J. W. & W. J. HEWITT.
Carriage-Spring.

No. 199,646. Patented Jan. 29, 1878.

FIG 1

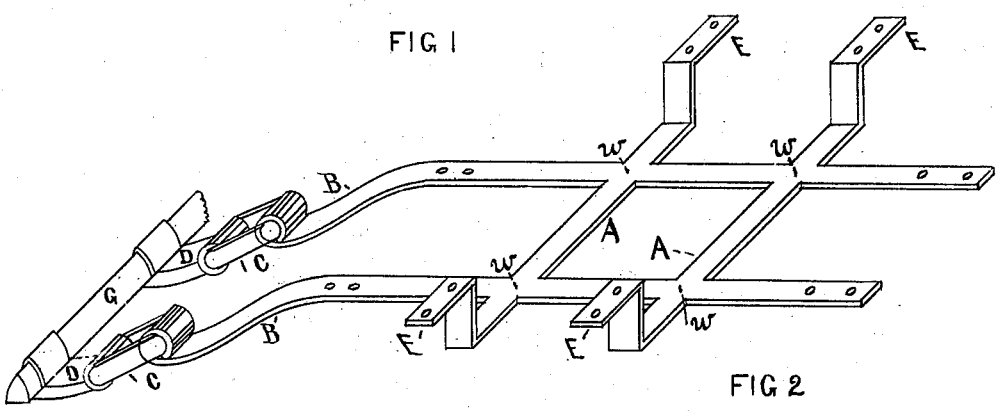


FIG 2

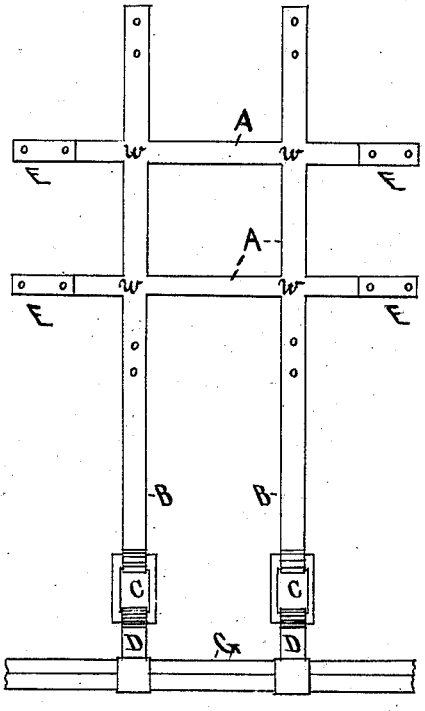
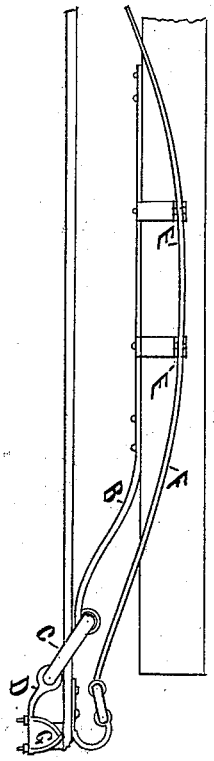


FIG 3



WITNESSES

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UNITED STATES PATENT OFFICE.

JACKSON W. HEWITT AND WILLIS J. HEWITT, OF JACKSON, MICHIGAN.

IMPROVEMENT IN CARRIAGE-SPRINGS.

Specification forming part of Letters Patent No. **199,646,** dated January 29, 1878; application filed December 24, 1877.

To all whom it may concern:

Be it known that we, JACKSON W. HEWITT and WILLIS J. HEWITT, of the city of Jackson, county of Jackson, and State of Michigan, have invented a new and useful Improvement in Carriage and Buggy Springs, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is an isometrical perspective. Fig. 2 is a plan; and Fig. 3 is a part of the side elevation, to show improved attachment.

Our improvement relates to springs for carriages, wagons, and the like, in which auxiliary springs are employed in connection with half-elliptic side springs, in order to prevent the sagging of the body and springs which the unequal distribution of weight in the vehicle is apt to cause; and in carrying out our invention we form the two short springs, intermediate of the side half-elliptic springs, and the cross-bars of the frame, with angular ends or dependent brackets, all in one piece, and arranging the same substantially as hereinafter more fully set forth and claimed.

Referring to the accompanying drawing, A A represent the cross-bars of the frame; E E, the angular ends or brackets thereof; and B B, the short auxiliary springs, which are connected with the loops C, as shown. These loops are connected with the rear axle-tree G by means of hangers D, so as to counteract the weight, which is usually in excess in the rear portion of the body of the vehicle.

These cross-bars A A and short springs B B are formed into a frame in one piece, with a flat surface, upon which the body or frame is bolted and secured in position. The way in which we can form this frame is by welding together the springs and bars. In this way all liability of the disarrangement of the frame and springs is avoided, and also the use of bolts and nuts for connecting the same, and a strong, perfect frame, whereon the body may be seated, is obtained.

Fig. 3 shows the same in position, with the side half-elliptic springs F.

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

The short auxiliary springs B B, intermediate of the side half-elliptic springs, and the cross-bars A A, with angular ends, the same being formed into a frame in one piece, with a flat surface, substantially as herein shown and described, and for the purpose specified.

JACKSON W. HEWITT.
WILLIS J. HEWITT.

Witnesses:
W. G. GILBERT,
E. D. WINNY.