

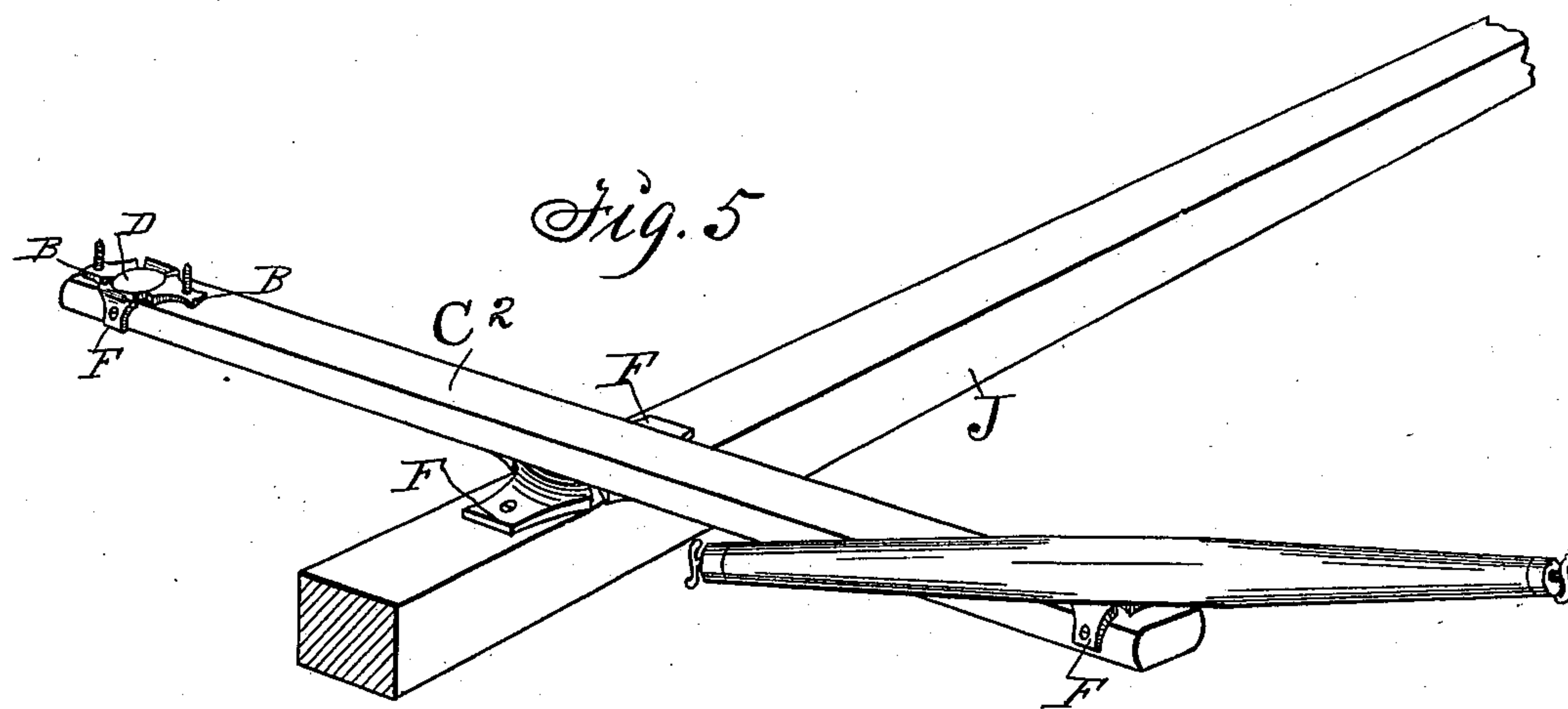
