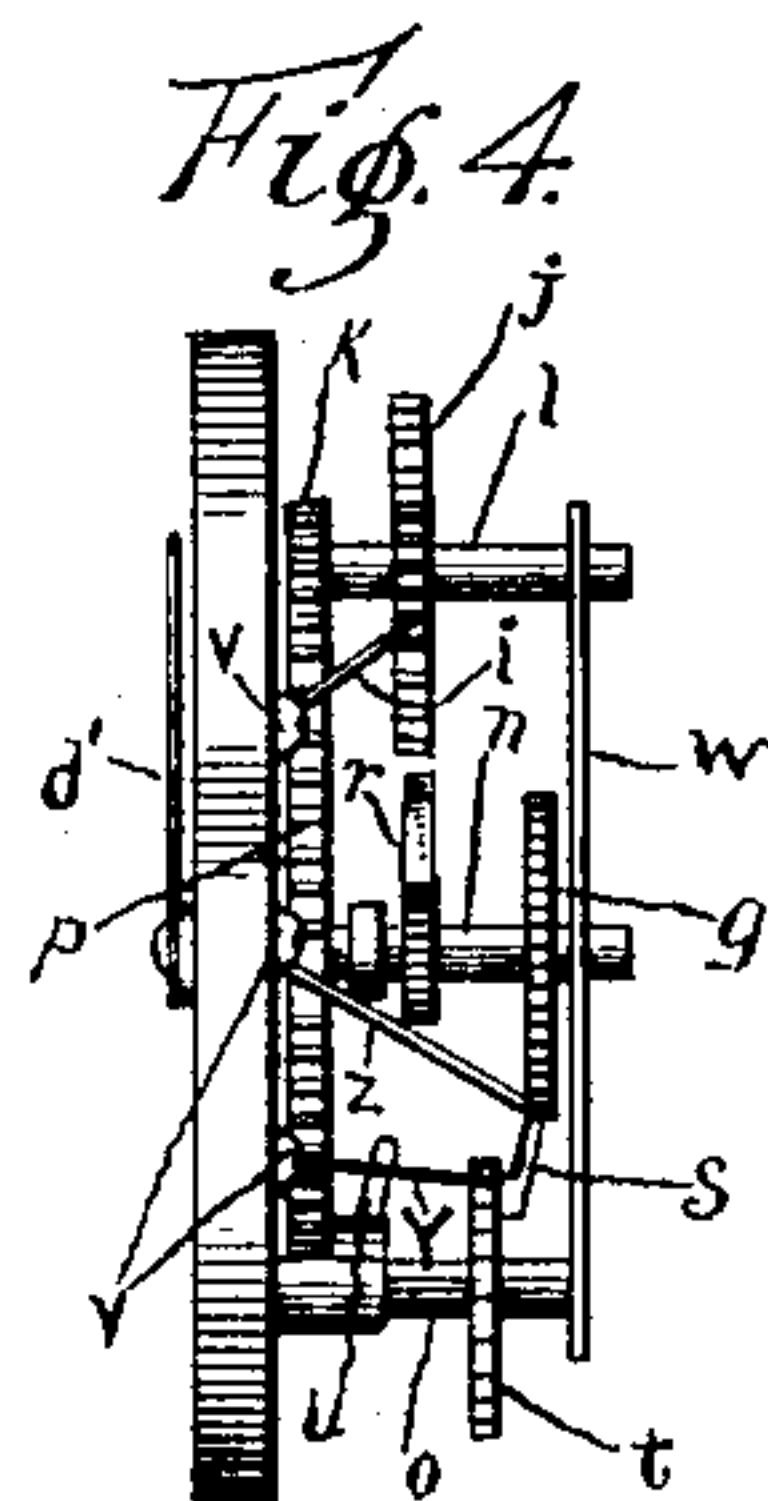
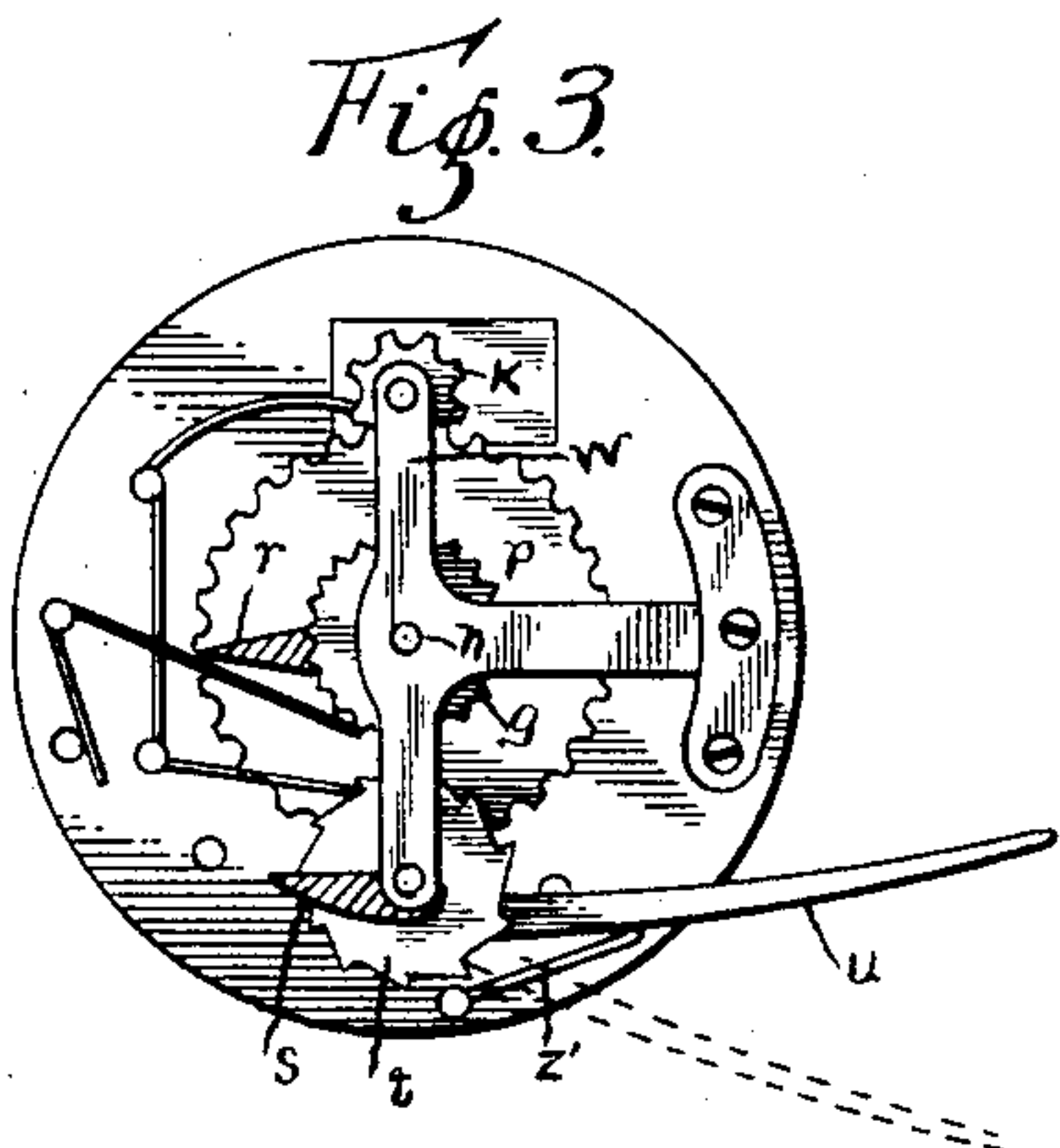
