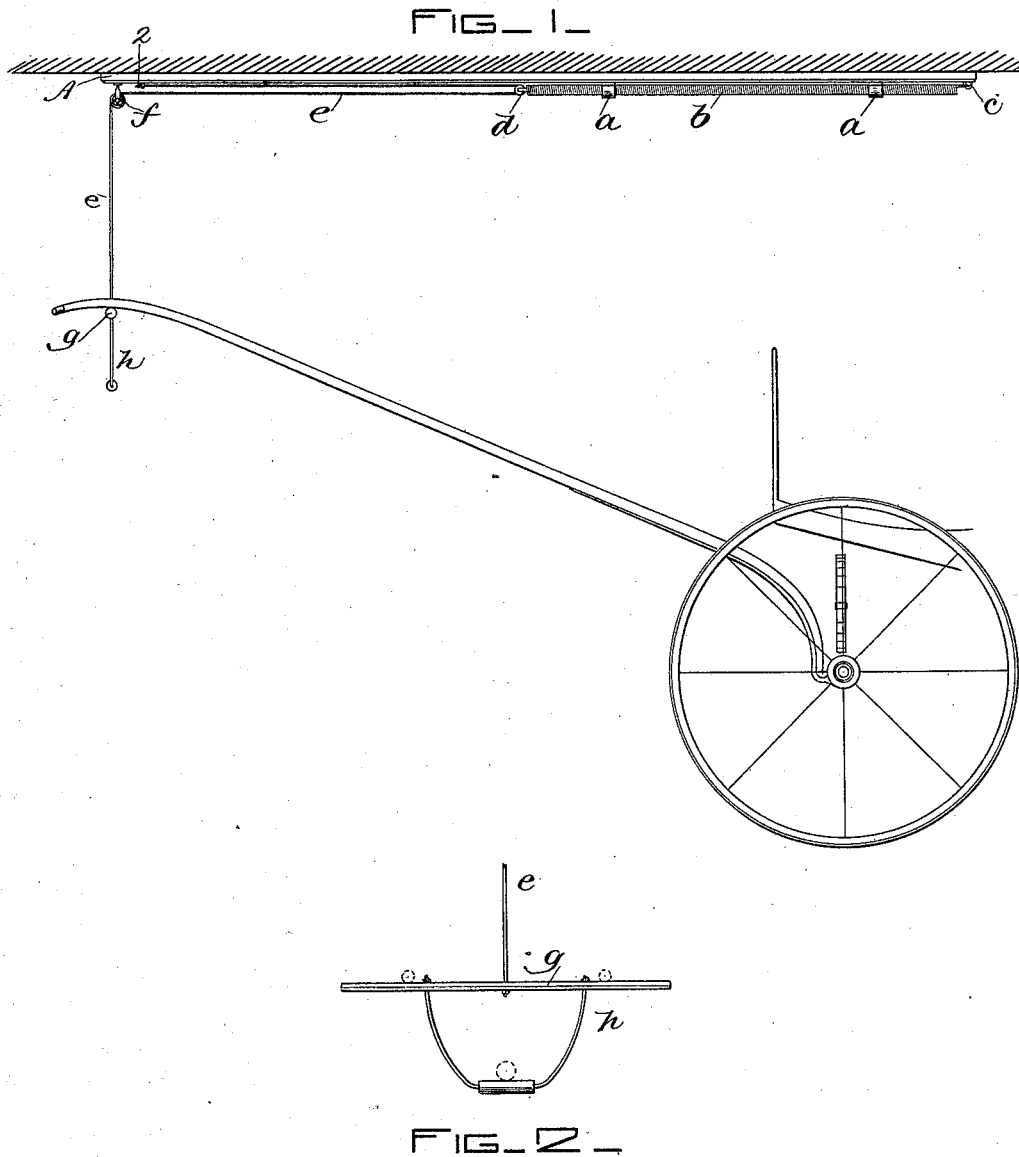


(No Model.)

W. H. HEALD.  
SHAFT SUPPORT.

No. 422,408.

Patented Mar. 4, 1890.



WITNESSES

*Howard F. Eaton.*  
*Edgar A. Goddard.*

INVENTOR

*William H. Heald,*  
*by Leroy & Gregory*  
*attys.*

# UNITED STATES PATENT OFFICE.

WILLIAM H. HEALD, OF SANDWICH, MASSACHUSETTS.

## SHAFT-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 422,408, dated March 4, 1890.

Application filed September 11, 1889. Serial No. 323,635. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM HERSEY HEALD, of Sandwich, county of Barnstable, State of Massachusetts, have invented an Improvement in Shaft-Supports, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object the production of a novel, efficient, and economical support by which to hold up shafts or poles of carriages.

15 My improved carriage-shaft support consists, essentially, of a strong spiral spring, a holder for it, a guide or pulley at one end of the spring, a flexible connection, a guide or pulley for the same, and a rest on which the shaft lies when the latter is in its elevated position.

20 Figure 1, in side elevation, represents part of a stable-ceiling with my invention added thereto, and part of a carriage; and Fig. 2 is a detail showing the rest detached, the dotted line showing a pole.

25 The holder A, herein shown as a strip of wood, but which may be of other material, is adapted to be attached to the ceiling of a carriage-house or stable. This holder has suitable straps, as *a a*, which receive a strong spiral spring *b*, one end of which is represented as held in place by a screw-eye *c*, or it may be held by any other usual or suitable stud. The opposite end of the spring has connected to it a guide or pulley *d*. The flexible connection *e*, which may be a rope, wire, or chain, is shown as fastened to the holder at 2, and is carried back about the guide or pulley *d*,

then again forward and over a guide or pulley *f*, beyond which the end of the flexible connection has secured to it a rest, shown in the present embodiment of my invention as a short rod *g*, on which the two arms of the pair of shafts to be held up will rest; but I do not desire to limit my invention to a rest of the exact shape herein shown.

40 The extension *h*, which may be of usual rope or wire, enables the rest to be pulled down against the strain of the spring, and it also forms a loop-like rest, in which may be inserted a carriage-pole.

45 I prefer to make the guides *d f* in the form of pulleys, to thus obviate chafing the flexible connection; but I do not desire to limit my invention to the exact construction of the said guides or pulleys, over or about which the flexible connection is drawn when the apparatus is being used.

I claim—

50 The holder, the spring extended along and connected at one end to the said holder, and the guides or pulleys *d f*, attached to the free end of the spring and the holder, respectively, combined with the flexible connection attached at one end to the holder, passed over pulley *d* and back over pulley *f*, and means attached to the free depending end of said connection to receive and support a shaft or pole, substantially as described.

55 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM H. HEALD.

Witnesses:

GEO. W. GREGORY,  
H. H. HEALD.