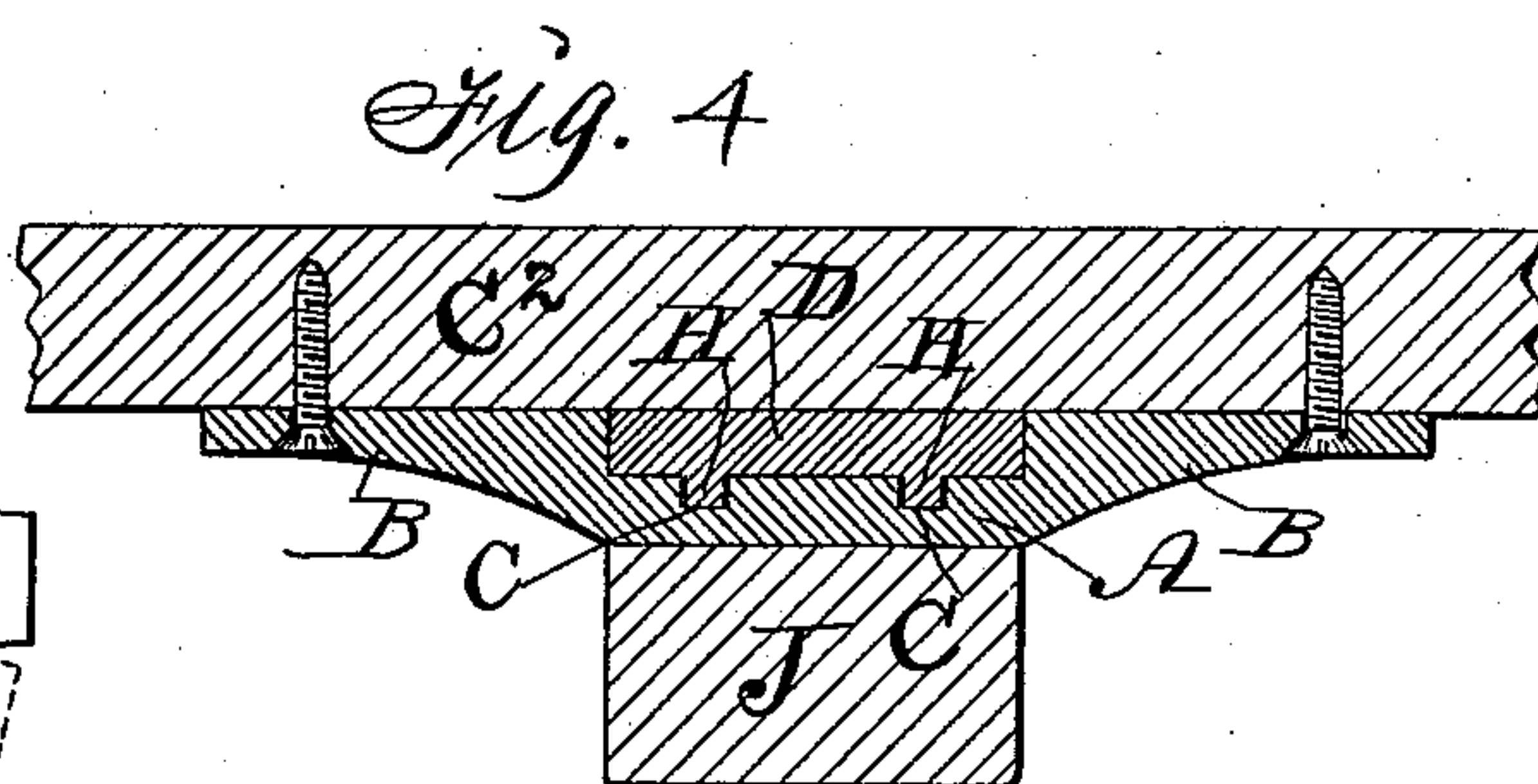
