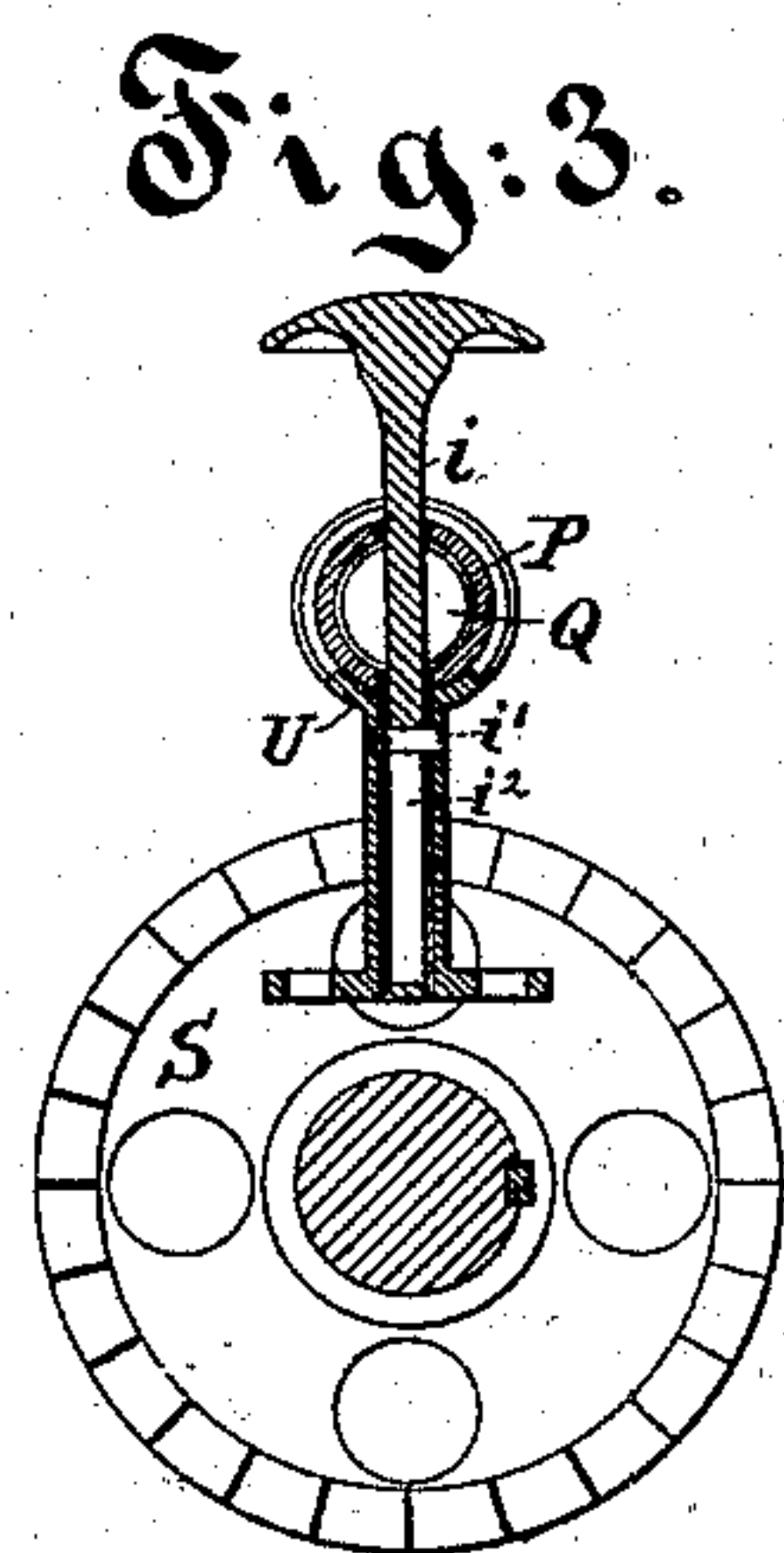
