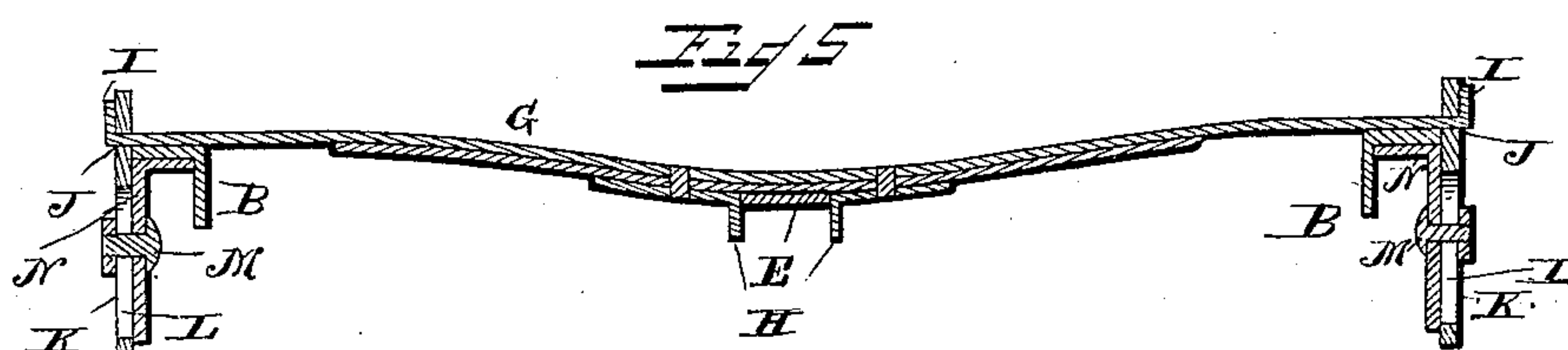
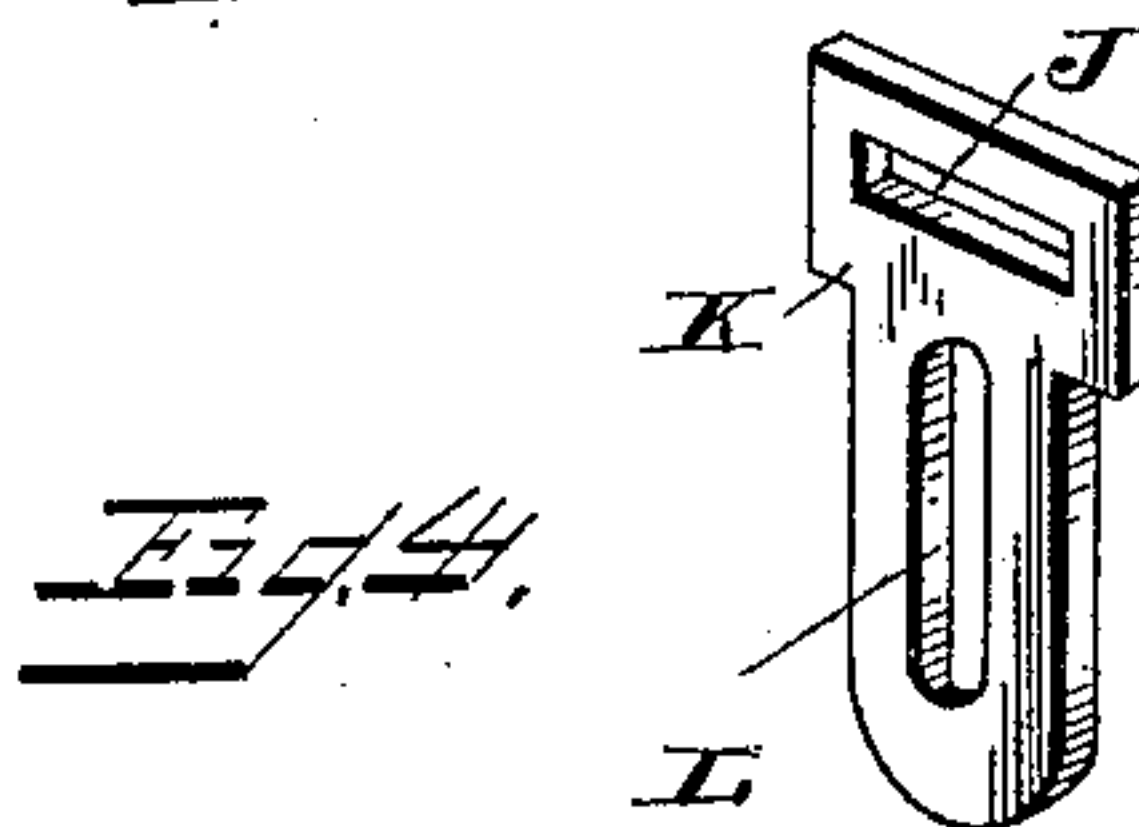