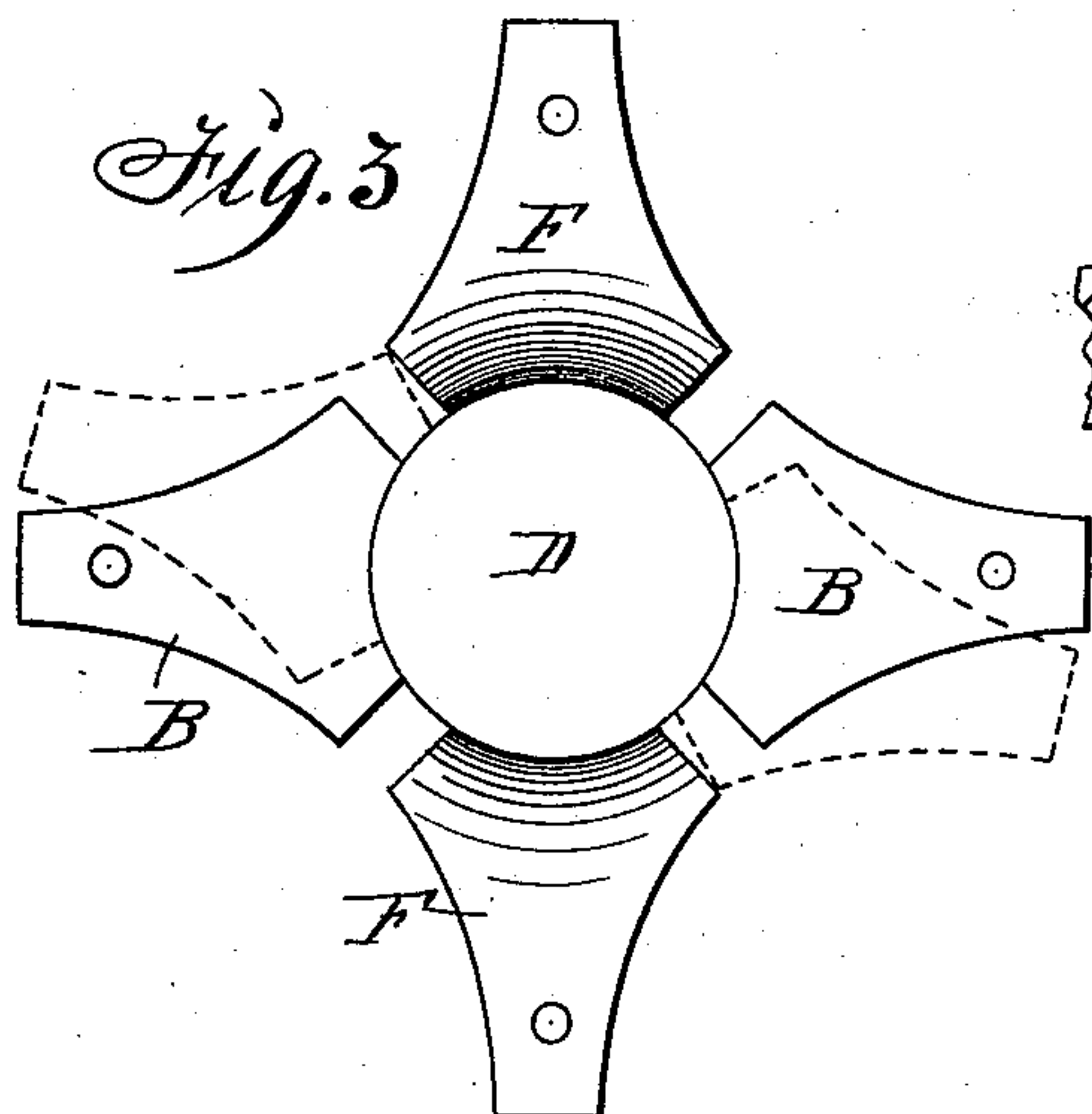
