No. 875,389. PATENTED DEC. 31, 1907.

N. J. THEEDE.

ADJUSTABLE BEARING.

APPLICATION FILED JULY 11, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

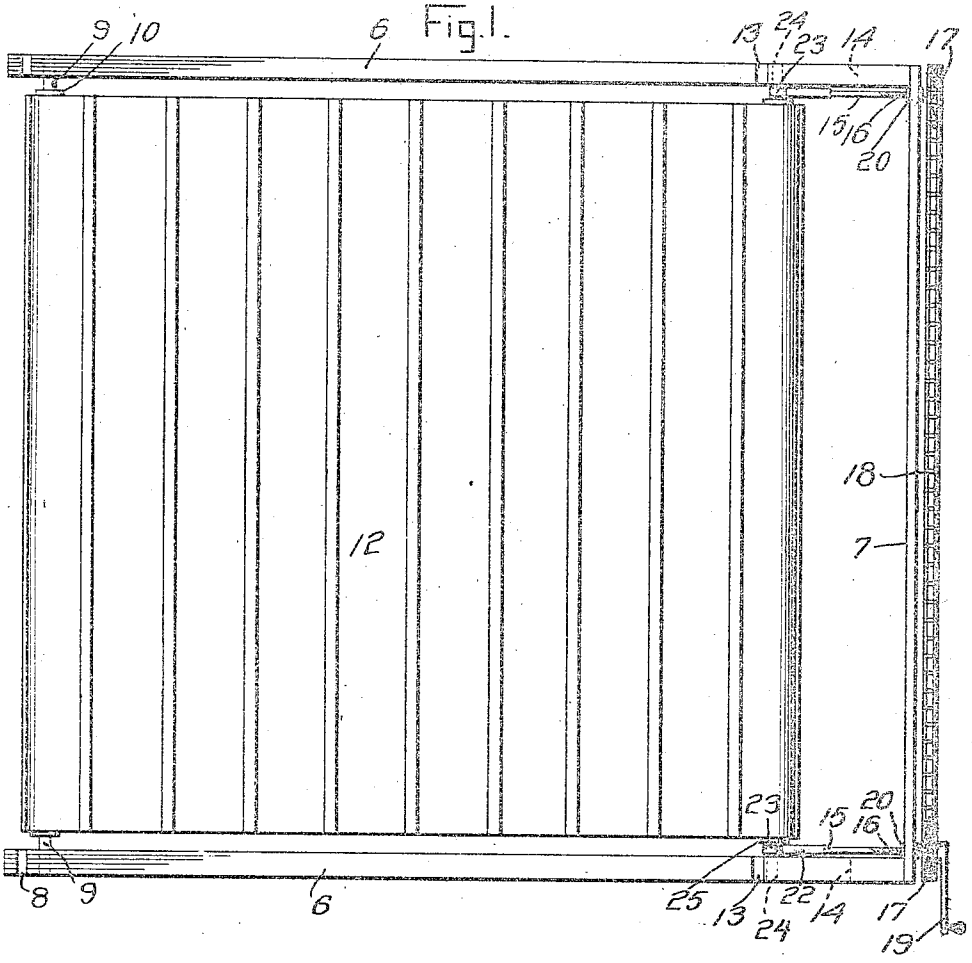
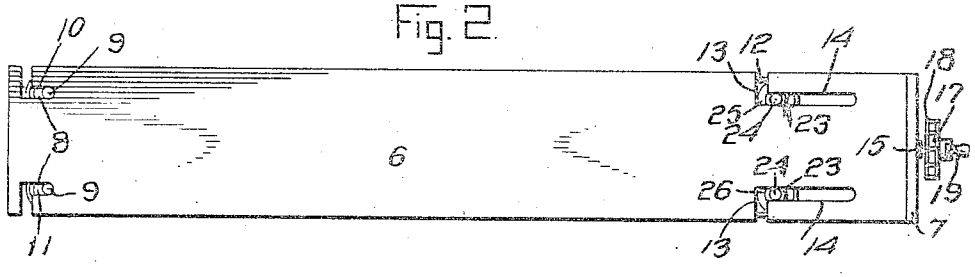


Fig. 2.



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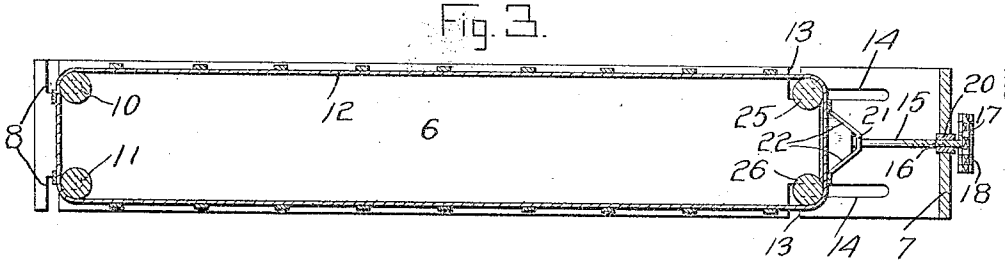
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2 SHEETS—SHEET 2.

Fig. 3.