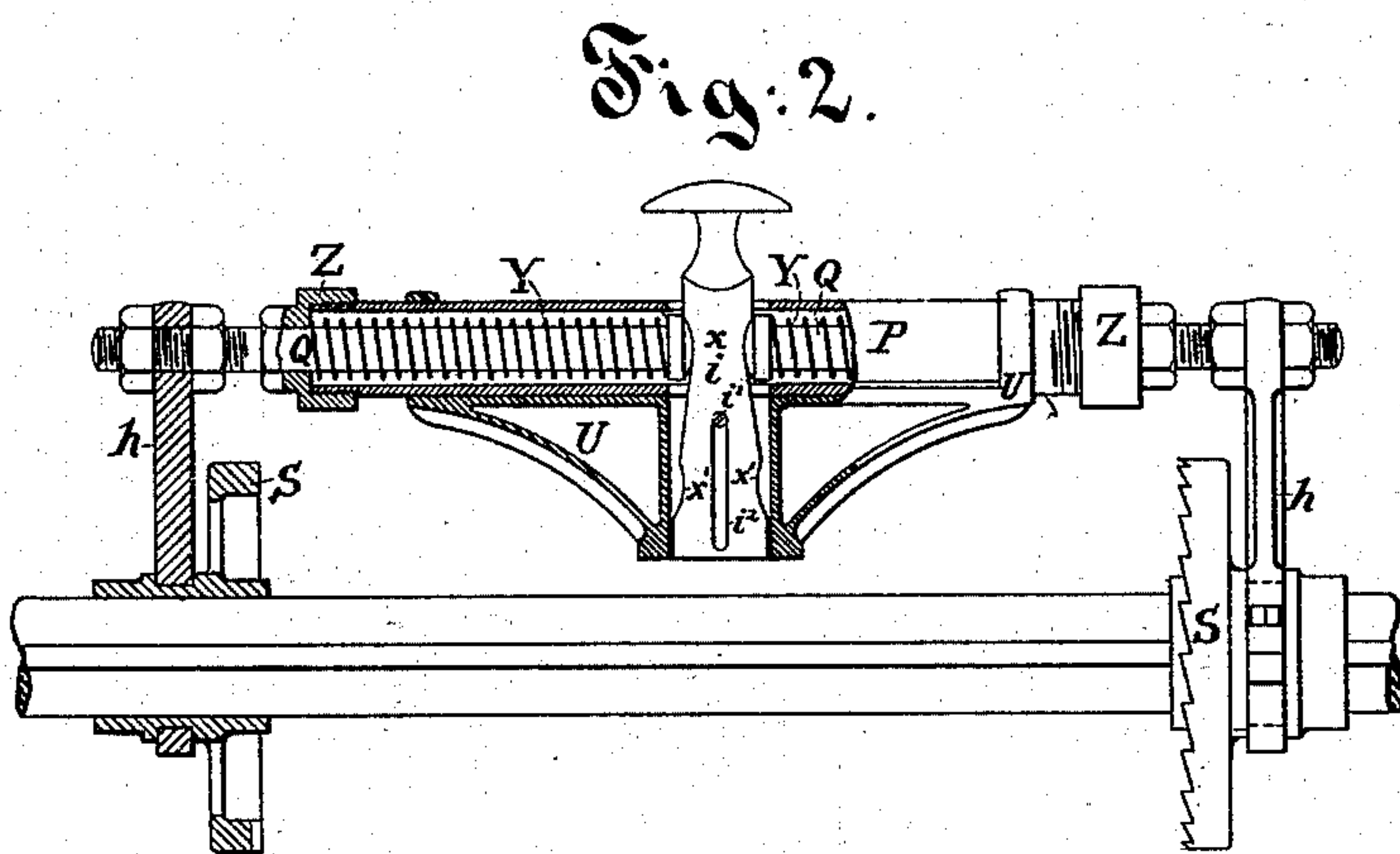
