

(No Model.)

C. E. DAVIS & C. LEWIS.
NECK YOKE.

No. 441,538.

Patented Nov. 25, 1890.

Fig 1

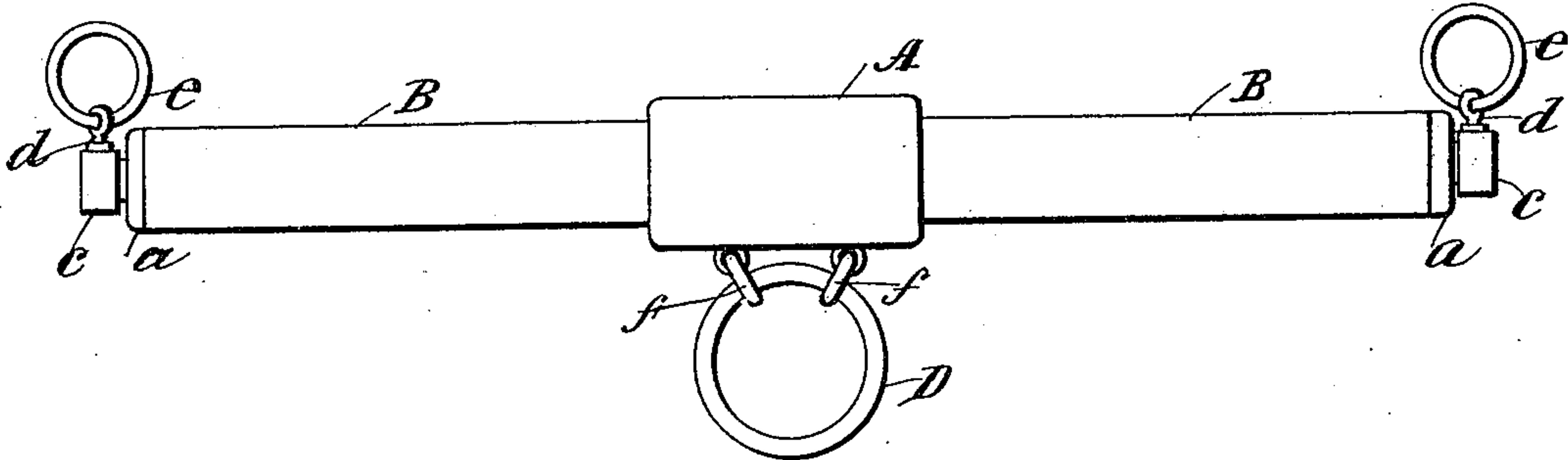


Fig 2

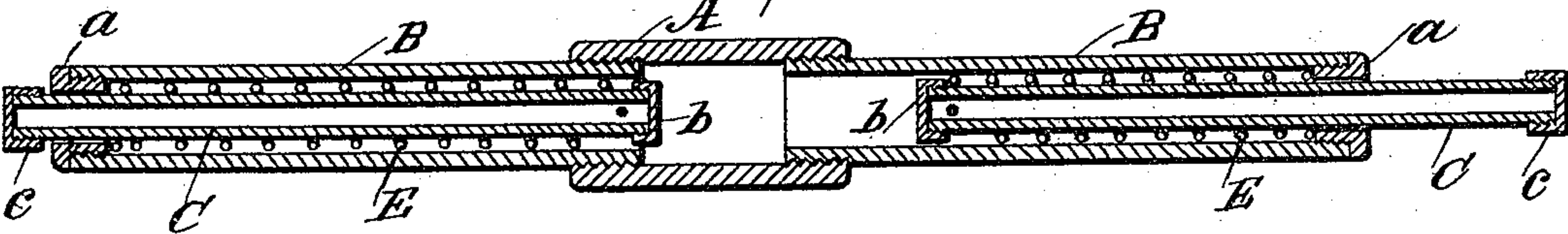
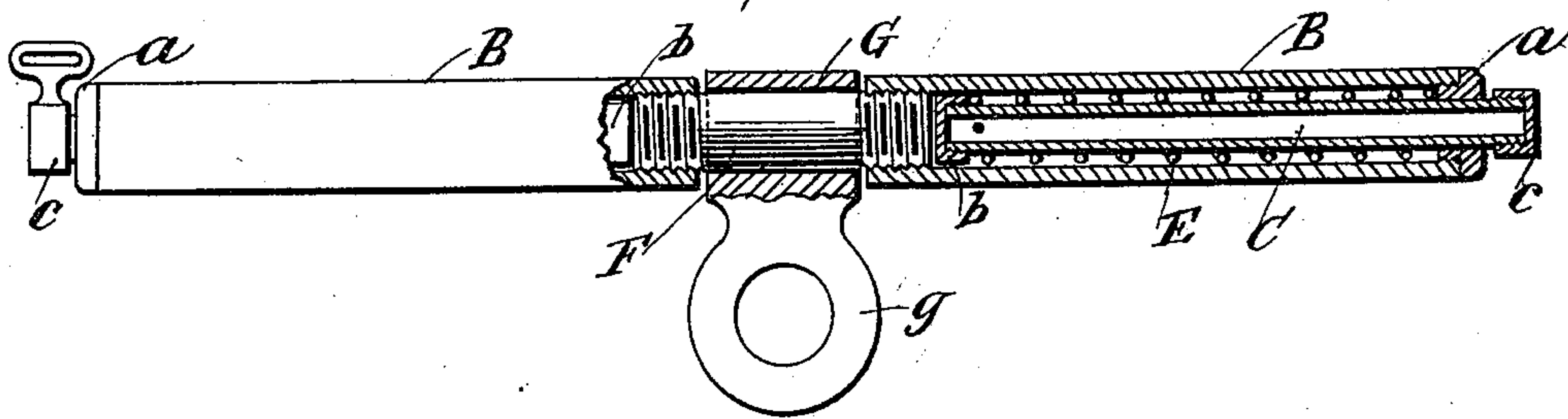


Fig 3



WITNESSES:

H. Walker
C. Sedgwick

INVENTOR:

C. E. Davis
C. Lewis

BY

Munn & Co
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES EDWARD DAVIS AND CHARLES LEWIS, OF NEOSHO, MISSOURI.

NECK-YOKE.

SPECIFICATION forming part of Letters Patent No. 441,538, dated November 25, 1890.

Application filed August 1, 1890. Serial No. 360,646. (No model.)

To all whom it may concern:

Be it known that we, CHARLES EDWARD DAVIS and CHARLES LEWIS, of Neosho, in the county of Newton and State of Missouri, have
5 invented a new and useful Neck-Yoke, of which the following is a full, clear, and exact description.

This invention relates to an improvement in neck-yokes for draft-animals, the objects
10 being to provide a simple, strong, neat, and convenient device that will permit one or both of a pair of horses which are connected by the neck-yoke to a vehicle-pole to move laterally and avoid obstructions or bad places
15 in a road-bed, and then resume a normal position with regard to the vehicle and its pole.

To these ends our invention consists in certain features of construction and combinations of parts, which are hereinafter described,
20 and indicated in the claims.

Reference is to be made to the accompanying drawings, forming a portion of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

25 Figure 1 is a plan view of the neck-yoke closed. Fig. 2 is a longitudinal section through the axis of the device shown in Fig. 1, with one end extended; and Fig. 3 is a plan view, partly sectional, of a modified form of
30 construction that is adapted for light vehicles.

In Figs. 1 and 2 the device shown is preferably supplied for use in connection with heavy wagons or carriages, and is comprised of a central socket-piece A, which is threaded
35 internally at each end for the connection therewith of two tubular cylindrical yoke-sections B, preferably made of wrought-iron pipe of proper diameter and length, threaded externally at one end to engage the socket-
40 piece A.

In the outer ends of the yoke-sections B the thimbles *a* are screwed, these parts being threaded internally and externally to permit the removable connection of the thimbles
45 with the yoke-sections, as shown in Fig. 2. The thimbles *a* have their interior diameters equal and necessarily align with each other from their position in the sections B.