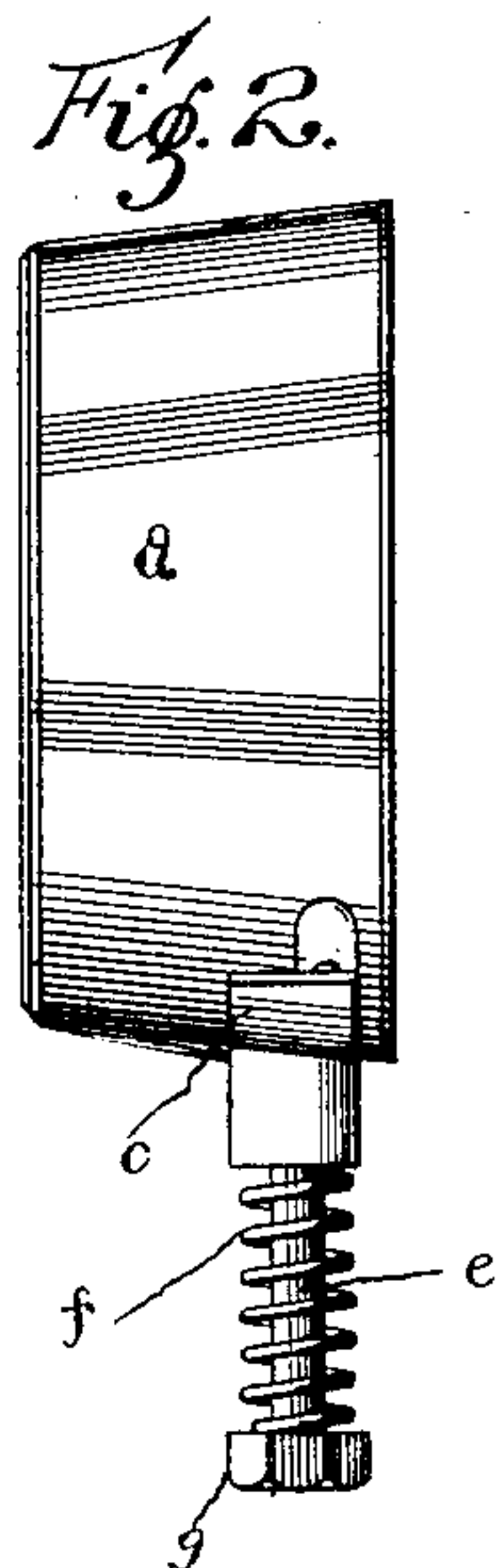
