

(No Model.)

A. SCHUBERT.
VEHICLE SPRING HANGER.

No. 388,588.

Patented Aug. 28, 1888.

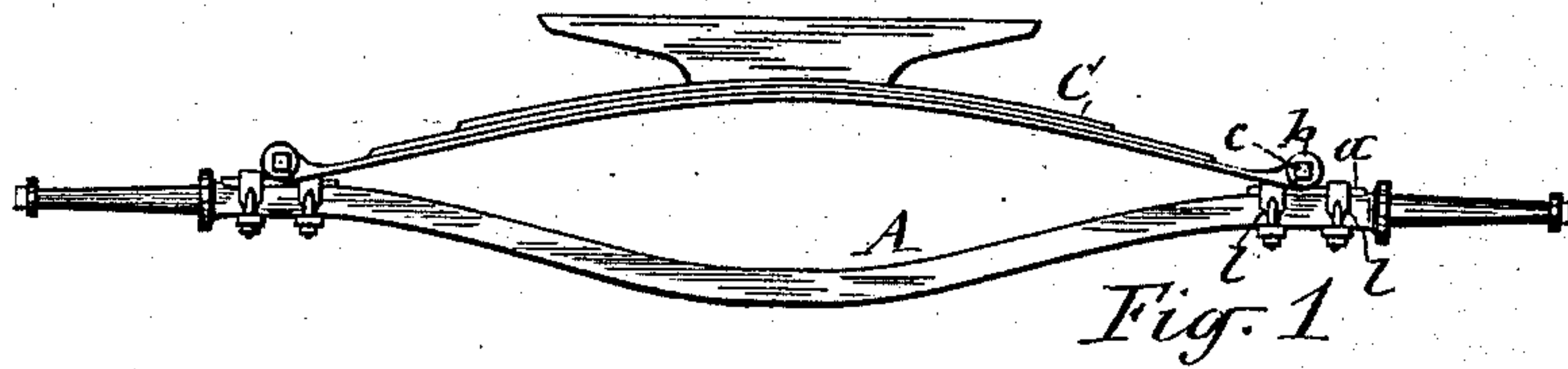


Fig. 1

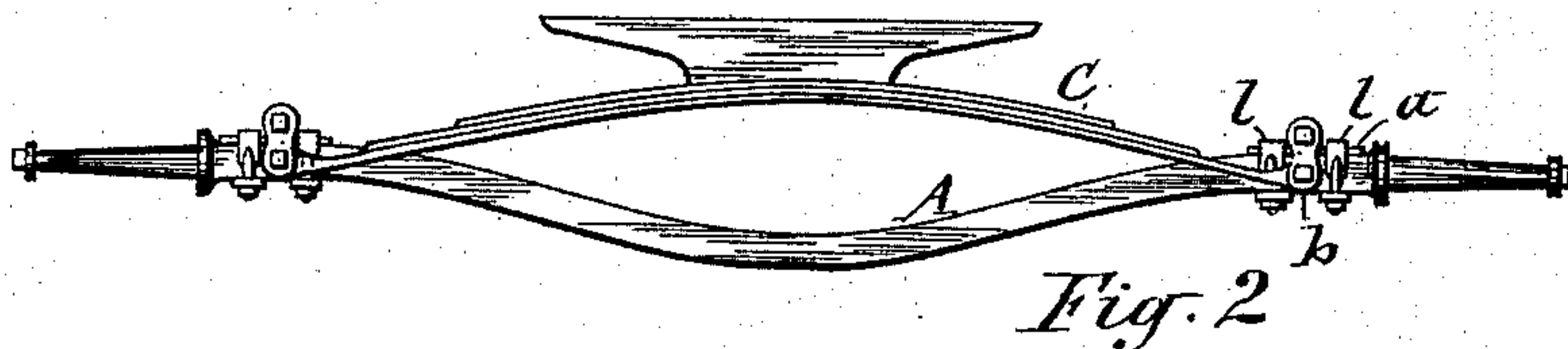


Fig. 2

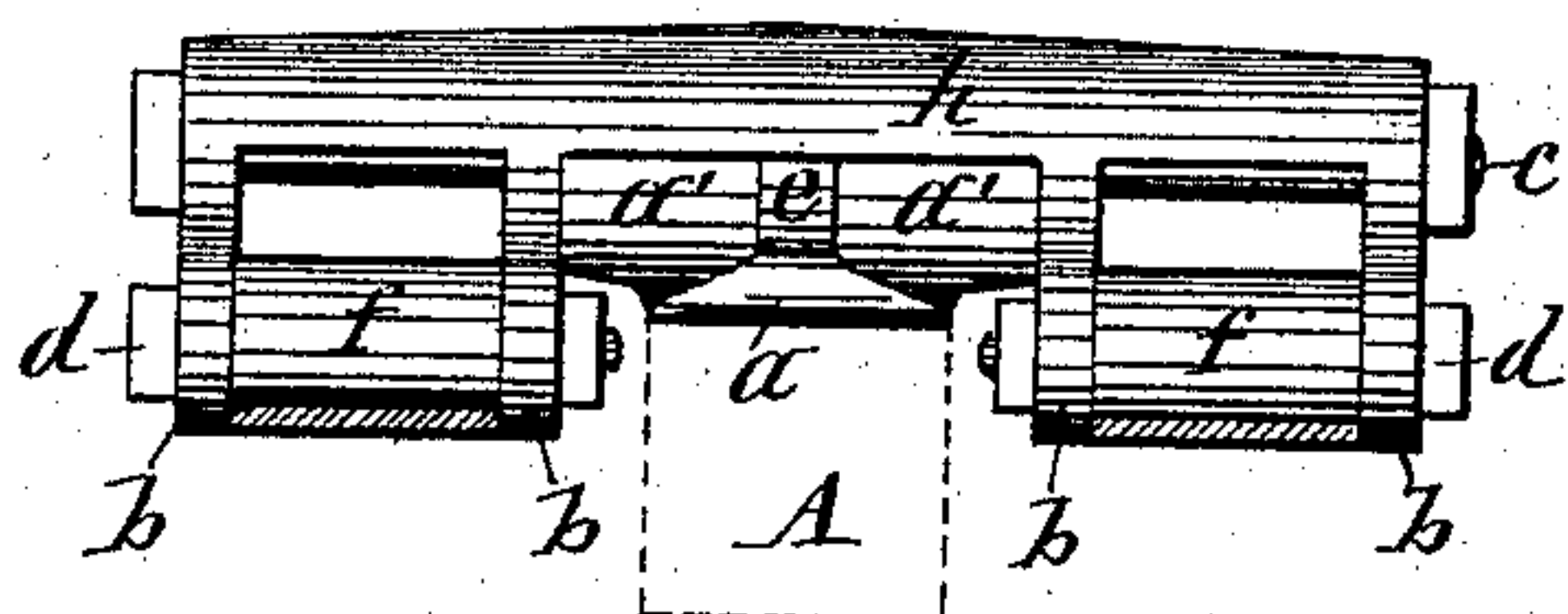