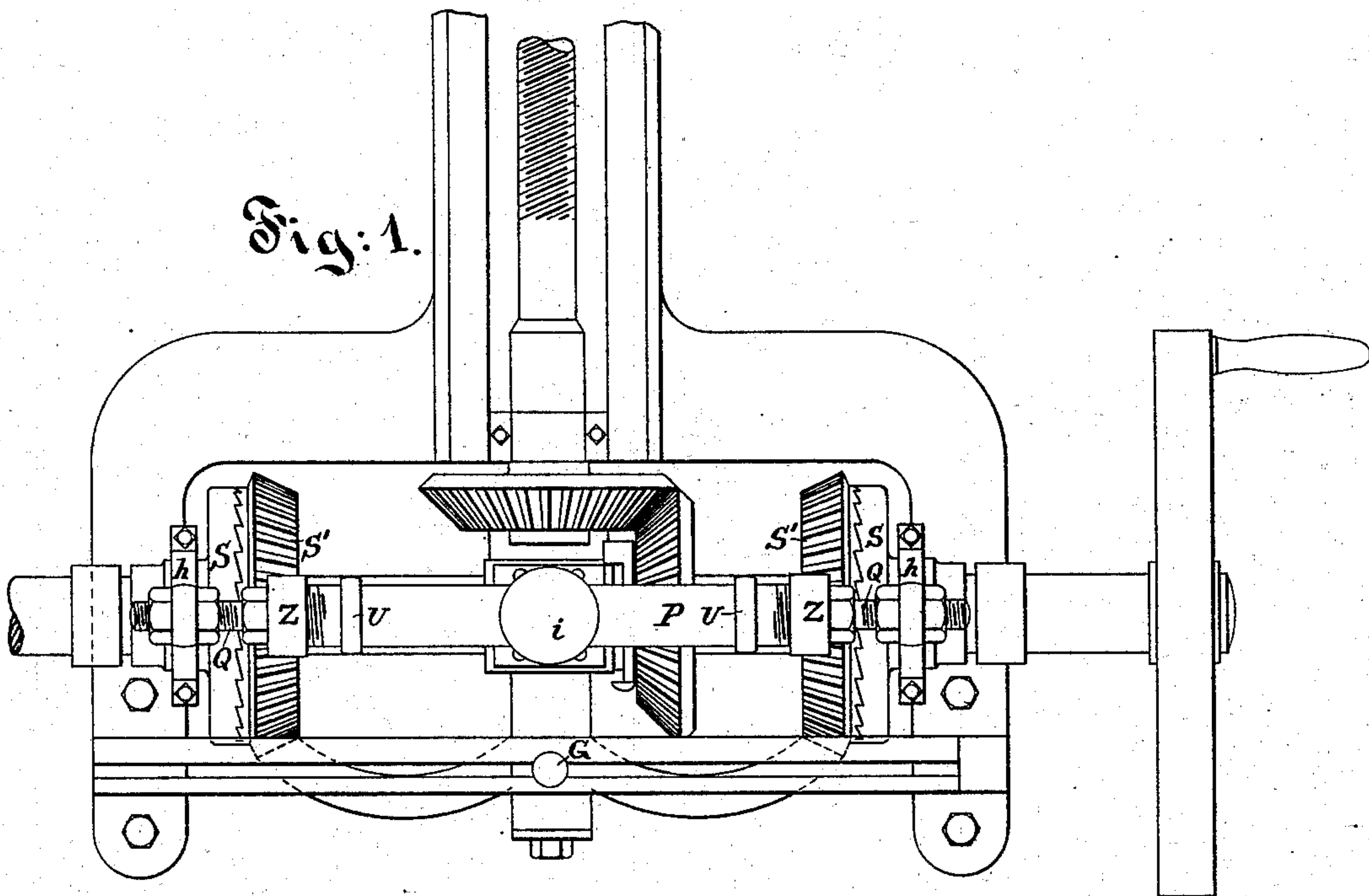


