

No. 775,349.

PATENTED NOV. 22, 1904.

L. W. ELLMAN.
GIN RIB.

APPLICATION FILED MAY 27, 1903.

NO MODEL.

Fig. 1.

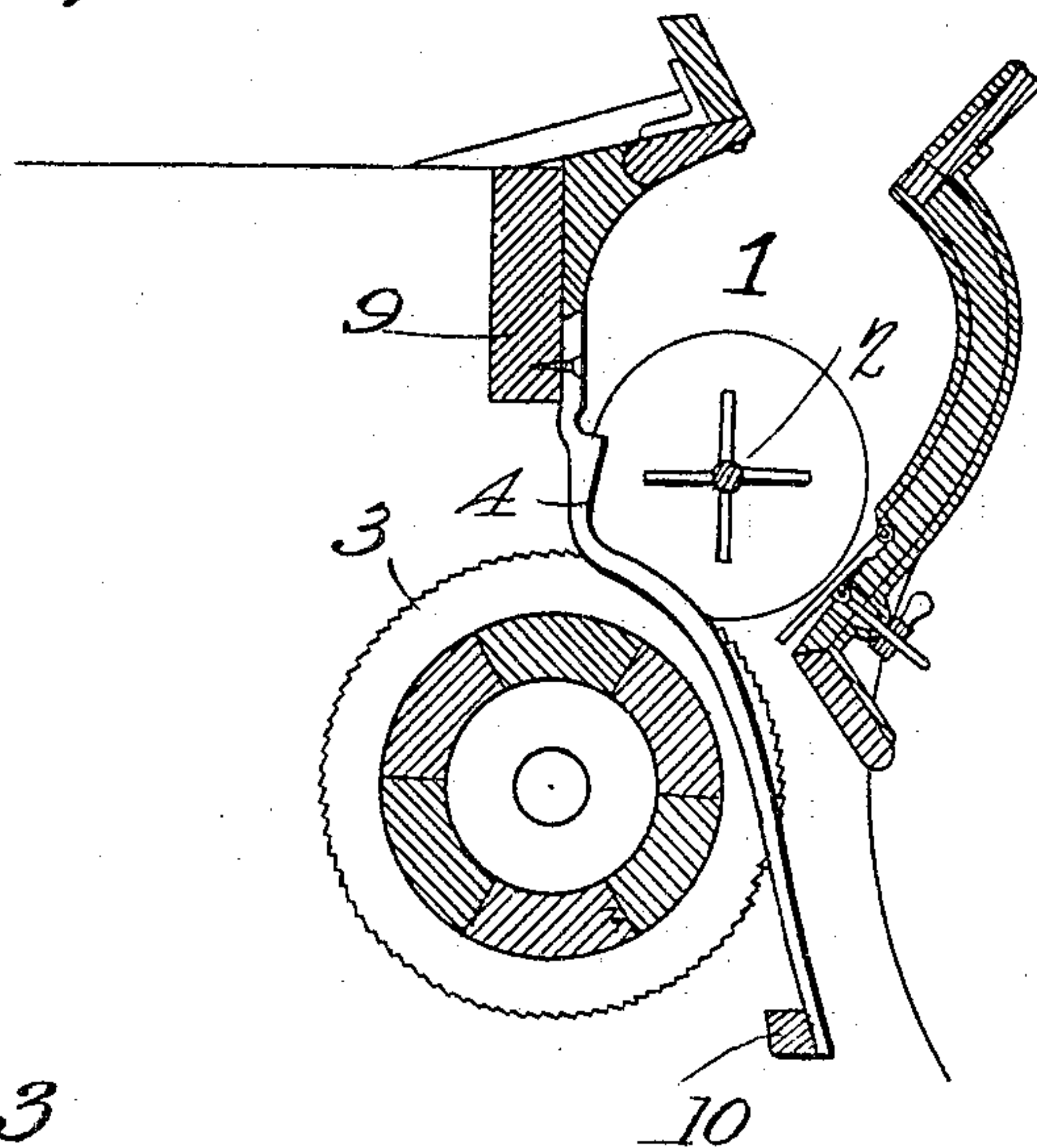


Fig. 3

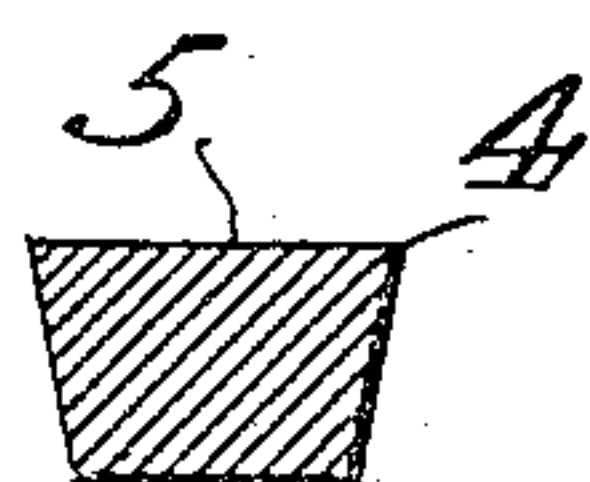