In each yoke-section B a tubular extension-
50 piece C is inserted, the external diameter of said pieces C being proportioned to the internal diameter of the longitudinal apertures

in the thimbles *a*, so that the extension-pieces will slide neatly in the thimbles and move nearly their entire length within the
55 yoke-sections B, the length of the respective pieces being adapted to permit such a telescopic movement of the extension-pieces C within the sections B. Upon the outer surfaces of the extension-pieces C elastic spiral
60 coils E are placed, which are made of spring-wire of such a gage as will admit of the free insertion of the coils within the yoke-sections B if the thimbles *a* are removed. On the inner ends of the extension-pieces C internally-
65 screw-threaded caps *b* are mounted, these engaging the threaded ends of the pieces C, as represented. The outer diameters of the caps *b* are the same and should be such with
70 relation to the inner diameter of the yoke-sections B that they will freely slide therein. If the thimbles *a* are removed from their positions in the yoke-sections B, and the spiral
spring-coils E placed on the yoke-extension
75 pieces C, and the parts assembled, as shown in Fig. 2, the thimbles *a* being replaced, it will be evident that the resilience of the springs will hold the extension-pieces C normally retracted within the extension-pieces,
80 as represented in the left-hand end portion of the yoke shown in Fig. 2.

Upon the outer ends of the extension-pieces C the caps *c* are secured by a threaded engagement with the ends of these pieces, and each cap has a swivel-eye *d* attached to
85 its side, said eyes having the rings *e* loosely connected with them.

Near the longitudinal center of the socket-piece A there is a ring D, connected by swivel eyes or rings *f*, which ring is adapted
90 for a convenient connection of the neck-yoke to a vehicle-pole, while the rings *e* are engaged by straps (not shown) that lead to the collars on the animals. In Fig. 3 the socket-
95 piece A is dispensed with and a short center piece of pipe F substituted for it, this pipe having such a relative diameter to that of the yoke-section B that the externally-threaded ends of the piece F may be inserted into the tapped ends of the yoke-sections, as
100 shown. Around the center piece F there is a metal or leather hanger G, secured by any proper means, its integral projecting end portion *g* having a ring form for a connection of

the yoke-coupling to the pole and breast straps of the team of animals in the usual way.

In use this improved neck-yoke will yield
5 readily to pressure on its ends and automatically resume its normal length, which will enhance the comfort of the animals it is attached to, as the whipping of the pole will not injure them, and if it is necessary for one
10 or both of the attached animals to move sidewise to escape contact with a mud-hole or an obstruction in the road the construction of the yoke will admit of such movement and by its retractile power again resume a
15 correct length for ordinary travel and lateral guidance of the team.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

20 1. A neck-yoke consisting of a center piece provided with a pole-ring, two tubes B, having a screw-connection at their inner ends with the center piece and internally threaded at their outer ends, the externally-threaded
25 thimbles *a*, screwed into said outer ends, the extension-tubes C, passing through said thim-

bles and having screw-caps *b* on their inner ends snugly fitting the bore of tubes B and screw-caps *c* on their outer ends, each provided with a pole-strap connection, and springs 30 surrounding the tubes C and abutting at their ends the ends of caps *b* and thimbles *a*, substantially as set forth.

2. A neck-yoke comprising a center piece F, externally threaded at its ends, the tubes 35 B, screwed at their inner ends upon the ends of said center piece, a strap G on the center piece between the inner ends of said tubes and having a pole-ring *g*, the thimbles *a* in the outer ends of the tubes, the tubes C, pass- 40 ing through said thimbles and having screw-caps *b c* on their inner and outer ends, respectively, the outer caps being provided with eyes, and the springs surrounding the tubes C and abutting at their ends the ends of the 45 caps *b c*, substantially as set forth.

CHARLES EDWARD DAVIS.
CHARLES LEWIS.

Witnesses:

P. R. SMITH,
H. C. SMITH.