No. 775,076.

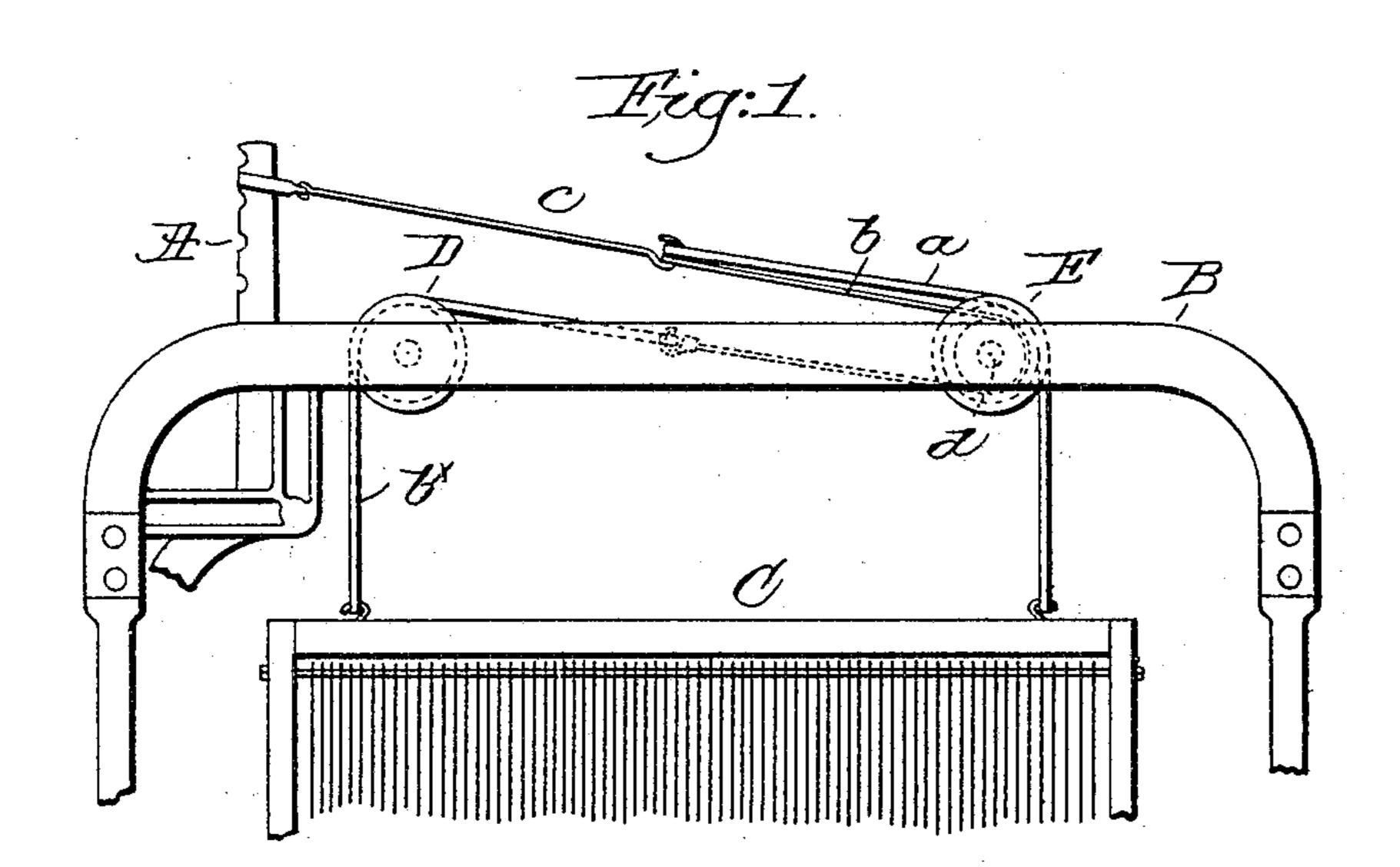
PATENTED NOV. 15, 1904.