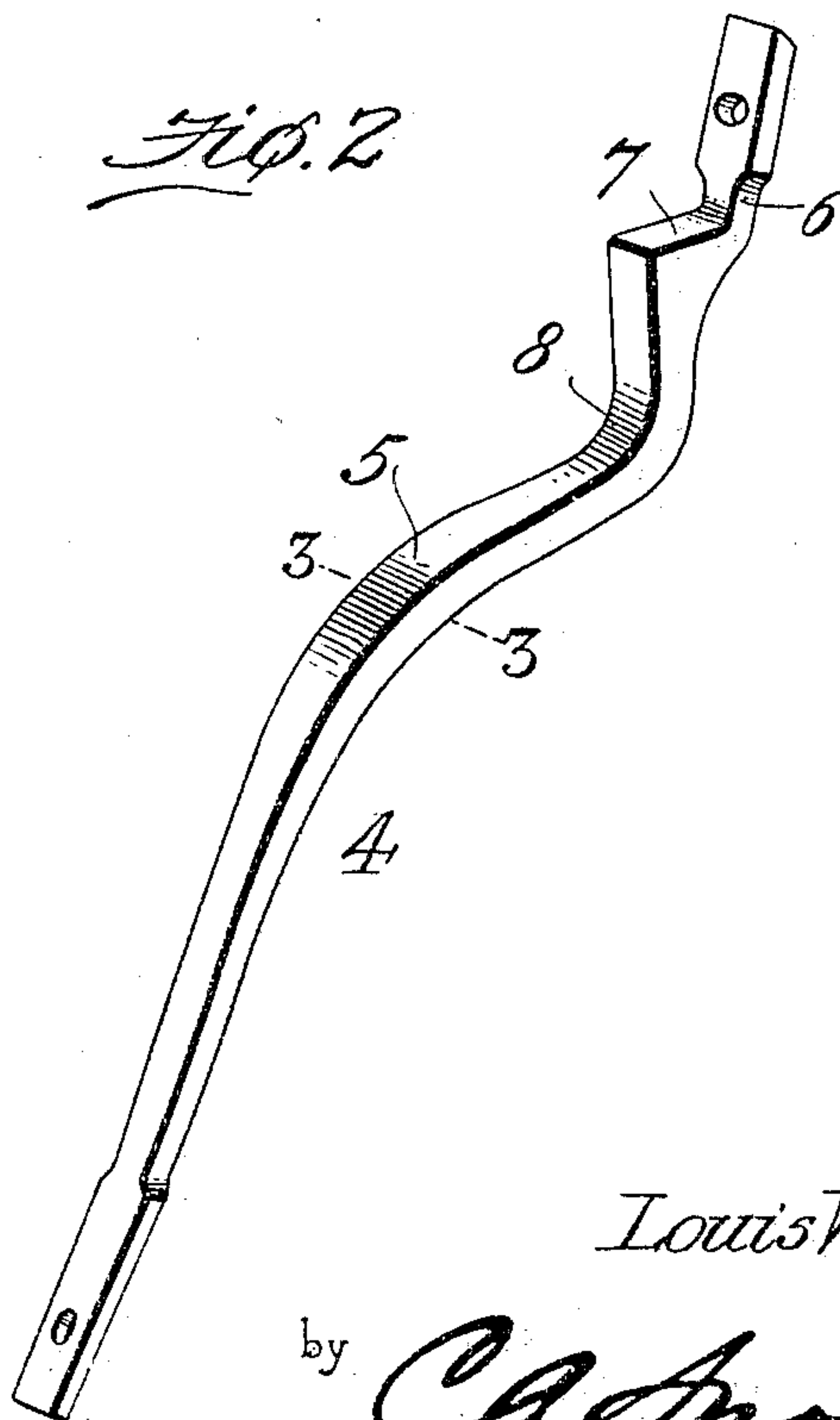


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS W. ELLMAN, OF SAN ANTONIO, TEXAS, ASSIGNOR OF ONE-HALF
TO JAMES L. DAVIS, OF SAN ANTONIO, TEXAS.

