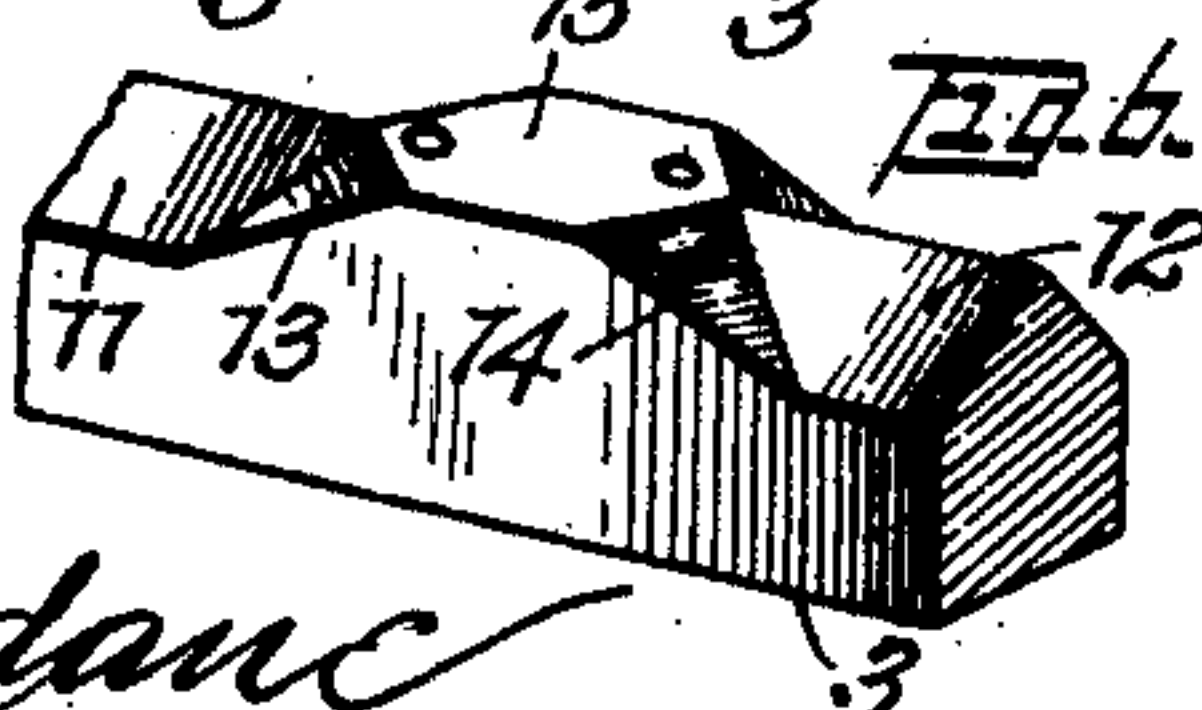
