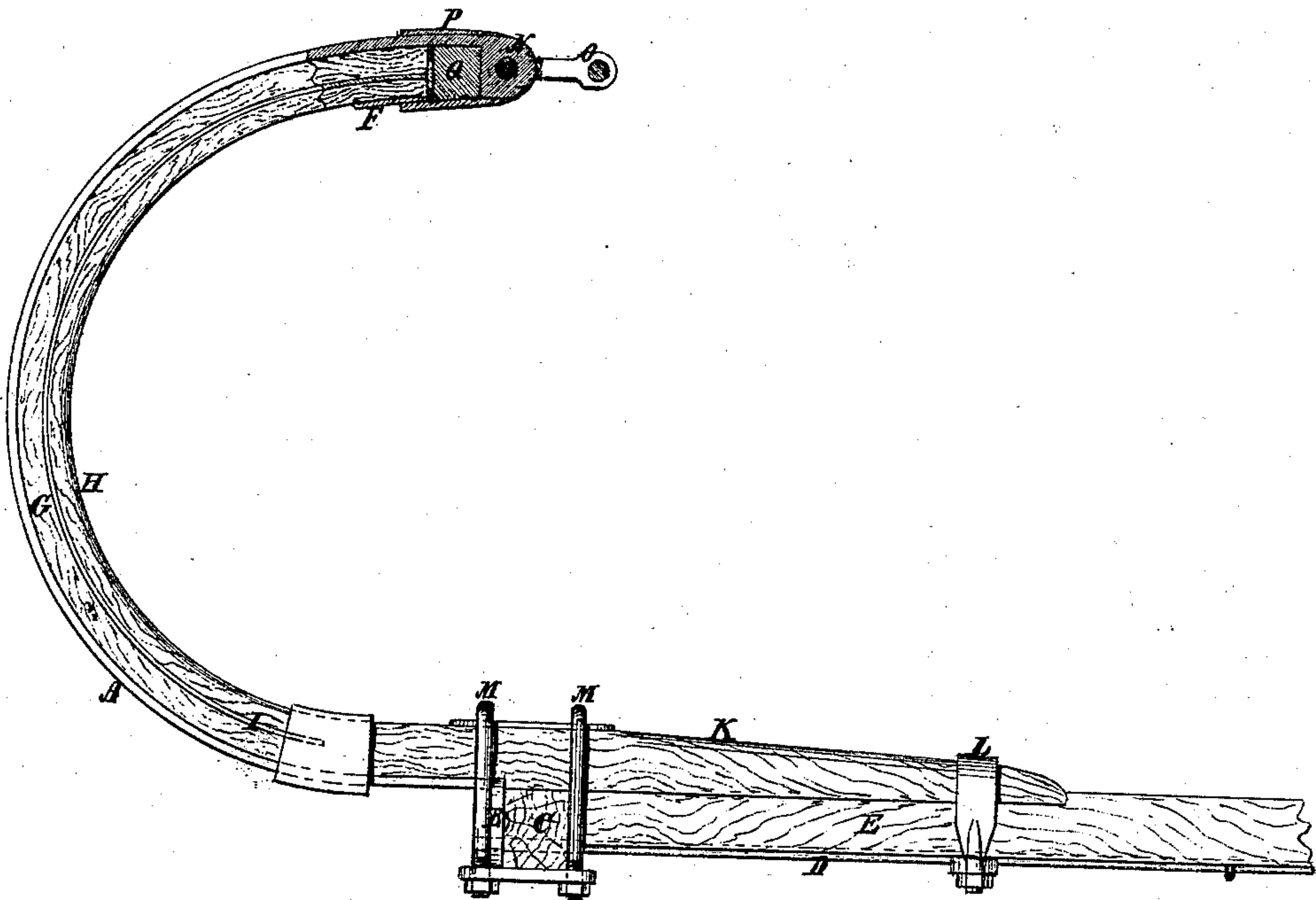


J. GOLLER.
Vehicle Spring.

No. 99,558.

Patented Feb. 8, 1870.



Witnesses:

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United States Patent Office.

JOHN GOLLER, OF LOS ANGELES, CALIFORNIA.

Letters Patent No. 99,558, dated February 8, 1870.

IMPROVEMENT IN VEHICLE SPRINGS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern :

Be it known that I, JOHN GOLLER, of Los Angeles, in the county of Los Angeles, and State of California, have invented a new and useful Improvement in Vehicle Springs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in springs for thorough-brace vehicles, and consists in certain features of novelty which will be particularly pointed out hereinafter.

The drawing represents a side elevation of my improved spring, partly sectioned at the upper end.

A represents the outer steel leaf, which is made stronger and longer than the other metal leaves.

The lower end B is bent perpendicular to the other part, to rest against the other side of the axle or rocker C, as the case may be, and it may, if preferred, be connected to the strap D, attached to the under side of the bar E of the frame, extending from the hind axle to the front rocker. The upper end is doubled under and laps back on the inner wood leaf, as shown at F.

G and H represent the wood leaves of the spring, and I another metal spring between them.

These wood leaves terminate in a common shank or stock K, at the lower end, which is attached to the top of the bolster or axle C, and bar E, by clips L and M.

The upper end F also laps around the pivot-bolt N of the shackle O, and a band, P, is arranged around this double end for strengthening it, and for forming two sides of the socket or recess at the end of the

other leaves of the spring, the said leaves being shorter than the one, A.

This socket is fitted with an India-rubber spring, Q, against which the short leaves bear, and which yields to make room for them, when, by the springing action, they push forward in the socket. This arrangement is intended to give each leaf of the spring freedom to expand or contract relatively to the others, independently and unconfined by them, and by it each leaf performs its function to better advantage than when all are confined together, as these springs have heretofore been arranged.

The straps or loops by which the body of the vehicle is supported are connected to the shackle, and may be arranged to extend over the leaf A and fasten to the plate B, if preferred.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. A wooden spring, K, slotted from the initial point of the bend out to the end thereof, and strengthened throughout the curve by a steel spring plate, I, in the centre, and a circumjacent steel spring plate, A, all as shown and described.

2. A spring whose end works easily against some elastic material in the socket of a circumjacent steel band, A, and is thereby allowed to readily contract and expand longitudinally, in the manner set forth.

JOHN GOLLER.

Witnesses:

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