

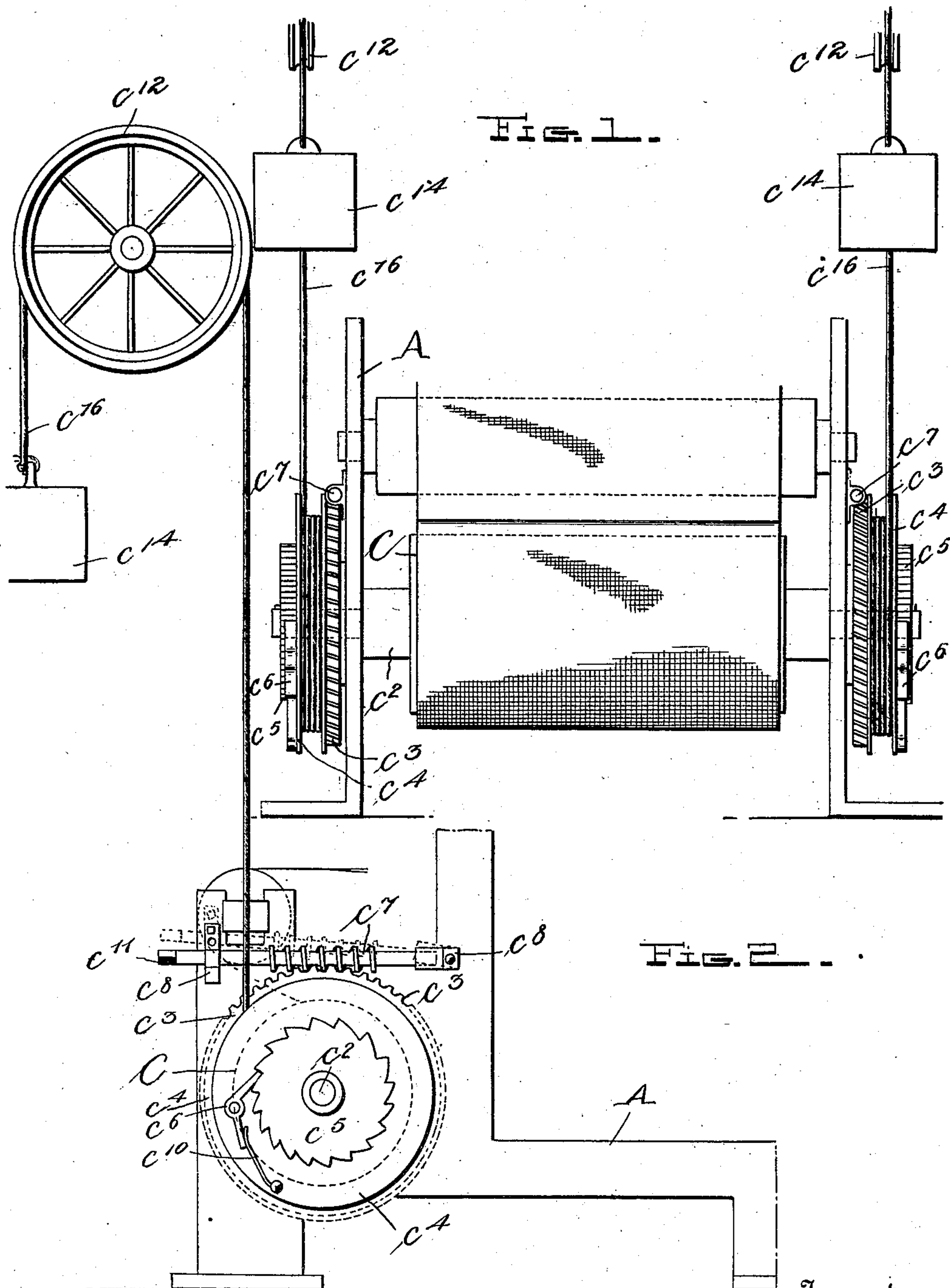
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A. A. WENDT.

## TAKE-UP MECHANISM FOR LOOMS.

APPLICATION FILED JAN. 22, 1907.



Witnesses

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# UNITED STATES PATENT OFFICE.

ADAM A. WENDT, OF SOUTH EUCLID, OHIO.

## TAKE-UP MECHANISM FOR LOOMS.

No. 889,564.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed January 22, 1907. Serial No. 353,452.

*To all whom it may concern:*

Be it known that I, ADAM A. WENDT, citizen of the United States, residing at South Euclid, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Take-Up Mechanism for Looms, of which the following is a specification.

This invention is a take-up for looms and has for its object to provide an improved mechanism for the purpose, said mechanism being operated by a weight or weights to turn the cloth beam, and to also maintain a constant tension on the warp. Improved means are provided for transmitting the motion from the weights to the beam.

In the accompanying drawings Figure 1 is a front view of the take-up mechanism. Fig. 2 is an end view thereof.

Referring specifically to the drawings, A indicates the front part of the frame of the loom. Mounted upon suitable bearings on this frame is a shaft  $c^2$  carrying the cloth beam or roll C which is provided in the ordinary way with hooks for engaging the end of the woven cloth.

Mounted loosely on each end of the shaft  $c^2$  is a combined worm wheel  $c^3$  and drum  $c^4$ . The worm wheel meshes with a worm  $c^7$  mounted on bearings  $c^8$  on the frame of the machine. These bearings are movable or shiftable so that the worm may be thrown out of gear by raising the front end of the worm shaft sufficiently and temporarily fixing it by a pin in the side of the frame, thus enabling the drum and gear to revolve. The shaft  $c^2$  also has a ratchet wheel  $c^5$  fixed to it on each end, beside the drum  $c^4$ , and a suitable pawl  $c^6$  is pivoted to the side of the drum  $c^4$  and is arranged to engage the teeth of the ratchet wheel, so as to transmit the motion of the drum and gear when turned in one direction, and allow back-slip thereof when turned in the other direction. A spring  $c^{10}$  holds the pawl in engagement.

Connected to each of the drums  $c^4$ , by means of a rope  $c^{16}$ , is a weight  $c^{14}$ , the rope passing around a sheave  $c^{12}$  overhead. The purpose of the worms  $c^7$  is to raise the weights, the ends of the worm shafts being squared as at  $c^{11}$ , to receive a crank. By dropping said worms to engagement with the gears the weights may be lifted, and when the worms are disengaged, the power of the weights is applied to the shaft by the pawl and ratchet devices, and consequently serve to take up the cloth on the cloth beam, as fast as it is woven, also preserving at all times a practically uniform tension on the warp. Obviously the weights may be varied as desired. I have shown two weights and connections, one set at each end of the cloth beam. One may be omitted, if desired although by the use of two either can be wound up without stopping the loom.

The take-up is particularly useful in wire looms in which a rather heavy and constant tension has to be maintained; but the invention is not limited to such use, since it may be applied to other kinds of looms.

I claim:

The combination with a loom frame, and a cloth roll therein having a shaft extending through one side of the frame and provided with a ratchet wheel at its outer end, of a combined drum and worm wheel loose on the shaft between the side of the frame and the ratchet wheel, the drum having a pawl engaging the ratchet wheel, and a worm shaft having a worm engageable with the worm wheel, the worm shaft being pivoted at one end to the side of the frame and movable at the other end to engage or disengage the worm wheel.

In testimony whereof I have affixed my signature, in presence of two witnesses.

ADAM A. WENDT.

Witnesses:

JOHN A. BOMMARDT,  
SHIRLEY J. BOMMARDT.