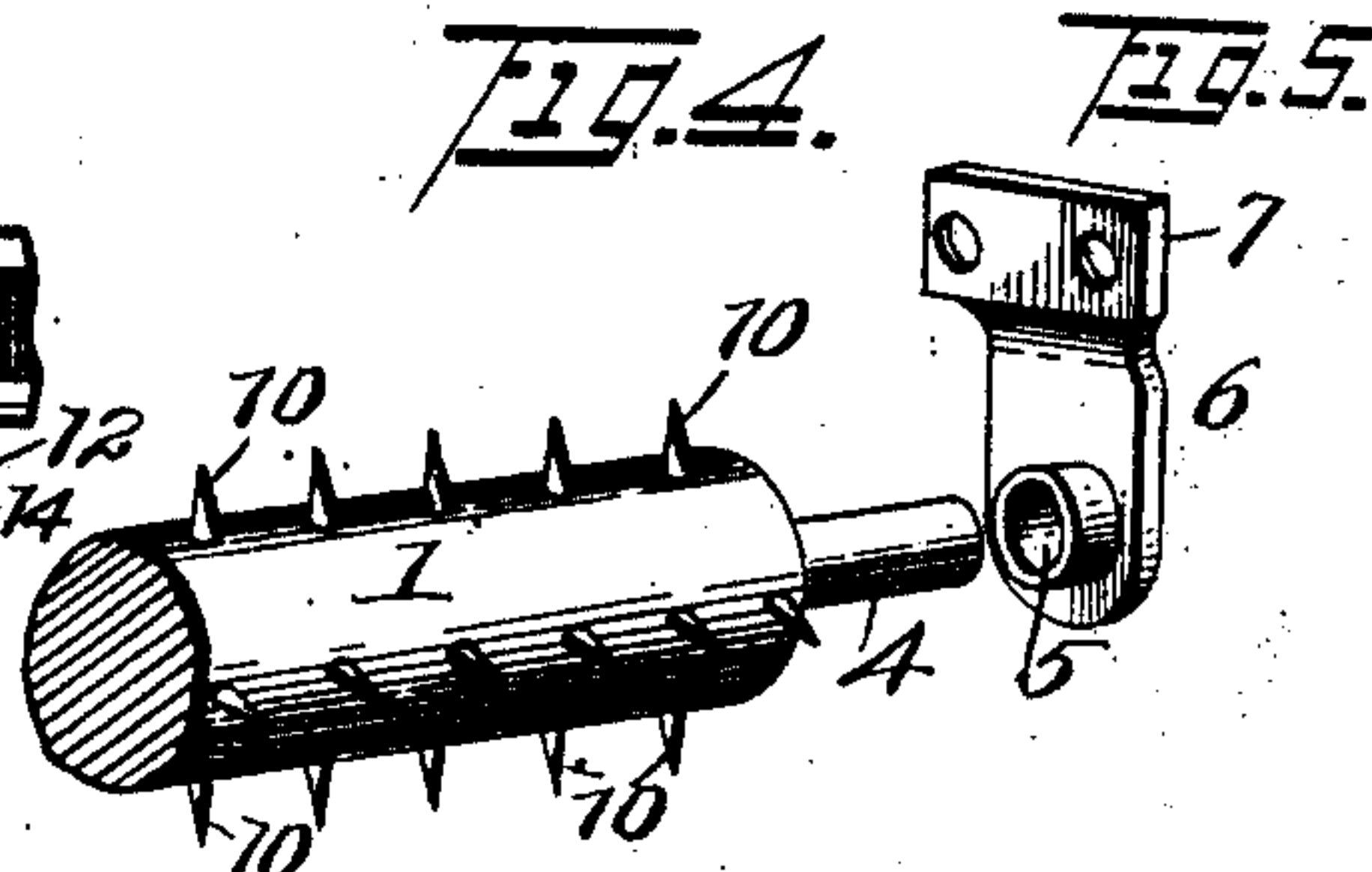
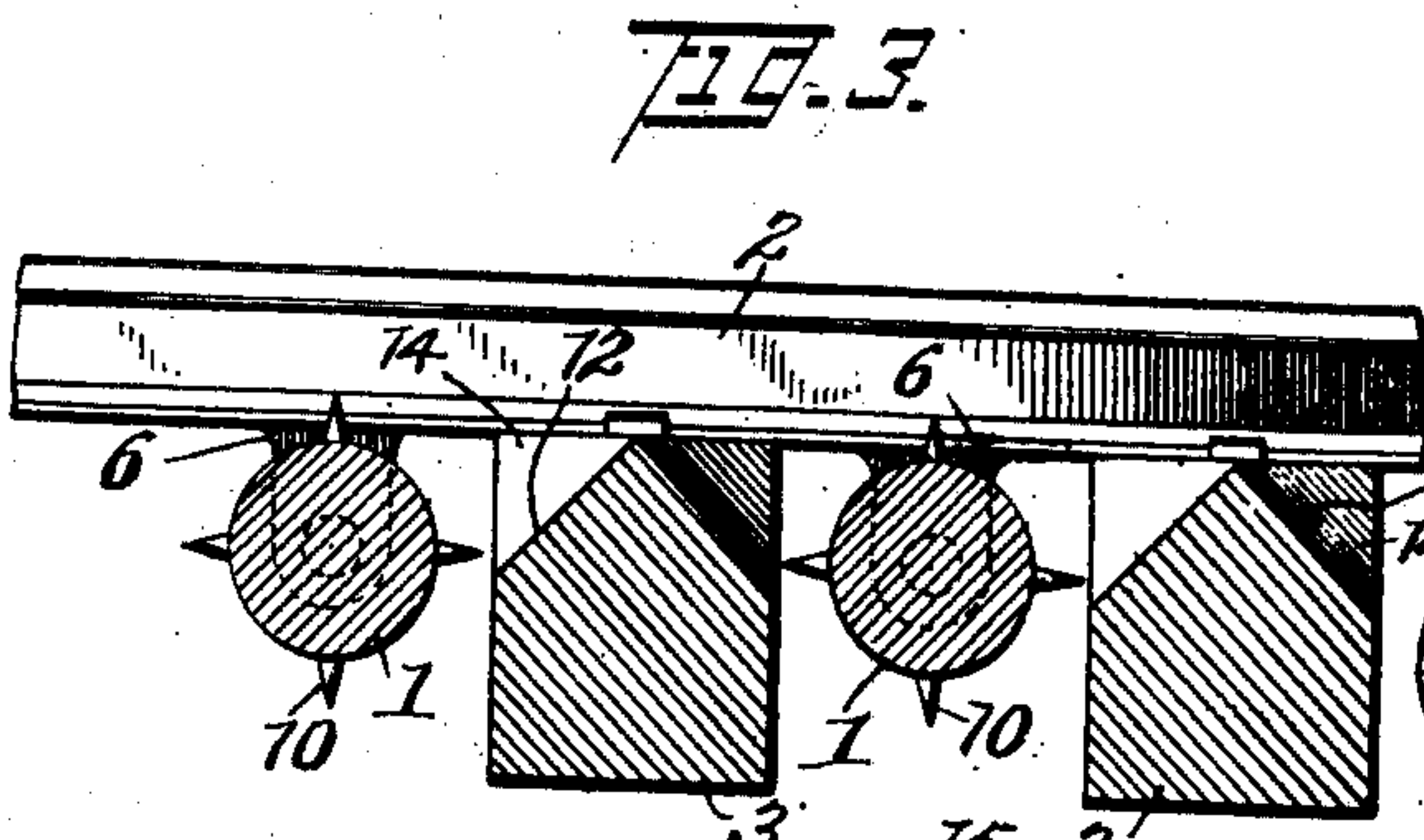