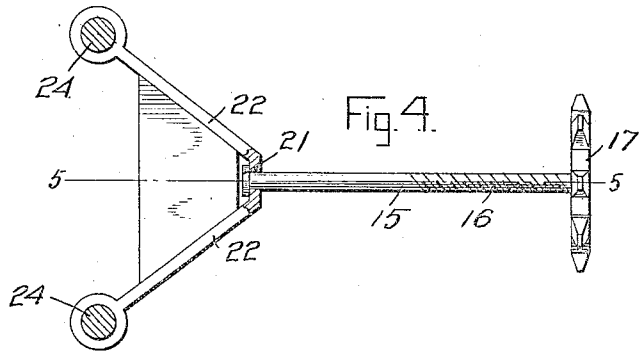


Fig. 4.

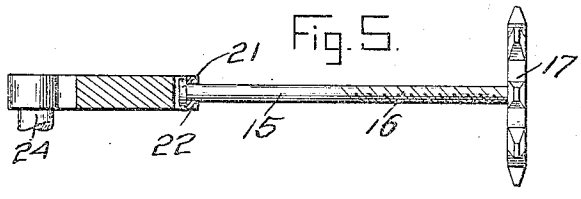


Fig. 5.

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UNITED STATES PATENT OFFICE.

NICHOLAS J. THEEDE, OF FAIRMOUNT, NORTH DAKOTA.

ADJUSTABLE BEARING.

No. 875,389. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed July 11, 1907. Serial No. 383,233.

To all whom it may concern:

Be it known that I, NICHOLAS J. THEEDE, a citizen of the United States, residing at Fairmount, in the county of Richland, State of North Dakota, have invented certain new and useful Improvements in Adjustable Bearings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in adjustable bearings for the supporting rollers of binding machine conveyers and elevator canvasses and it has for its object to provide novel means for taking up or letting out the slack of the endless apron or canvas comprehended in the above device.

The details of construction will appear in the course of the following description in which reference is had to the accompanying drawings forming a part of this specification, like characters of reference designating similar parts throughout the several views, wherein:—

Figure 1 is a plan view of an endless elevator canvas showing the application thereto of the improvements comprehended in the present invention. Fig. 2 is a side elevation of such canvas showing the frame construction therefor. Fig. 3 is a section taken longitudinally through the canvas showing the adjustable movable arms which carry the upper rollers of the canvas. Fig. 4 is a detailed view showing the construction of such arms and the manner of engaging the same with a threaded adjusting shaft. Fig. 5 is a section on the line 5—5 of Fig. 4.

Referring specifically to the accompanying drawings, there is shown a frame comprising the side bars 6, and a connecting end bar 7. The side bars 6, at their rear ends are formed with angular recesses 8, in which are disposed the projecting trunnions 9 of upper and lower rollers 10 and 11, over which the canvas 12 is trained. The side bars 6 are likewise formed adjacent their front ends with angular recesses 13, which communicate with longitudinal slots 14. Threaded through collars 20 in the ends of the bar 7, are shafts 15 which are formed with threads 16 of steep pitch and which, on their projecting outer ends carry sprocket wheels 17. A chain 18 is trained over the latter and one of the shafts 15 has its end formed to receive a crank handle 19, by means of which said chain and said shafts are driven. Surrounding each of the shafts 15 is a V-shaped member having diverging arms 22, the said member bearing against a swivel head 21 provided at the end of the shaft 15. The arms 22 are connected by an integral reinforcing web and at their inner ends have connection with the boxes 23, the latter being formed to receive the projecting trunnions 24 of upper and lower rollers 25 and 26. The belt 12 is likewise trained over the rollers 25 and 26.

It will be apparent that by rotating the crank handle 19, in the proper direction desired, to correspondingly rotate the shafts 15, that the boxes 23 will be moved longitudinally with relation to the side bars 6 and in such movement, will carry the rollers 25 and 26 by means of the connections described, to take up or let out the slack of the belt 12 as desired.

The invention is simple in its structural details, inexpensive to manufacture, and practical and efficient in use.

From the foregoing description it will be seen that simple and efficient means are provided for accomplishing the objects of the invention, but while the elements herein shown and described are well adapted to serve the functions set forth it is obvious that various minor changes may be made in the proportions, shape and arrangement of the several parts, without departing from the spirit and scope of the invention as defined in the appended claims.

What is claimed is:

1. The combination with side bars, a connecting cross bar, a roller supported stationarily between said side bars and rollers supported between said side bars and having adjustable movement, of a threaded shaft, a collar in said cross bar surrounding said shaft, a V-shaped member having diverging arms formed to surround the ends of said rollers, said shaft passing through the central portion of said V-shaped member and having a head bearing against the inner face of said central portion and means for rotating said shaft.

2. In a mechanism of the type set forth, side bars formed at corresponding ends with recesses extending from their upper and lower edges and with forwardly directed slots extending from the inner portions of said recesses, a pair of rollers having end

trunnions adapted to be introduced into said slots through said recesses and means for adjustably moving said rollers in said slots.

3. In a mechanism of the type set forth, side bars formed at each end thereof with recesses extending from their upper and lower edges and with slots extending forwardly from the inner portion of said recesses, rollers mounted in pairs at the ends of said side bars and having end trunnions journaled in said slots and introduced therein through said recesses, an endless belt trained over said rollers and means for adjustably moving the rollers of one of said pairs along the extent of the adjacent slots.

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

NICHOLAS J. THEEDE.

Witnesses:
JNO. F. CROSS,
PETER MERGEUS.