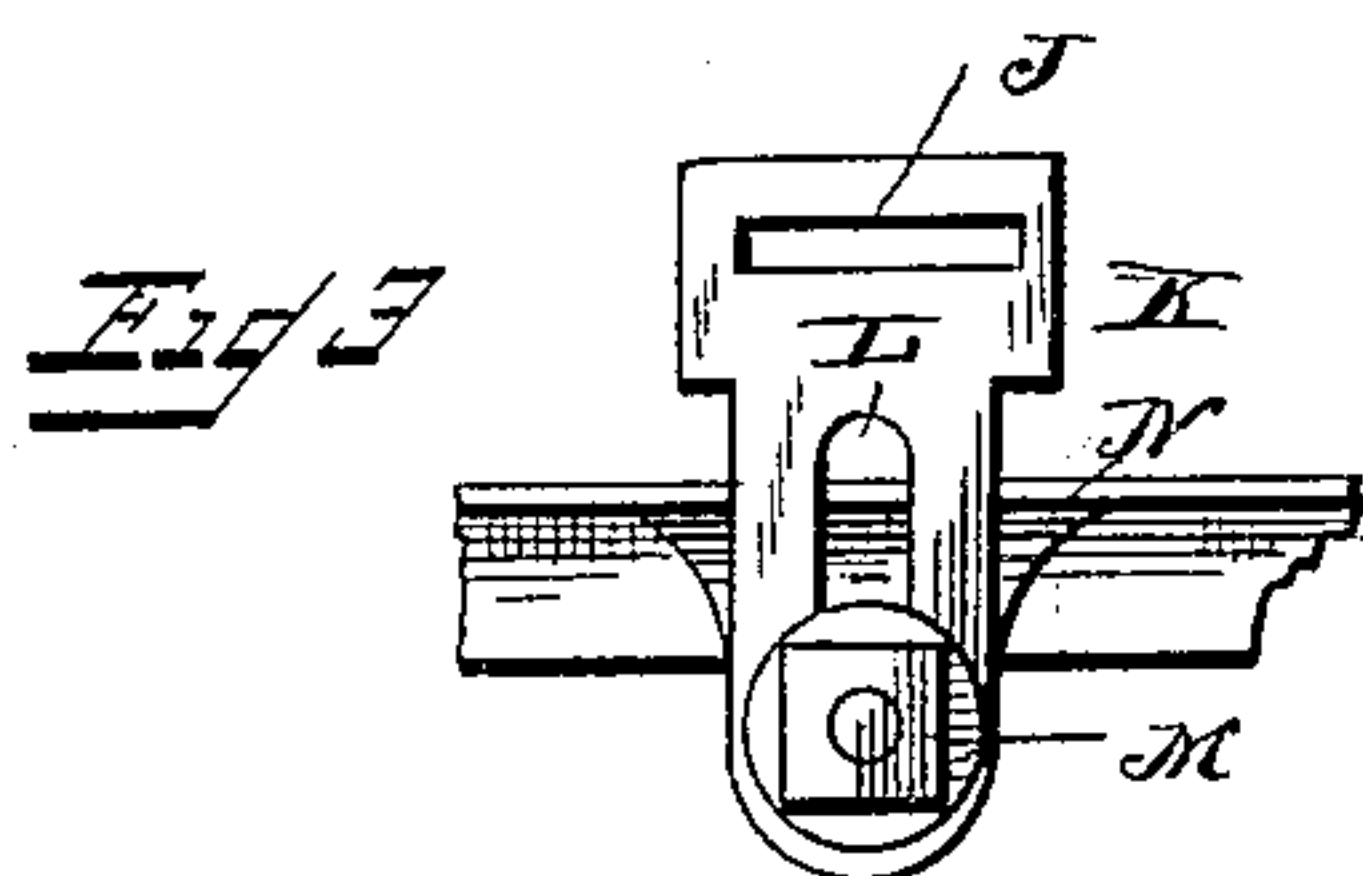