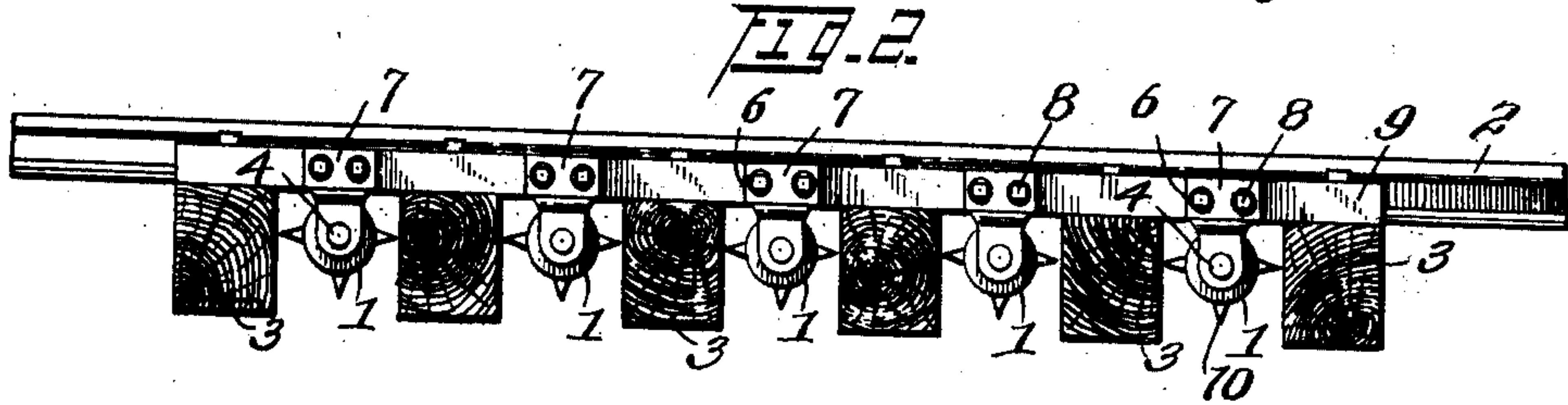