Fig. 3

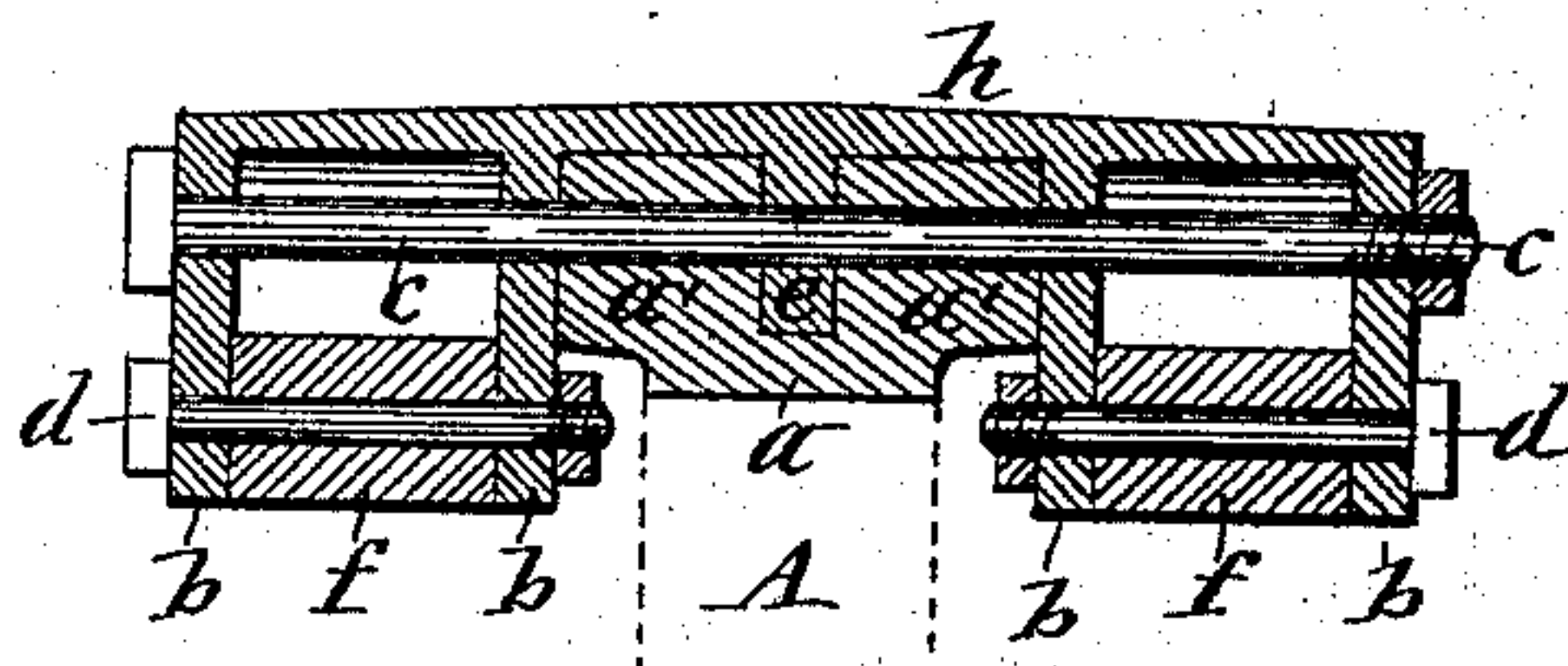


Fig. 4

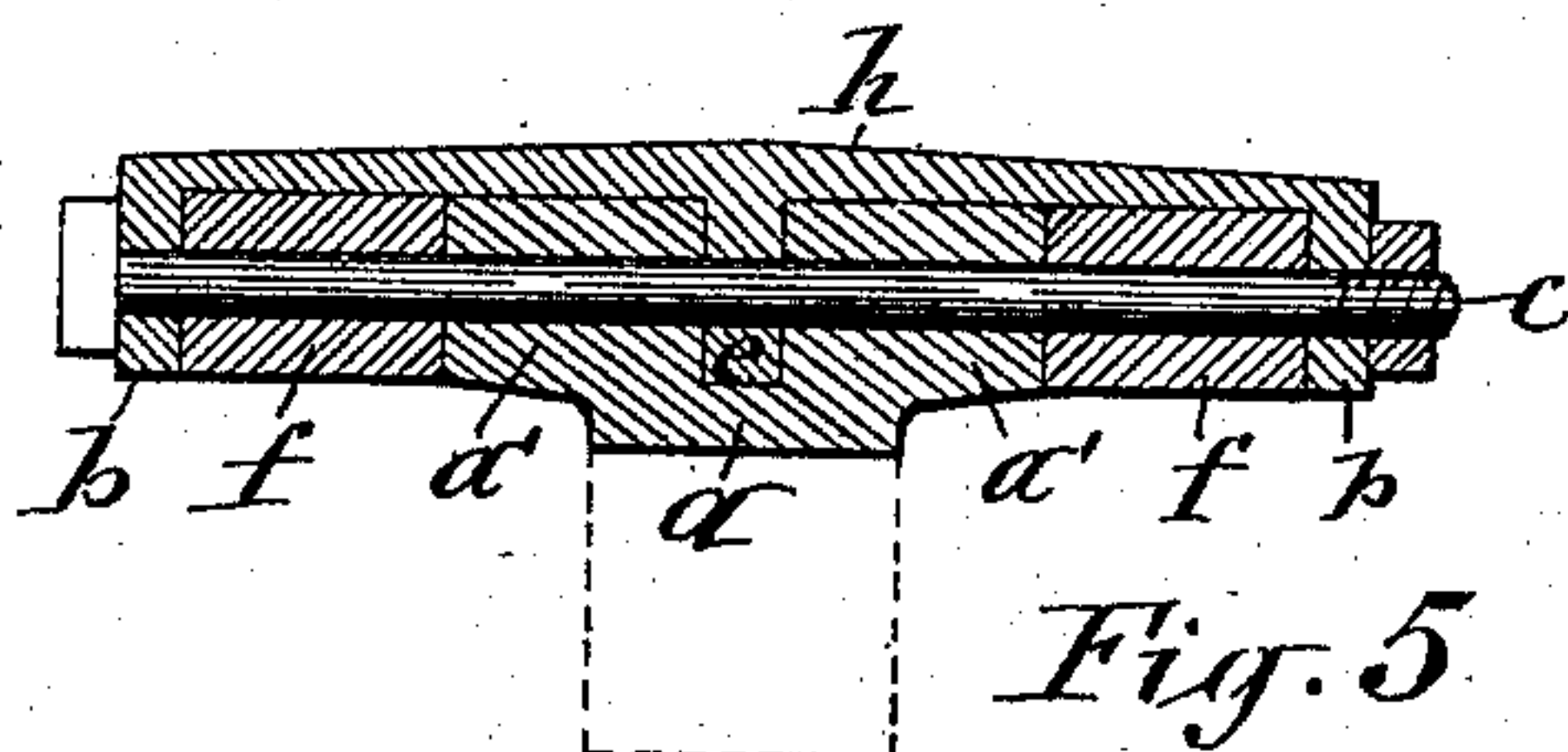


