No. 687,954. Patented Dec. 3, 1901.

S. S. EVELAND.

ANTIFRICTION BEARING.

(Application filed Dec. 19, 1900.

(No Model.)

Fig. 1

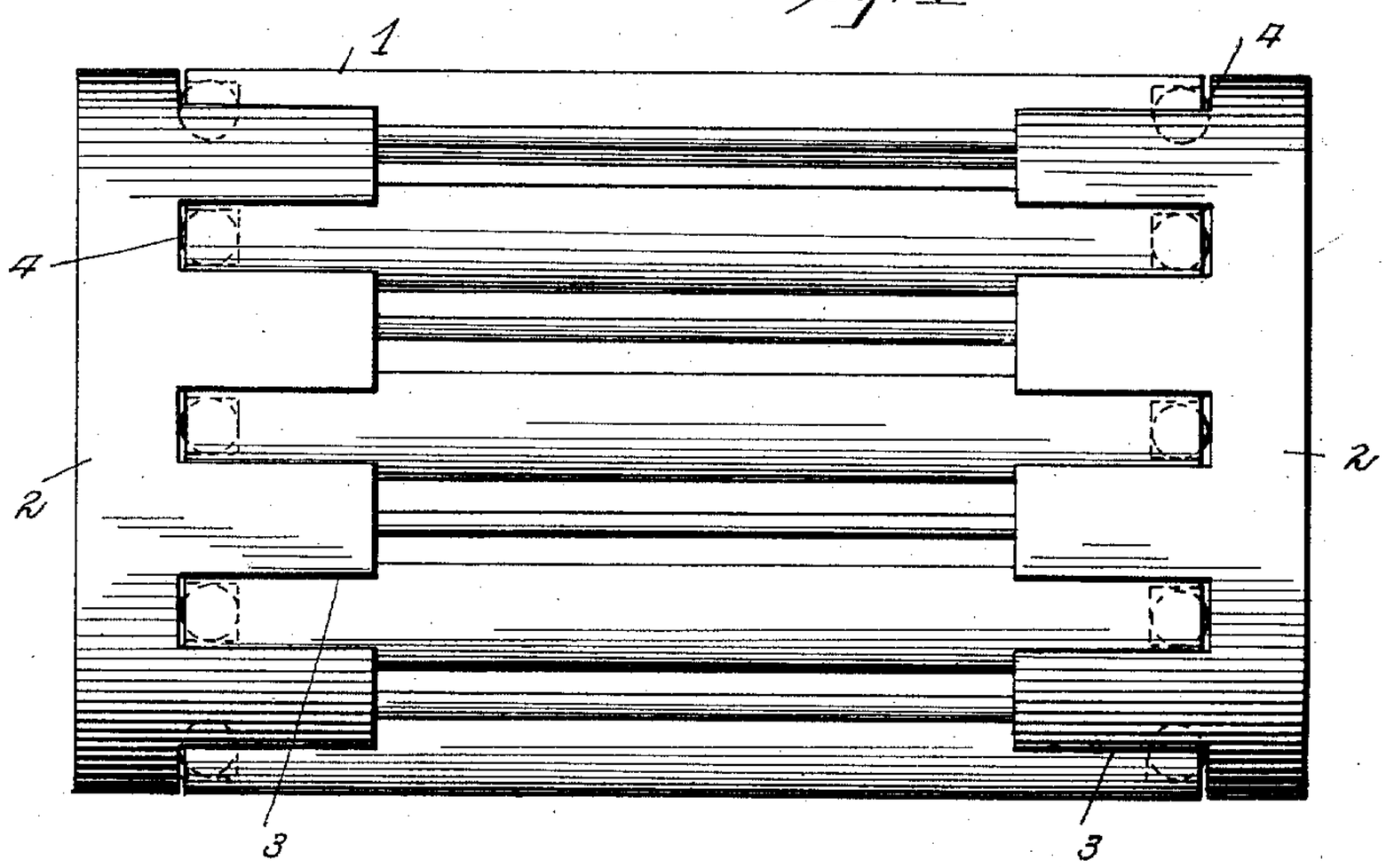
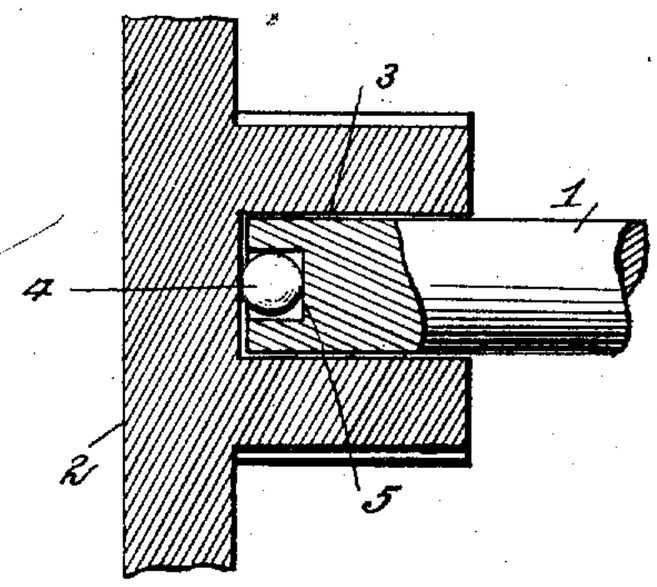