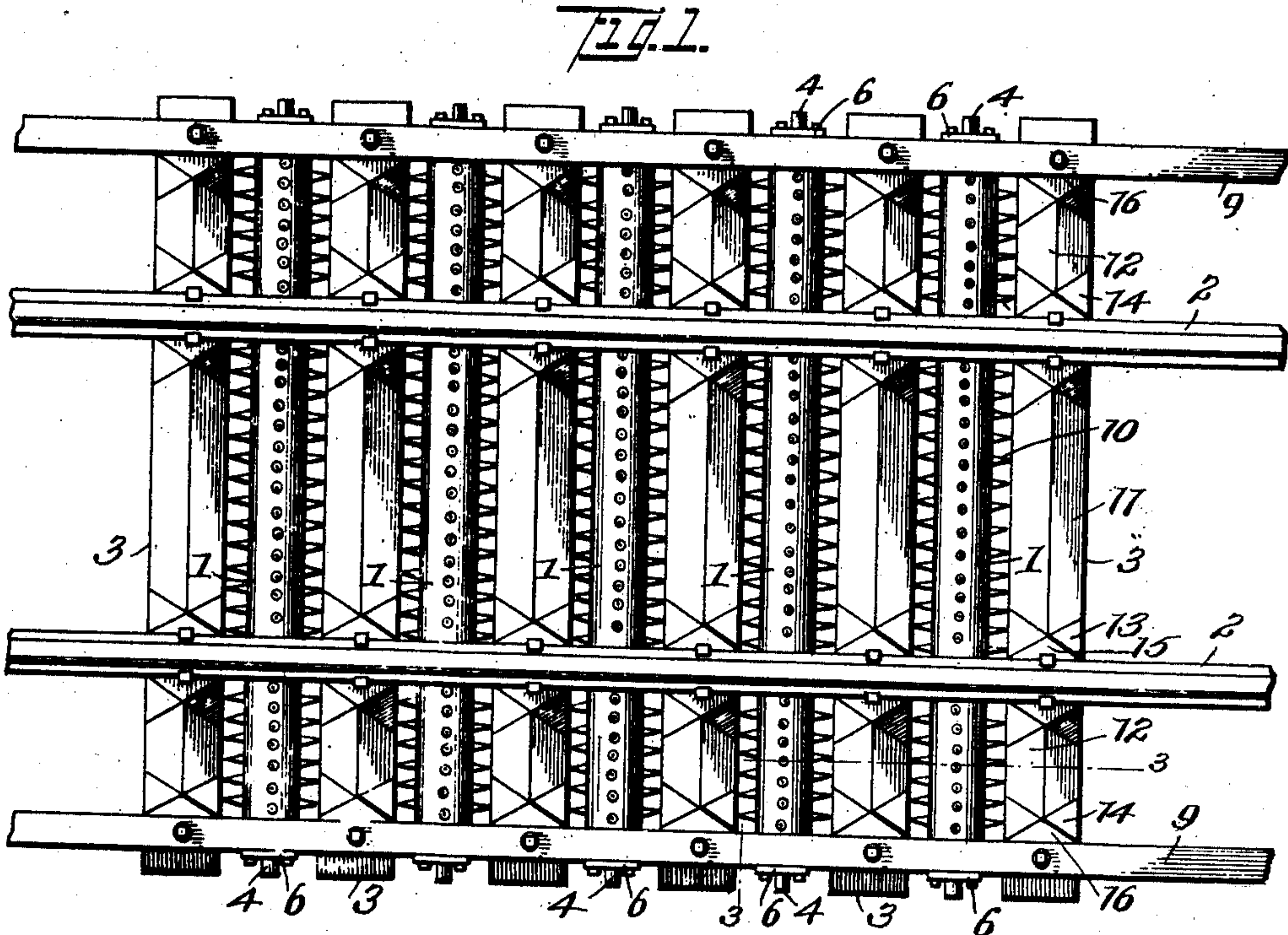