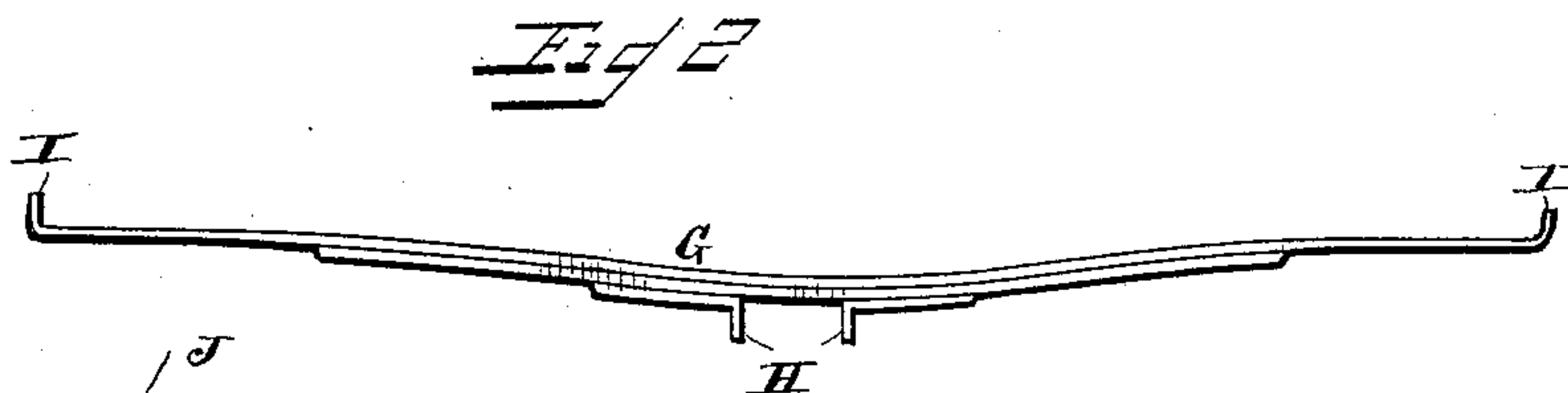
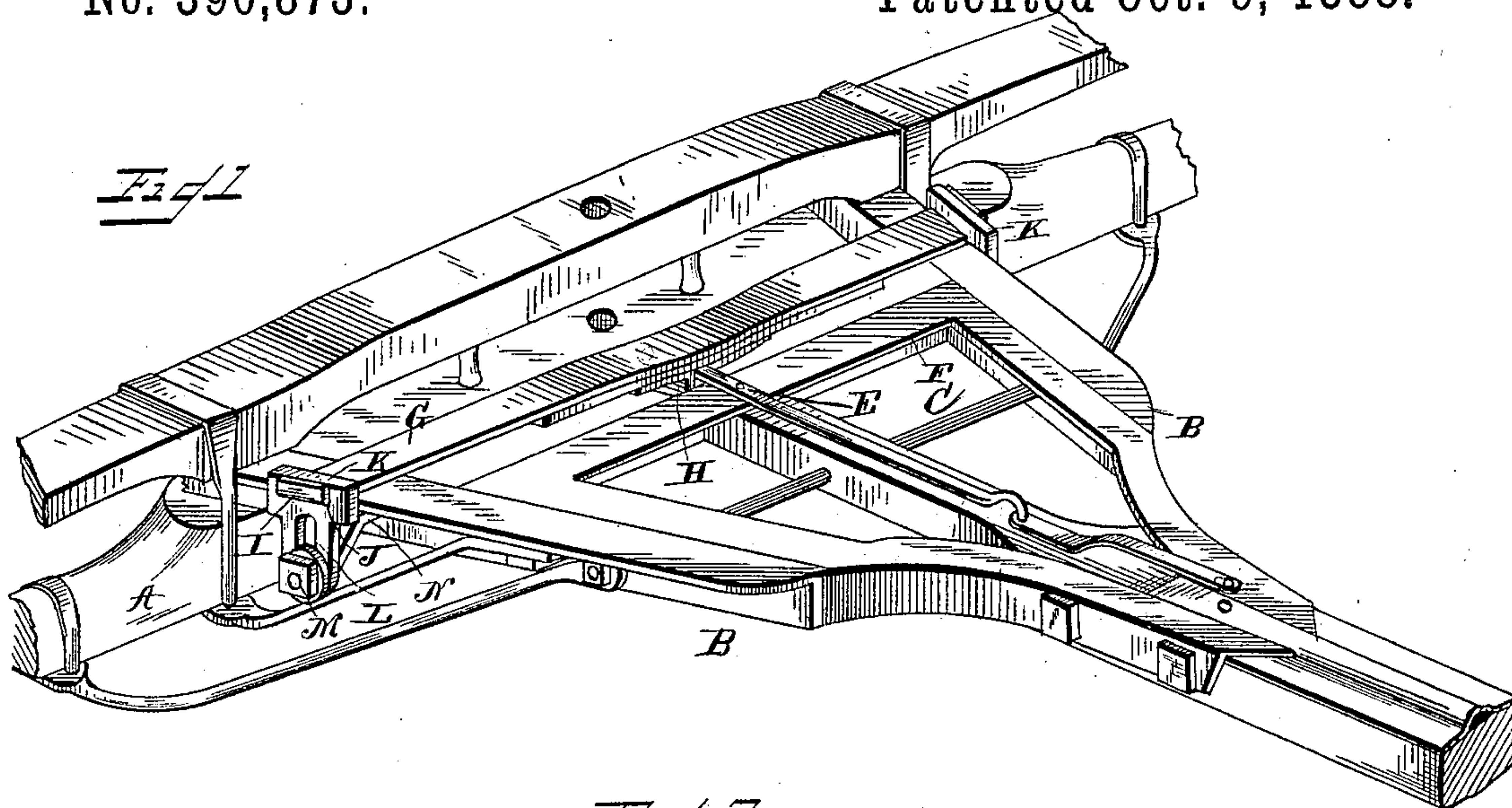