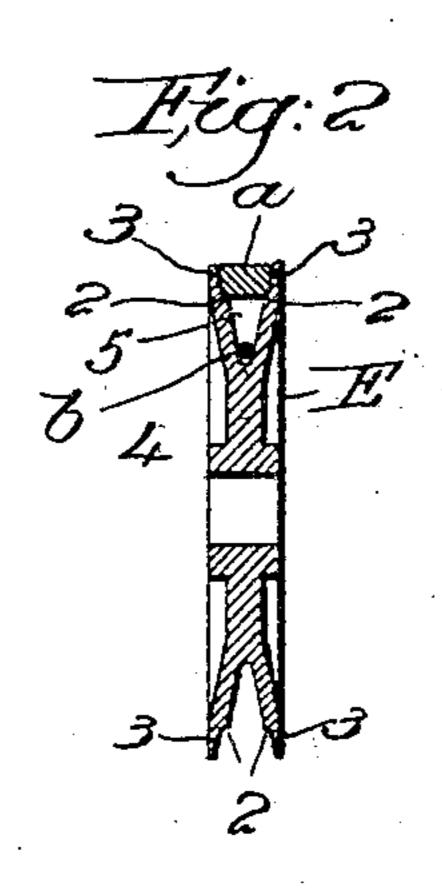
## R. CROMPTON.

# SHEDDING MECHANISM FOR LOOMS.

APPLICATION FILED AUG. 19, 1904.

NO MODEL.





PROTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO, & PTQ. CO. H (W YORK.

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# United States Patent Office.

RANDOLPH CROMPTON, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO HIMSELF, GEORGE CROMPTON, EDWARD D. THAYER, AND WILLIAM B. SCOFIELD, OF WORCESTER, MASSACHUSETTS, DOING BUSINESS AS CROMPTON-THAYER LOOM COMPANY, OF WORCESTER, MASSACHUSETTS, A FIRM.

#### SHEDDING MECHANISM FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 775,076, dated November 15, 1904.

Application filed August 19, 1904. Serial No. 221,358. (No model.)

To all whom it may concern:

Be it known that I, RANDOLPH CROMPTON, a citizen of the United States, residing at Worcester, county of Worcester, and State of Massachusetts, have invented an Improvement in Shedding Mechanism for Looms, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention has for its object to improve the shedding mechanism of looms, especially in the parts for supporting the flexible connection between the heddle-frame and the jack

15 for moving the same.

Figure 1 in elevation shows a sufficient portion of a jack, heddle-frame, and loom-frame with my improvement added to enable my invention to be understood; and Fig. 2 is a section of my improved sheave, together with the heddle connections sustained therein.

The jack A, arch B, heddle-frame C, and sheave D are and may be all as usual. With these usual parts I employ a novel sheave E.

25 (Shown in section and enlarged in Fig. 2.) Each sheave E supports two flexible connections a and b, that are attached through hooks c to the jack of whatever construction, while the sheave D supports but one connection—

30 namely, the end b\* of the connection b—the connection b\* being attached to the heddle-frame in usual manner, while the lower end

of the connection a is attached also to the heddle-frame, said connection being attached to the heddle-frame near its opposite end. That the sheave E sustain two heddle connections, it is provided with two concentric connections sustaining surfaces, one of said surfaces be-

ing, however, located at a greater distance from the rod d on which said sheave turns than the other surface. In making the novel sheave the periphery thereof is tapered to leave a supporting-surface, as 2, having side walls 3, said surface between said side walls sustaining the connection a, which is of greater

area in cross-section than the part b of the connection  $bb^{\times}$ . To provide a supporting-surface 4 in the part b of the connection  $bb^{\times}$ , a pick 5 is formed that leads thereto, the pick opening below the surface 2. In this way 50 and as shown in Fig 2 I am enabled to provide two supporting-surfaces 2 and 4 for the heddle connections which have a common center of motion; but the surface 2 is farthest removed from the center of the rod d. 55 The surfaces 2 and 4 are adapted to sustain the two heddle connections a and b in the same vertical plane, so that the strain on each connection is direct and the same in character, and neither connection touches the other. 60

The sheave shown above the heddle-frame may be duplicated below the same, and the connection from the lower bar of the heddle-frame will be connected in usual manner with the opposite end of the jack A, said end be- 65 ing herein omitted, but shown in my application, Serial No. 212,692, filed June 15, 1904.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a heddle-frame and flexible heddle connections attached to the frame near its opposite end, of a sheave having a plurality of concentric connection-sustaining surfaces to sustain both said connections in the same vertical plane and out of contact one with the other.

2. The combination with a heddle-frame and flexible heddle connections attached to the frame near its opposite ends, of a sheave sustaining both connections in the same vertical plane.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

### RANDOLPH CROMPTON.

Witnesses:

John C. Edwards, Margaret A. Dunn.