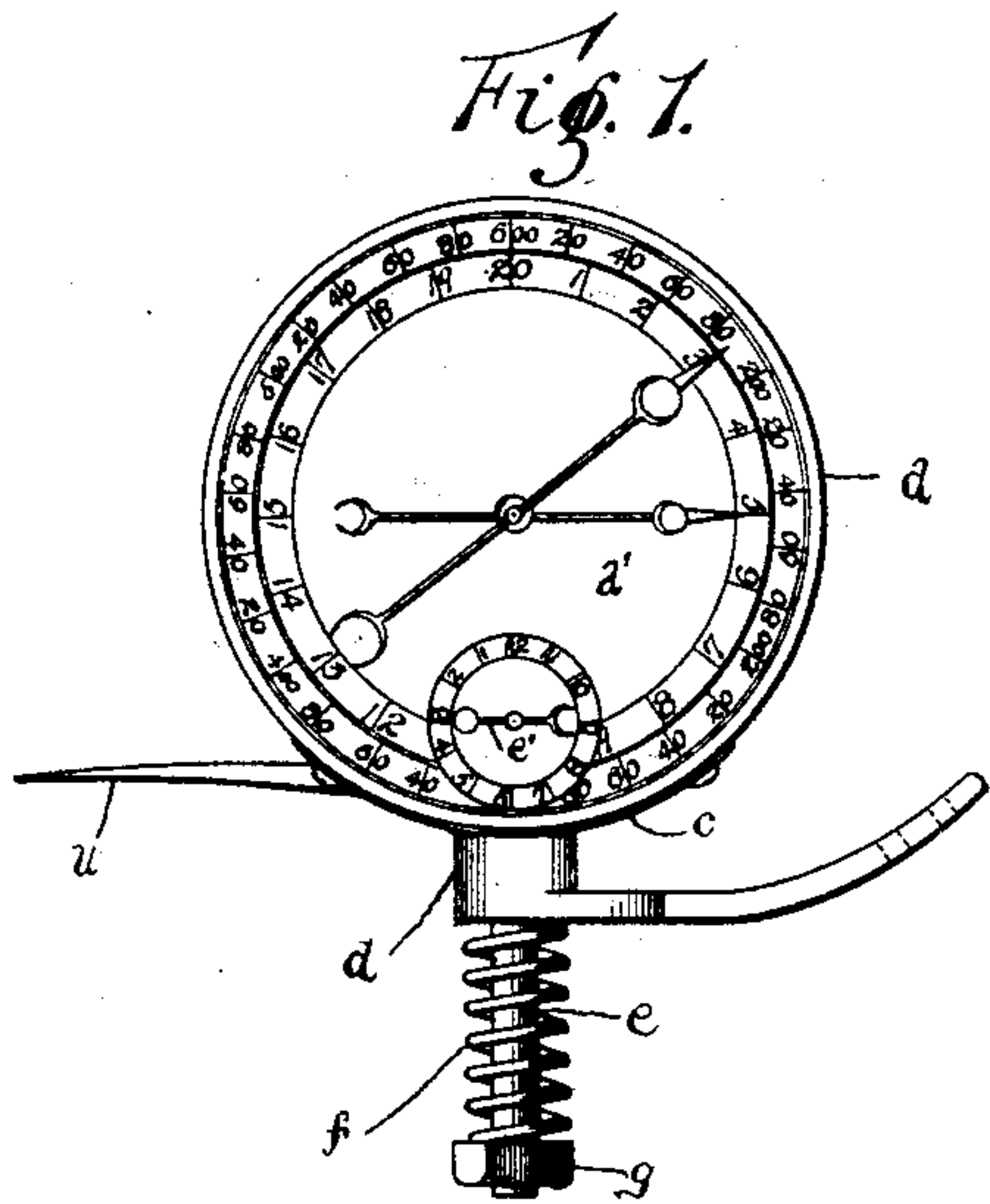
Patented Oct. 30, 1900.