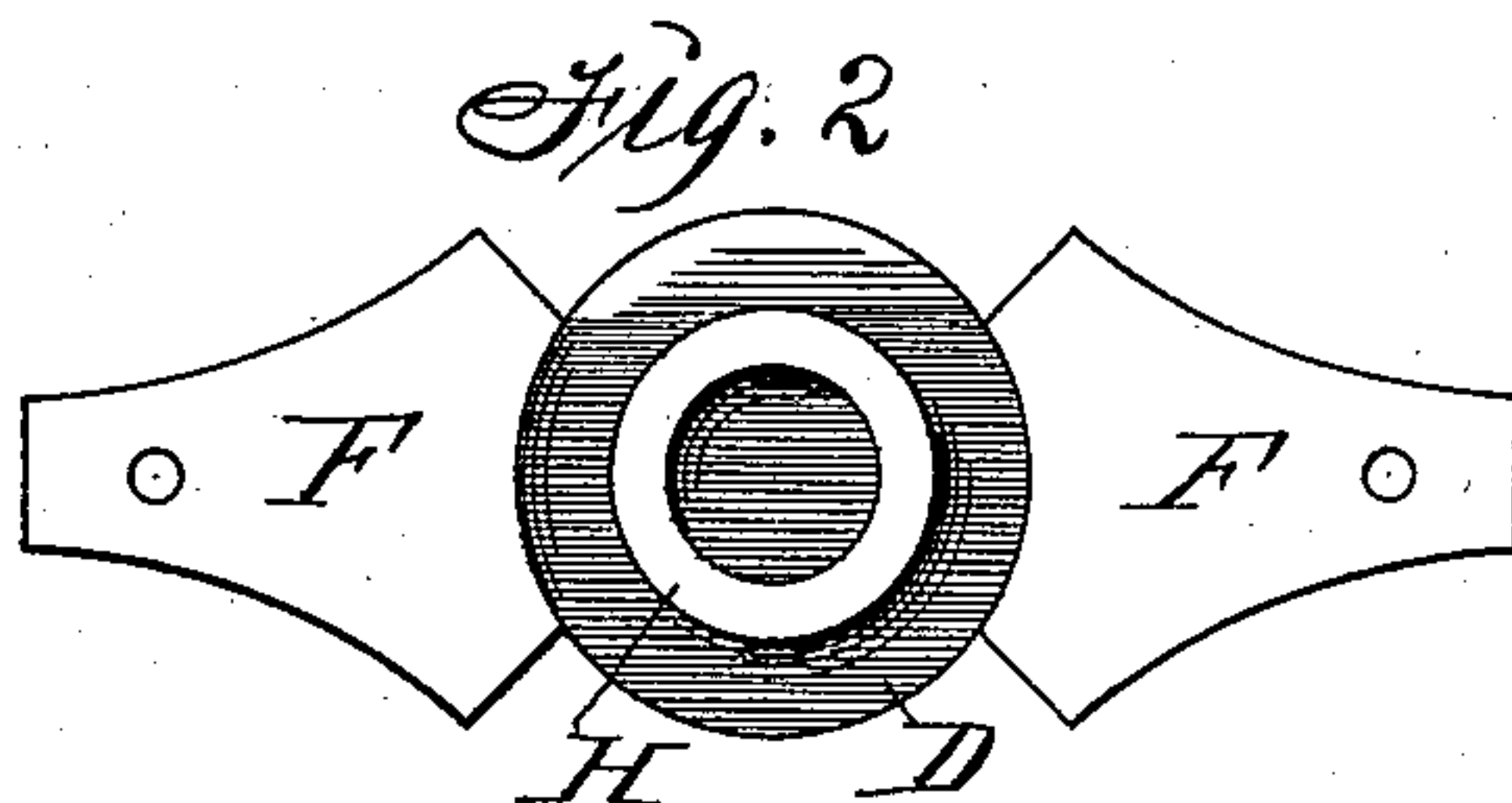