No. 826,663.

PATENTED JULY 24, 1906.

J. R. HORTON.
RAILWAY CATTLE GUARD.
APPLICATION FILED OCT. 21, 1905.



Witnesses.

M. C. Lyddane
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UNITED STATES PATENT OFFICE.

JOHN ROBERTS HORTON, OF MEMPHIS, TENNESSEE, ASSIGNOR OF ONE-THIRD TO EDWARD L. PENCE, OF MEMPHIS, TENNESSEE.

RAILWAY CATTLE-GUARD.

No. 826,663.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed October 21, 1905. Serial No. 283,868.

To all whom it may concern:

Be it known that I, JOHN ROBERTS HORTON, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented a new and useful Railway Cattle-Guard, of which the following is a specification.

The invention relates to improvements in railway cattle-guards.

The object of the present invention is to improve the construction of cattle-guards for railways and to provide an exceedingly simple and inexpensive one of great strength and durability capable of effectually preventing horses, cattle, and other animals from passing over it.

With these and other objects in view 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 the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a plan view of a cattle-guard constructed in accordance with this invention. Fig. 2 is a side elevation of the same. Fig. 3 is a sectional view taken substantially on the line 3 3 of Fig. 1. Fig. 4 is a detail perspective view of one end of one of the spiked rollers. Fig. 5 is a detail view of one of the hangers. Fig. 6 is a detail perspective view of a portion of one of the cross-ties, illustrating the arrangement of the beveled faces of the same.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

The cattle-guard is provided with a series of transversely-disposed rollers 1, located beneath the rails 2 of a track in the space between the ties 3, and the said rollers, which extend entirely across the road-bed and which project laterally beyond the rails, are provided at their ends with journals 4, which are arranged in suitable bearings 5 of hangers 6. The hangers 6 consist of plates or brackets provided with upper attachment portions 7, which are perforated for the reception of bolts 8. The bolts 8 secure the hangers to the outer

faces of longitudinal bars or stringers 9, which are mounted upon the cross-ties 3 at the ends thereof. The hangers depend from the stringers, and the bearings 5 are arranged at the lower portions of the hangers, so that the rollers are suspended beneath the rails. The rollers, which constitute pivotally-mounted guard members, are provided with projecting spikes or spurs 10.

The stringers are bolted or otherwise secured to the cross-ties, which are provided with central and side beveled faces 11 and 12 in order to afford no foothold for horses, cattle, or other animals and also in order to cause an animal should it attempt to cross the cattle-guard to slip onto the adjacent spiked roller. The central and side portions of each of the cross-ties are preferably beveled at an angle of forty-five degrees, and the tie is also provided with inclined or beveled faces 13 and 14, arranged at the terminals of the inclined faces 11 and 12 and extending downward from flat intermediate and end portions 15 and 16. The oppositely-inclined side faces of the cross-ties form apexes, which are located below the rails and in substantially the same horizontal plane as the tops of the rollers. The rails are spiked to the intermediate flat portions 15, and the stringers 9 are arranged on the flat end portions 16.

It will be seen that the cattle-guard is exceedingly simple and inexpensive in construction, that it is adapted to be readily applied to a railroad-track, and that it is capable of effectually preventing an animal from crossing it. Also it will be clear that it is located wholly below the rails, so that it can offer no obstruction to the passage of trains nor be injured by the same.

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

1. In a railway cattle-guard, the combination with rails, and cross-ties supporting the same, of rotary spiked rollers located wholly beneath the rails and extending entirely across the track and projecting beyond the sides of the rails, and hangers having depending portions supporting the rollers.

2. In a railway cattle-guard, the combination with rails, and cross-ties supporting the same, of rotary spiked rollers located wholly beneath the rails and extending entirely across the track and projecting beyond the

sides of the rails, stringers mounted on the cross-ties, and hangers depending from the stringers and supporting the rollers.

3. In a railway cattle-guard, the combination with rails, of pivotally-mounted rollers suspended below the rails and provided with projecting spurs or spikes, and cross-ties spaced apart to receive the rollers and beveled at their upper faces to provide oppositely-inclined faces and to form apexes, which are also located below the rails and in substantially the same horizontal plane as the tops of the rollers.

4. In a railway cattle-guard, the combination with rails, of cross-ties having flat faces for supporting the rails and provided with central and end beveled portions forming oppositely-inclined faces between the rails and at the sides thereof, and pivotally-mounted guard members located below the rails in the spaces between the cross-ties.

5. In a railway cattle-guard, the combination with rails and stringers, of cross-ties having intermediate and end flat portions receiving the rails and the stringers, said cross-ties being also beveled between the rails and at the sides thereof to form oppositely-inclined side faces, and inclined end faces extending from the flat portions to the inclined side faces, and pivotally-mounted guard members having spurs or projections and suspended from the stringers and arranged in the spaces between the cross-ties at points below the rails.

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

JOHN ROBERTS HORTON.

Witnesses:

L. S. COWLES,
H. G. RISER.