J. F. YOUNG.

SHEAF OR BUNDLE REGISTERING MACHINE.

(Application filed Aug. 29, 1899.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN FAIRLAMB YOUNG, OF MARSHALTON, PENNSYLVANIA.

SHEAF OR BUNDLE REGISTERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 660,879, dated October 30, 1900.

Application filed August 29, 1899. Serial No. 728,858. (No model.)

To all whom it may concern:

Be it known that I, JOHN FAIRLAMB YOUNG, a citizen of the United States, residing at Marsh-
5 alton, in the county of Chester and State of Pennsylvania, have invented a new and useful Sheaf or Bundle Registering Machine, of which the following is a specification.

My invention relates to sheaf or bundle registers to be used in connection with grain
10 harvesters or binders by which units, dozens, and hundreds of dozens of sheaves or bundles are indicated by numerals upon the face or dial of the machine and definitely pointed out by the indicators upon said dial.

15 The object of my machine is to number each sheaf or bundle consecutively as it is expelled from a grain harvester or binder, registering the number of sheaves or bundles to six hundred dozen, and repeating without any mechanical adjustment. I attain this object by
20 the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a face view of the entire machine. Fig. 2 is a side elevation of my invention;
25 Fig. 3, a detailed view of the mechanism from the back of the machine with casing removed. Fig. 4 is a side elevation with the casing removed. Figs. 5 and 6 are detail views. Fig.
30 7 shows a key which may be used in connection with my invention.

My invention comprises a circular casing *a*, supported by a spider *c*, to which is secured a
35 downwardly-projecting bolt *e*, having a square shoulder at its upper end, which lies in a corresponding perforation in a bracket *d*, through the medium of which my register may be adjusted upon a grain harvester or binder. Upon the lower end of the bolt *e* is a nut *b*,
40 between which and the bracket *d* is a spring *f*.