Fig. 2.



Witnesses

Inventor

Samuel S Eveland.

By

Augustus B Kingsley

Attorney

UNITED STATES PATENT OFFICE.

SAMUEL S. EVELAND, OF PHILADELPHIA, PENNSYLVANIA.

ANTIFRICTION-BEARING.

SPECIFICATION forming part of Letters Patent No. 687,954, dated December 3, 1901.

Application filed December 19, 1900. Serial No. 40,343. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. EVELAND, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Antifriction-Bearings, of which the following is a specification.

The present invention relates to an improvement upon the bearings shown in Letters Patent No. 602,047, of April 5, 1898, to Hobron; and its object is to enhance the efficiency of said device by increasing the effective length of the rollers without changing the size of the device as a whole.

To this and other ends the invention comprises the improvements hereinafter described and claimed.

The nature, characteristic features, and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is an elevational view of an antifriction device embodying features of my invention. Fig. 2 is a sectional view of a portion of the same.

In the drawings, 1 represents the rollers.

2 represents the roller-supports, having individual sockets 3 for the rollers, and 4 represents the balls, interposed between the rollers and the supports. In the patented device above referred to the balls were arranged in the sockets 3 and the rollers were necessarily somewhat short in order to accommodate the balls. In the device constituting the subject-matter of this application auxiliary sockets are provided for the reception of the balls, so that the rollers may be correspondingly increased in length, whereby their effective surface is also increased and the device made more efficient as a whole. The offsetted auxiliary sockets for the balls are independent of and smaller than the roller-sockets 3, and they are arranged in the ends of the rollers, as clearly shown in Fig. 2. The balls bear against the bottoms 5 of the auxiliary sockets, and it will be observed that they not only serve to take up end thrust, but also serve the important function of keeping the rollers in alinement.

It will be obvious to those skilled in the art to which my invention appertains that modifications may be made in details without departing from the spirit thereof. Hence I do not limit myself to the precise construction and arrangement of parts hereinabove set forth, and illustrated in the accompanying drawings; but,

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the rollers having the squared sockets in the ends thereof and bottoms for the sockets, the roller-supports having individual sockets for the rollers, and balls arranged in said roller-sockets and sufficiently protruding therefrom to impinge against the supports, whereby to aline the rollers and take up end thrust, substantially as described.

In testimony whereof I have hereunto signed my name.

SAMUEL S. EVELAND.

In presence of—
W. J. JACKSON,
K. M. GILLIGAN.