Fig. 5

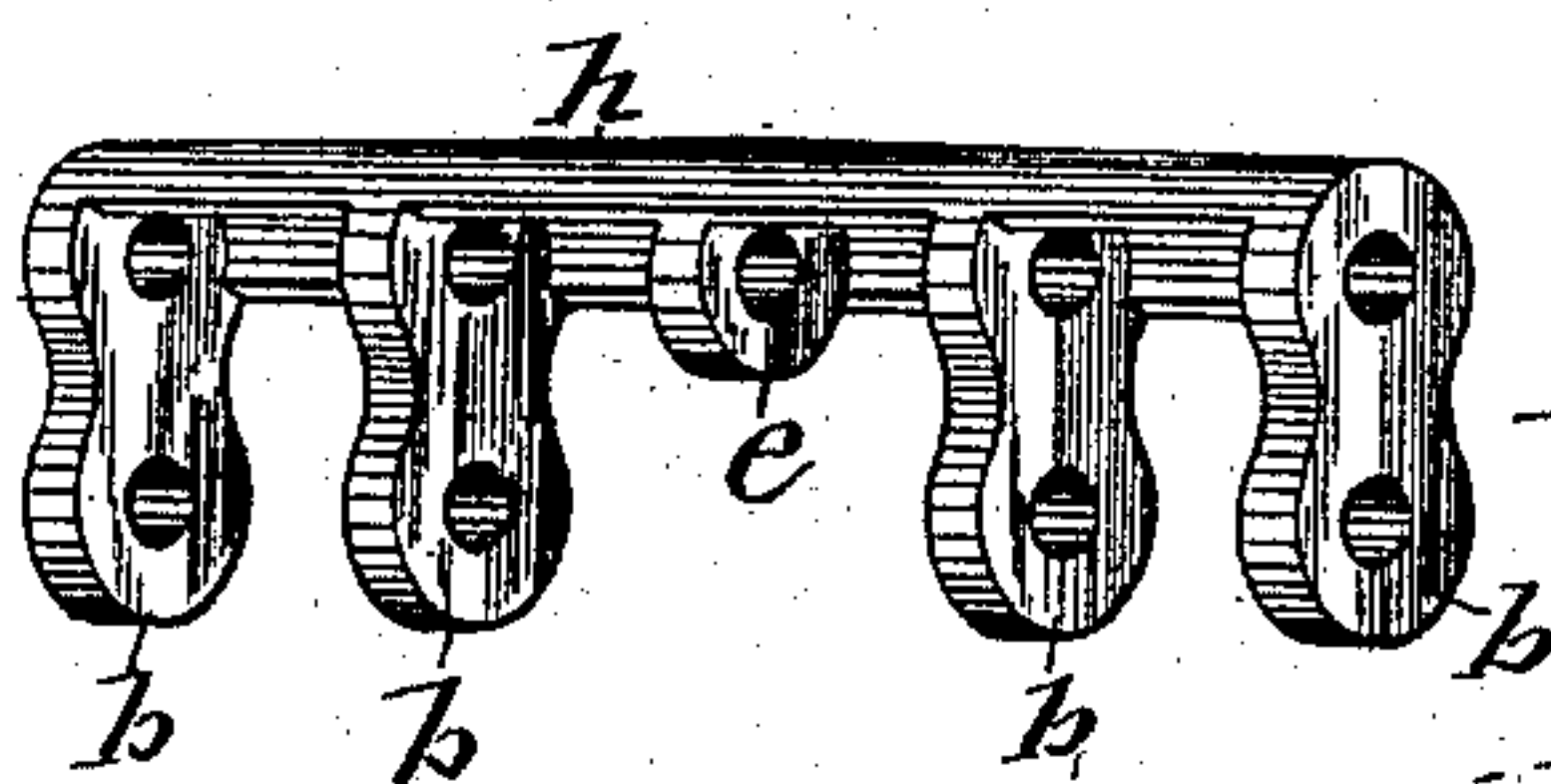


Fig. 6

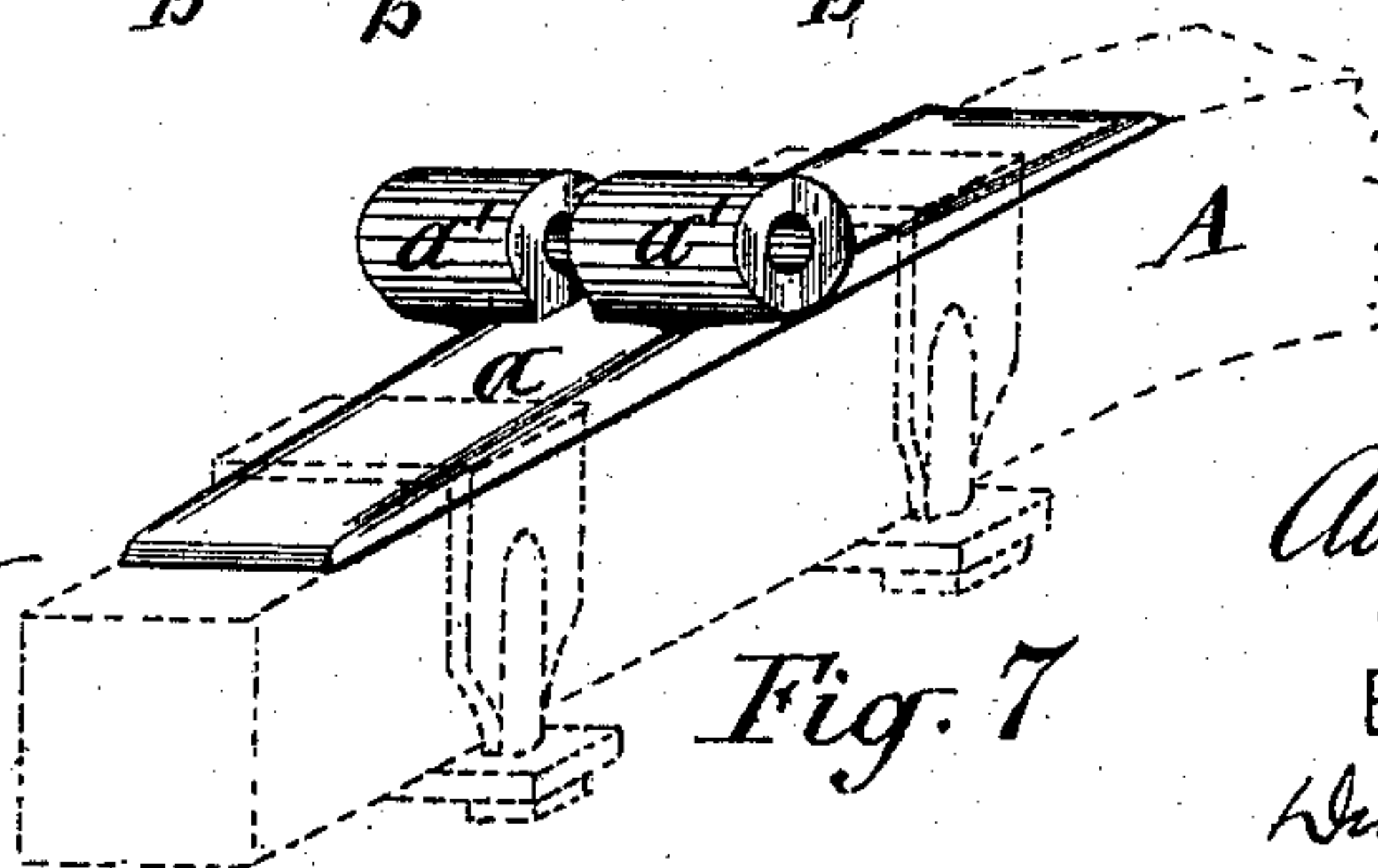


Fig. 7

WITNESSES:

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UNITED STATES PATENT OFFICE.