The interior mechanism of my invention is operated through the medium of a lever *u*, which passes through the side of the casing
45 *a*, to be actuated by the arm of the harvester by which the sheaves of binders are supplied from the harvester. Secured to the front of the casing *a* is a dial *a'*, upon which the interior mechanism is mounted. Secured to the inner side of the dial *a'* is a yoke *w*, between
50 which and the dial the mechanism is supported. A shaft *o* passes from the lower extremity of the yoke *w* through the dial, and upon its outer end is mounted an indicator *e'*,

while on this shaft and intermediate the dial and the yoke is secured a ratchet-wheel *t*, to which the lever *u* is secured. Formed upon
55 the ratchet-wheel *t* is a dog *s*, adapted to engage the teeth of a gear-wheel mounted upon a shaft *n*, which also passes through the dial *a'* and carries an indicator *b'*. Mounted upon the shaft *n*, adjacent the gear-wheel *g*, is a
60 dog *r*, which revolves with said shaft and is adapted to operate a spur-wheel *j*, mounted upon a shaft *l*, journaled in the upper end of the yoke *m*, and a bearing *h*, secured to the dial. This shaft also carries with it a gear *k*,
65 which meshes with a gear *p*, provided with a hollow shaft which encircles the shaft *n*, and which also projects through the dial and carries an indicator *d'*. Springs *i*, *z*, and *y* are
70 secured to the back of the dial *a* by means of screws *v* to prevent backward revolution of the wheels *j* *g*, respectively. A spring *z'* is also secured to the rear face of the dial to bear upon the lower side of the lever *u* to hold it in the upper position. The limit of
75 motion of the lever *u* is such that when it is depressed the ratchet-wheel *t* will rotate the distance of one tooth, and from the foregoing description it will be seen that when the lever
80 is depressed a number of times equal to that of the teeth on the wheel *t* the dog *s* will engage a tooth of the wheel *g* and give it a partial revolution, and when this wheel *g* has been revolved a number of times equal to the
85 teeth upon its periphery the dog *r* will engage a tooth on the wheel *j* and give it a partial revolution, carrying with it the shaft *l* and the wheel *k*, which in turn will impart a partial revolution to the wheel *p*.

An example of the operation of my inven-
90 tion is as follows: If the wheel *t* be provided with twelve teeth, the wheel *g* with twenty teeth, the wheels *i* and *k* with seven teeth, and the wheel *p* with thirty teeth, the wheel
95 *g* will be moved the distance of one tooth when the lever *u* has been depressed twelve times, indicating that one dozen bundles have passed from the machine to which my inven-
100 tion is attached. When the wheel *g* has been moved the distance of its twenty teeth, or one complete revolution, the dog *r* will engage a tooth of the wheel *j*, indicating that twenty dozen bundles have passed from the machine, and when the wheel *j* has been moved a suf-

5 ficient number of times to cause a complete
revolution of the wheel *p* it will indicate
that six hundred dozen bundles have passed
from the machine. The face of the dial *a*
10 should be marked with a circle of figures
around the indicator *e'* to indicate each bun-
dle passed from the machine, a similar circle
of figures should be placed around the indi-
cator *b'* to indicate each dozen of bundles, and
15 a row of figures should be placed around the
indicator *d'* to indicate the number of twenty
dozen bundles passed. Should it be desired
to set the indicator at any given number of
bundles, a key may be placed upon the end of
20 shaft *n* to rotate the parts, and when it is de-
sired to place the indicator in such a position
as to throw it out of operation the casing *a*,
with its interior mechanism, may be raised
from the end of the bracket *d* to give a par-
25 tial revolution, after which the casing may
be let fall and the square shoulder allowed to
reseat itself in the perforation at the end of
the bracket *d*.

Having thus described my invention, what
25 I claim is—

A device of the class described comprising
a casing provided with a dial, a yoke secured
to the rear face of the dial, a ratchet-wheel
mounted upon the shaft, a lever secured to
30 the ratchet-wheel through the medium of
which it may be operated, a second shaft pass-
ing from the yoke through the dial, a gear
mounted upon the said second shaft and adapt-
ed to be operated by a dog secured to the
35 ratchet-wheel, a third shaft passing from the
yoke to the dial and adapted to be revolved
by a dog secured to the second-named shaft,
a hollow shaft encircling the second-named
shaft, a second gear-wheel mounted upon the
40 hollow shaft and adapted to receive motion
from the gear-wheel attached to the second-
named shaft, and indicators secured to the
outer ends of the first-named shaft, and indi-
cators secured to the outer ends of the first-
45 named shaft, the second-named shaft and the
hollow shaft.

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Witnesses:

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