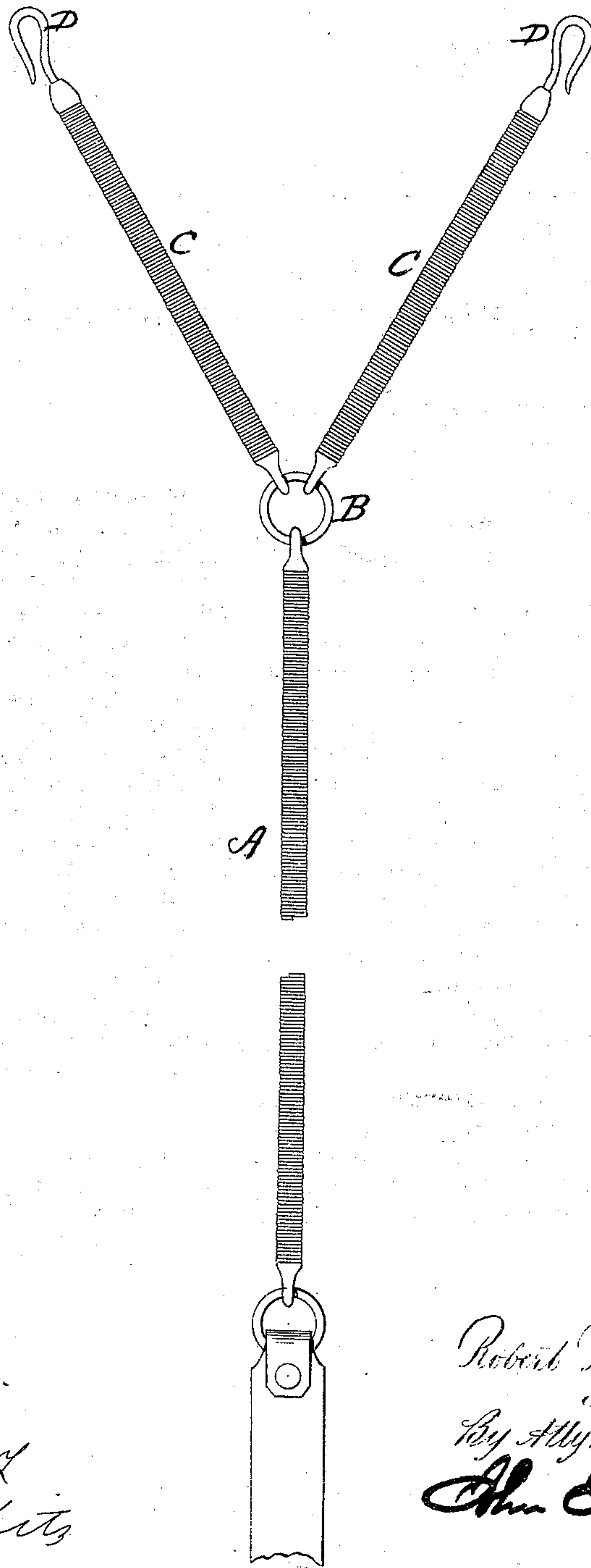


R. R. MILLER.

Martingales.

No. 135,657.

Patented Feb. 11, 1873.



Witnesses

J. H. Shumway
A. J. Tibbitts

Robert R. Miller
Inventor

By Atty.

Chas. S. Earle

UNITED STATES PATENT OFFICE.

ROBERT R. MILLER, OF SOUTHTON, CONNECTICUT, ASSIGNOR TO HIMSELF
AND J. B. SAVAGE, OF SAME PLACE.

IMPROVEMENT IN MARTINGALES.

Specification forming part of Letters Patent No. 135,657, dated February 11, 1873.

To all whom it may concern:

Be it known that I, ROBERT R. MILLER, of Southington, in the county of Hartford and State of Connecticut, have invented a new Improvement in Martingales; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents a front view.

This invention relates to the construction of a martingale for horse's harness, the object being both to make the martingale ornamental and elastic—this latter feature in order to allow the free movement of the horse's head and yet control that movement; and the invention consists in forming the martingale in three branches of wire spiral spring—two of the branches attached to the bit, the other to the girth, in the usual manner.

A is the branch which extends from the girth up to the connection B, and from this connection two branches, C, extend to either side of the bit and connected to the bit by hooks D or other equivalent device. These

branches are formed by winding wire upon a cylinder in the usual manner of making wire spiral springs, then cut to the proper length for the several branches, and united and applied in the manner described.

The advantages of this invention are that, while the spring is of sufficient strength to compel the horse to hold his head in the required position, it will yield to allow him to throw up his head, and thus, while accomplishing all that is required for the martingale, it will not be a discomfort to the horse; and, further, made of metal and plated, it is a highly ornamental appendage to the horse.

I do not wish to be understood as broadly claiming an elastic martingale, as such, I am aware, is not new.

I claim as my invention—

As an article of manufacture, a martingale formed from wire spiral springs, constructed substantially as described.

R. R. MILLER.

Witnesses:

M. H. HOLCOMB,
NATHAN E. STANNARD.