(No Model.)

T. G. MANDT.
TONGUE SUPPORT.

No. 390,873.

Patented Oct. 9, 1888.



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UNITED STATES PATENT OFFICE.

TARGE G. MANDT, OF STOUGHTON, WISCONSIN.

TONGUE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 390,873, dated October 9, 1888.

Application filed March 16, 1888. Serial No. 267,328. (No model.)

To all whom it may concern:

Be it known that I, TARGE G. MANDT, a citizen of the United States, and a resident of Stoughton, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Tongue-Supports for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of the front part of the running-gear of a vehicle, showing my improved tongue-support in position. Fig. 2 is a front view of the spring-support detached. Fig. 3 is a side view of one of the devices for adjusting the tension of the spring-support. Fig. 4 is a detail view of one of the adjustable plates to which the spring-support is fastened and by means of which its pressure or tension is regulated, and Fig. 5 is a longitudinal sectional view through the spring-support and its attachments.

Like letters of reference denote corresponding parts in all the figures.

My invention has relation to so-called "tongue-supports," or means whereby the rear end of a wagon-tongue may be supported in such a manner as to reduce to a minimum the strain upon the necks of the team; and my improvement consists in the detail construction and combination of parts of the adjustable spring-support, which will be hereinafter more fully described.

In the accompanying drawings, the letter A denotes the front axle of a vehicle provided with my improved tongue-support, while B B denote the forwardly-projecting parts of the hounds, which are connected by the usual draw-bolt, C, upon which the pole D is hung or pivoted, the said draw-bolt C passing through apertures made in the hounds and tail-end of the pole.

Upon the top of the latter is fastened a plate, E, the rear end of which extends beyond the cross-bar F of the hounds, so that it will, when the pole is attached in its proper position upon the draw-bolt, project underneath the middle

part of the spring-support G. The latter consists of one or more layers or leaves of steel, according to the degree of stiffness which it is desired to impart to it, and has attached toward the under side of its middle part two plates, H H, bent at right angles, so as to form guides for the rearwardly-projecting plate E of the tongue, which, when the tongue is in position, will bear against the under side of the spring-support, and is prevented from lateral play or motion by the plates H H.

The ends of the spring-support G are bent upwardly at right angles, as shown at I I, and said bent ends are inserted through slots J in plates K, one at each end of the spring-support. Each of the plates K has a longitudinal slot, L, at right angles to the upper horizontal slot, J, and is fastened by means of a bolt, M, inserted through the said slot L to a downwardly-projecting bracket or bearing, N, bolted to the under side of the hounds and projecting downwardly therefrom. Thus it will be seen that by loosening or tightening the bolts M the plates K K may be raised or lowered, thereby raising or lowering the spring-support, and the tension or pressure of the same against the rearwardly-projecting end of the tongue may be adjusted in such a manner as to adjust the strain of the forward end of the pole upon the neck of the team. This adjustment may be effected with little trouble and in a moment's time, and without removing the tongue or removing any parts of the device.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with the running-gear of a vehicle, of the tongue, which is provided with a projection extending back of the rear cross-bar, an elastic tongue-support secured at its ends to the hounds of the vehicle, and two right-angled plates secured to the under side of the support, the downward-projecting portions of which engage with the projection of the tongue and prevent lateral movement, substantially as set forth.

2. The combination, with the running-gear of a vehicle, of the tongue, the elastic or yielding tongue-support bent at opposite ends, and the

adjusting - plates suitably fastened to the
hounds and provided with horizontal slots for
the insertion of the free ends of the tongue-
support and with vertical slots for the inser-
5 tion of the bolts or screws, whereby said plates
may be adjusted for the purpose of regulating
the tension of the support against the rear-
wardly-projecting end of the tongue, substan-
tially as set forth.

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

TARGE G. MANDT.

Witnesses:

THORVALD C. LUND,
OSWALD F. KROPP.