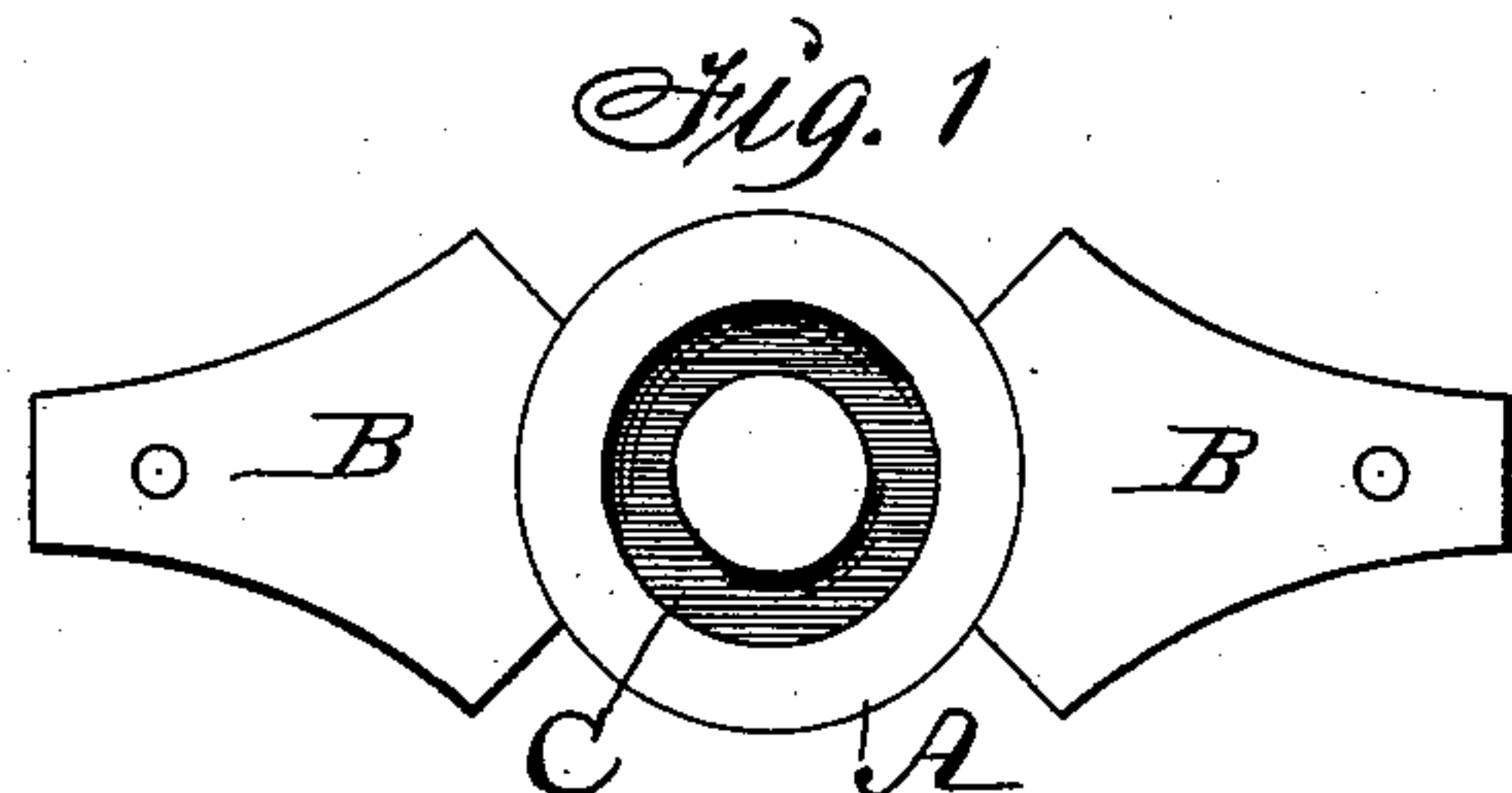
(No Model.)