GIN-RIB.

SPECIFICATION forming part of Letters Patent No. 775 349, dated November 22, 1904.

Application filed May 27, 1903. Serial No. 159,009. (No model).

To all whom it may concern:

Be it known that I, LOUIS W. ELLMAN, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Gin-Rib, of which the following is a specification.

This invention relates to certain improvements in ribs or grates for cotton-gins, and has for its object to provide a simple, inexpensive, and efficient device of this character which may be quickly and readily applied to the ordinary form of gin and which will act effectively in the ginning of seed-cotton, long staple cotton, wool, and other material of a fibrous nature without choking or otherwise clogging the saws.

A further object of the invention is to provide a rib the construction and general arrangement of which is such as to permit the saws to revolve freely between the same, effectively ginning the cotton without cutting or otherwise injuring the same.

A still further object is to provide a rib having a hump or projection formed thereon and so disposed with relation to the saws that any cotton or other material not taken up by the teeth will roll back in the hopper, thereby preventing the gin from choking or clogging.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

In the accompanying drawings, Figure 1 is a transverse section of a roll-box of a cotton-gin and certain of its appurtenances, showing a rib constructed in accordance with my invention applied thereto. Fig. 2 is a detail perspective view of one of the ribs detached, and Fig. 3 is a transverse sectional view on the line 3 3 of Fig. 2.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the roll-box, which may be of the ordinary form and construction, 2 the feeding-roll, and 3 the gin-saws, revolubly mounted within the roll-box in any suitable manner.

The ribs 4 (any desired number of which may be employed) are formed of metal, wood, or other suitable material, and each consists of a body portion, the side walls of which are inclined or beveled, as clearly shown in Fig. 3 of the drawings, the portion designated by the numeral 5 being curved, as shown, and somewhat wider than the rest of the rib, so as to properly space the lower portion of the ribs from the saws to permit the cotton or other material to be fed thereto.

The upper end of the rib 4 is arranged in a substantially vertical plane above the gin-saws, being provided with a contracted neck 6 and a forwardly-extending shoulder 7, defining a rearwardly-curved or concave portion 8, which acts as a guard or deflector and causes the cotton not taken up by the saws to roll back into the hopper.

The upper end of the rib 4 is secured to the upper cross-bar 9 by means of screws, bolts, or similar fastening devices and the lower end thereof to the lower cross-bar 10, the thickened curved portion 5 of the rib extending above the saw-teeth and following the general curve of the saw for a short distance, as clearly shown in Fig. 1, so as to prevent the cotton or heavy mats of lint when reginning discarded or waste cotton from coming in contact with the saws and choking or otherwise obstructing the same.

By forming the rib with an intermediate curve or hump and having said hump extend above the saw and follow the general curve thereof for a short distance a relatively small portion of the periphery of the saw is exposed and the cotton will be deflected from contact with the upper portion of said saw, as will be readily understood.

From the foregoing description it will be seen that I have provided an exceedingly simple and inexpensive rib capable of being readily attached to the ordinary cotton-gin and which by reason of its peculiar construction

will effectively gin seed-cotton, long staple cotton, and other fibrous material without choking or otherwise clogging the saws.

Having thus described the invention, what
5 I claim, and desire to secure by Letters Patent, is—

1. In a gin, the combination with a saw, of
a rib provided with an intermediate outwardly-
projecting curve or hump having a smooth
10 exterior surface for contact with the cotton,
the walls of said hump being thickened and
extended above the saw and curved to con-
form to the periphery of the latter to thereby
form a deflector for the cotton.

15 2. In a gin, the combination with a saw, of
a rib having its upper end arranged in a sub-

stantially vertical plane above the saw and
provided with a concave portion defining an
outwardly-projecting curve or hump having
a smooth exterior surface for contact with 20
the cotton, the walls of said hump being thick-
ened and extended above the saw and curved
to conform to the periphery of the latter to
thereby form a deflector for the cotton.

In testimony that I claim the foregoing as 25
my own I have hereto affixed my signature in
the presence of two witnesses.

LOUIS W. ELLMAN.

Witnesses:

GEORGE B. JOHNSTON,
JOHN KINAHAN.