(No Model.)

G. H. ZSCHECH.  
HEAD BLOCK FOR SAW MILLS.

No. 276,321.

Patented Apr. 24, 1883.



Witnessed:

A. H. Gentner  
B. E. Stafford

Inventor:

Gustavus H. Zschech  
by his attorney  
Thomas D. Watson



# UNITED STATES PATENT OFFICE.

GUSTAVUS H. ZSCHECH, OF INDIANAPOLIS, INDIANA.

## HEAD-BLOCK FOR SAW-MILLS.

SPECIFICATION forming part of Letters Patent No. 276,321, dated April 24, 1883.

Application filed February 14, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAVUS H. ZSCHECH, of Indianapolis, Marion county, in the State of Indiana, have invented certain new and useful Improvements relating to Head-Blocks for Saw-Mills, of which the following is a specification.

The invention is based on that set forth in a patent to me dated November 22, 1881, No. 250,034. I have devised convenient means of avoiding an evil incident in that invention, which is the liability of the key *i* to be lost or mislaid. I have devised a construction by which a key corresponding to the key *i* of that patent of 1881 does not require removal and cannot be removed. It induces the desired changes in the condition of the mechanism by simply being shifted endwise.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention. All the parts not here shown or otherwise specially referred to may be exactly as set forth in said patent.

Figure 1 is a plan view of certain parts of the head-block corresponding to Fig. 3 in said patent of November 22, 1881. Fig. 2 is an elevation, showing the novel parts, with so much of the other parts as is necessary to indicate their relation thereto. Fig. 3 is a section at right angles to Fig. 2.

As in the former patent, P is the tube, supported in a wide spreading bracket, and having its ends partially closed by screw-caps Z. The tube incloses the rods Q and springs Y, which urge them together, and thus tend to urge together the yokes or arms *h h* and the controlled wheels. The slots in the upper and lower sides of the tube P to receive the key *i* are longer than in my patent of 1881, and the key *i* is longer, wider, and essentially different in form and arrangement. Its head or top is a convenient button to be seized by the hand. Some little distance below the head is a narrow part, which, when presented between the rods Q Q, allows them to be forced nearly together by the tension of the springs. Below the narrow point the key widens gradually. In the lower and wide portion of the key is a smaller recess, *x'*, on each side, adapt-

ed to receive the ends of Q Q and cause the key to be held up thereby. In the key is also a long vertical slot, *i'*, which receives a transverse pin, *i'*, removably set in the fixed portion, and serving to guard the key by means of the said pin against its being removed while the pin is in place. It allows it to be shifted easily up and down, so as to present at will its narrowest or widest portion between the rods Q Q. When the key *i i'* is depressed, the rods Q Q are drawn together and the same effect is induced as by the removal of the key in my said patent of 1881, with the advantage that the key cannot be mislaid. When the key is raised it forces the rods Q Q apart, the effect being the same as followed the insertion and depression of the key in my said former patent. The engagement of the rods Q Q in the recesses *x' x'* holds the key up firmly.

In one further point my present improvement is of advantage. This is in the effect of gravity. The tendency of the key to sink in the present construction tends to allow the rods Q Q to come together. In my former device it tended to drive the rods Q Q apart. The present is better, because in the possible case when, from any inadvertence or derangement, the rods Q Q come together and the wheels S S unintentionally engage with their respective wheels S' S', ready to be worked by the lever G, the mischief is less than when the reverse condition obtains and the control of the device by the lever G is unintentionally lost.

Modifications may be made in the forms and proportions. The bracket U may be narrower; but I prefer the wide form shown.

Parts of the invention may be used with some success without the whole. I can dispense with the transverse pin *i'*. I can provide other stops to restrain the movement of *i*; but I prefer the transverse pin *i'*, for the reason, among others, that it can be conveniently removed to allow the separation of the parts when required.

I claim as my invention in head-blocks for saw-mills—

1. The taper key *i*, formed with a narrow point, *x*, between two wide portions, and with the slight recesses *x'*, in combination with the

rods Q Q and arms or yokes *h h* and their connections, and with the springs Y Y and tube P, as herein specified.

2. The key *i*, formed with the slot *i*<sup>2</sup>, as  
5 specified, in combination with the rods Q Q and their connections, and with the removable pin *i'*, to prevent a too great movement of the key, as herein specified.

In testimony whereof I have hereunto set my hand, at Indianapolis, this 18th day of 10 January, 1883, in the presence of two subscribing witnesses.

GUSTAVUS H. ZSCHECH.

Witnesses:

PETER SPITZFADEN,  
THEODORE REYER.