AUGUST SCHUBERT, OF ONEIDA, NEW YORK.

VEHICLE-SPRING HANGER.

SPECIFICATION forming part of Letters Patent No. 388,588, dated August 28, 1888.

Application filed May 4, 1888. Serial No. 272,764. (No model.)

To all whom it may concern:

Be it known that I, AUGUST SCHUBERT, of Oneida, in the county of Madison, in the State of New York, have invented new and useful
5 Improvements in Vehicle-Spring Hangers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention has special reference to the
10 class of vehicle-springs designated "duplex spring-gears," and in which two cross-springs are arranged respectively at opposite sides of the axle and hung at their ends to supports projecting at right angles from the end portions of the axles, and the body of the vehicle
15 is carried on the arching central portions of said cross-springs; and the invention consists in novel means for hanging on the axle the cross-springs arranged at opposite sides thereof, as hereinafter fully described, and specifically set forth in the claims.

In the annexed drawings, Figures 1 and 2 are side views of axles with springs hung thereon by my improved hangers, and showing
25 modifications thereof. Fig. 3 is an enlarged detached side elevation of the hanger and its support on the axle. Fig. 4 is a vertical longitudinal central section of the same. Fig. 5 is a vertical longitudinal central section of a modification of the hanger. Fig. 6
30 is a detached perspective view of the hanger; and Fig. 7 is a detached perspective view of the support of the hanger on the axle.

Similar letters of reference indicate corresponding parts.

A represents the axle, and C C the cross-springs arranged at opposite sides of the axle and carrying the body of the vehicle on their arching central portions in the usual and well-
40 known manner.

My invention consists, essentially, in connecting the springs to the axle by means of hangers connected transversely to the end portions of the axle and projecting at opposite
45 sides of the axle and oscillatory in the direction of the length of the axle, and couplings connecting the springs to opposite ends of the hangers. This connection of the springs with the axle admits of several modifications, two
50 forms being illustrated in the annexed draw-

ings. The form shown in Figs. 1 and 5 of the drawings consists of a saddle, *a*, which is rigidly secured to the top of the end portion of the axle by clips *l l*, or other suitable and well-known means. Said saddle is formed with
55 lugs *a' a'*, projecting upward from the top thereof and perforated at right angles to the axle. The top portions of said lugs are semi-cylindrical, and upon the same rides a hanger, *h*, which is disposed at right angles to the axle
60 and projects at opposite sides thereof, and is formed with a central eye, *e*, and eyes or perforated ears *b b* at its ends. This saddle is pivoted to the lugs *a' a'* by the eye *e*, entered between the said lugs, and a bolt, *c*, extending
65 the entire length of the hanger and through the ears *b b* and eye *e* thereof, and through the lugs *a' a'*, and also through the eyes *f f* of the springs, inserted, respectively, between the end ears, *b b*, and lugs *a' a'*, as illustrated in
70 Fig. 5 of the drawings.

In order to allow the springs to distend and contract more freely, I form the hanger *h* with two pendant ears, *b b*, at each end, and connect each spring to one of said pairs of ears
75 by inserting the eye *f* of the spring between the pendent ends of the ears and passing a bolt, *d*, through said parts, as illustrated in Figs. 3 and 4 of the drawings.

Having described my invention, what I claim
80 as new, and desire to secure by Letters Patent, is—

1. In combination with the axle and cross-springs at opposite sides thereof, saddles rigidly secured to the top of the end portions of
85 the axle and provided with lugs perforated at right angles to the axle, hangers riding on said lugs, bolts extending completely through the length of the hangers and through the aforesaid lugs, and couplings connecting the
90 cross-springs to said hangers, as set forth and shown.

2. In combination with the axle and cross-springs at opposite sides thereof, the saddles
95 *a a*, secured to the top of the end portions of the axle and formed with the perforated lugs *a' a'*, and the hangers *h h*, riding on said lugs and each formed with the central eye, *e*, and pendent ears *b b* at its ends, the bolt *c*, extending completely through the length of the
100

hanger and through the aforesaid lugs, and bolts *d' d'*, passing through the pendent portions of the ears and connecting thereto the eyes *f f* of the springs, substantially as described and shown.

5 In testimony whereof I have hereunto signed my name, in the presence of two witnesses, at

Oneida, in the county of Madison, in the State of New York, this 2d day of May, 1888.

AUGUST SCHUBERT. [L. S.]

Witnesses:

GEO. E. KIRKPATRICK,

NELSON G. STARK.