E. B. PERRY.

COUPLING DEVICE FOR VEHICLE EVENERS.

No. 506,250.

Patented Oct. 10, 1893.



Witnesses:

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Inventor: Erastus B. Perry.

By Thomas G. Orwig, Atty.

UNITED STATES PATENT OFFICE.

ERASTUS B. PERRY, OF GILMAN, IOWA.

COUPLING DEVICE FOR VEHICLE-EVENERS.

SPECIFICATION forming part of Letters Patent No. 506,250, dated October 10, 1893.

Application filed September 29, 1891. Serial No. 407,201. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS B. PERRY, a citizen of the United States of America, residing at Gilman, in the county of Marshall and State of Iowa, have invented a new and useful Coupling Device for Vehicle-Eveners, of which the following is a specification.

Heretofore a plate has been fixed to an evener and a mating plate to a pole and the plate on the evener and the evener jointly pivoted to the plate fixed to the pole and the pole, by means of a bolt passed through coinciding perforations in the four overlying parts. Two plates have also been pivotally connected with a bolt and one of the plates fixed to a whiffletree and the other to a stationary part of a vehicle in such a manner that the whiffletree had unrestricted horizontal vibration.

My object is to provide two interlocking plates adapted to pivotally connect an evener with a pole, or a whiffletree with an evener, without perforating them to admit a pivotal bolt, and also adapted to restrict the vibrations of the evener and the whiffletree and to resist any straining force applied thereto at two distinct points located on opposite sides of the center of motion so that such force will always be distributed between the two plates and equally divided to the end portions of each plate as required to prevent the plates from becoming loosened from their respective positions.

My invention consists in a plate adapted to rest upon the top surface of a pole and to be fastened to the under side of an evener and a mating plate adapted to be pivotally connected with the plate fastened to the evener to engage the under surface of the evener and also adapted to be fastened to the top surface of a pole in such a manner that the two plates, respectively fixed to the evener and the pole, will be in an interlocked position as required to produce a flexible connection between the evener and the pole and to allow a restricted horizontal vibratory motion to the evener.

In the accompanying drawings—Figure 1 is a plan view of the lower section. Fig. 2 is a bottom view of the top section. Fig. 3 is a plan view showing the coupling complete. The dotted lines indicate the relative varia-

tion of the parts. Fig. 4 is a vertical transverse central sectional view showing my device applied to a pole and evener. Fig. 5 is a perspective view showing my device applied as required for practical use.

The lower section of the coupling is composed of a circular plate A and two integral arms B. The first plate A has a circular groove in its top face and in concentric position therewith and the arms B project in opposite directions from the opposite edges of the plate and their bottom faces are level with the bottom of the plate so that the plate and arms will lie flat on a flat surface. The inner ends of the arms are thicker than the plate and the opposite sides of each arm at its inner end projects radially relative to the circular plate and each such radial projection is adapted to serve as a shoulder in restricting the motions of the two mating plates, when in practical use, as required to distribute a straining force whenever subjected thereto. The outer ends of the arms are tapering and perforated and adapted to be fastened to a pole or evener.

D is a second plate and mate for the plate A and a counterpart thereof in all respects excepting that it has an annular flange H in its face adapted to enter the groove C in the plate A as required to maintain a pivotal connection between the two plates when combined and applied for practical use.

The ends of the arms of one of the plates may be bent at right angles to adapt them to overlap the sides of an evener as shown in Fig. 5.

To couple an evener to a pole by means of my device I place one of the plates across the top of the pole and then place the other across said plate so that the flat bottom surface of the arms will lie flat on the pole to be fastened thereto by means of screws or bolts. I then lay the evener across the tops of the faces of the arms projecting at right angles to the pole, as shown in Fig. 4, and fasten the arms to the under side of the evener. The two mating parts of the coupling thus interlocked in a crossed position pivotally connect the evener with the pole and allow a restricted horizontal vibration to the evener and when the forces applied to the ends of the evener are unequal and one end of the evener acts

as a lever to transmit a straining force upon the coupling two of the radial shoulders of one of the mating parts engage two of the radial shoulders of the other part and thereby
5 distribute such straining force between the four arms and relieve each single arm from undue strain as required to prevent breaking any portion of the coupling or its fastening devices.

10 It is obvious that the plate D which extends across the plate A and is fixed to the pole, by means of its arms F, prevents the plate A that is fixed to the evener, by means of the arms B, from rising relative to the pole while
15 at the same time it allows a restricted horizontal vibration to the plate D and the evener fixed to its arms F.

I claim as my invention--

20 An improved coupling device for eveners, consisting of a circular plate A having a flat bottom adapted to rest upon the flat top surface of a pole, a concentric groove in its top

surface and arms B that extend horizontally from the opposite edges of the plate and have flat top surfaces in a plane above the top sur- 25 face of the circular plate and adapted to be fixed to the bottom of an evener and shoulders that extend radially at the inner ends of the said arms, and a mating circular plate D that has an annular bead on its under side 30 and a flat top surface on its upper side adapted to engage the flat bottom of an evener, arms F extending horizontally from its sides and having flat surfaces on their under sides adapted to be fixed on top of a pole and ra- 35 dial shoulders at the inner ends of said arms adapted to engage the corresponding shoulders of the arms B, and the mating parts adapted to be applied to a pole and evener substantially as and for the purposes stated. 40

ERASTUS B. PERRY.

Witnesses:

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BINFORD TIGHT.