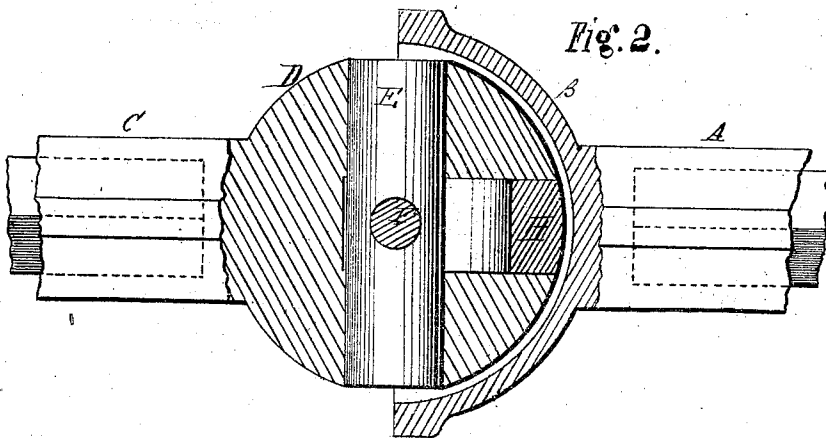
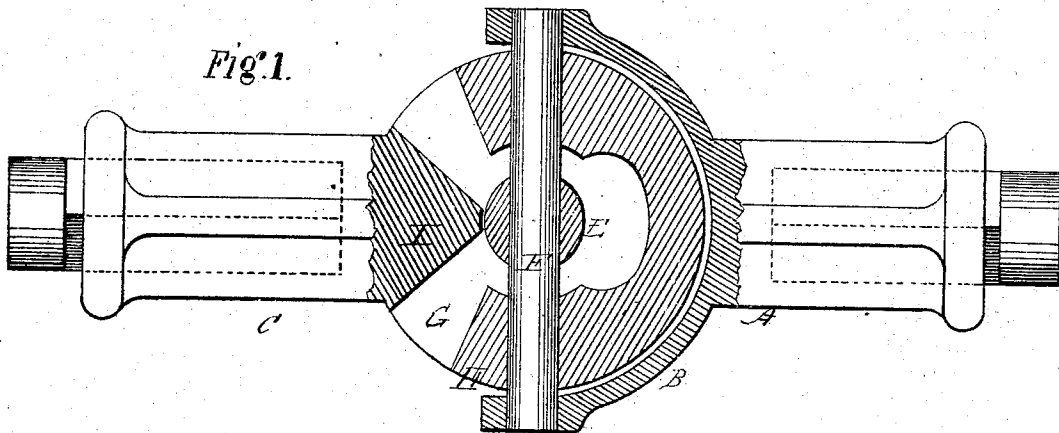


G. H. ZSCHECH.

Improvement in Universal Safety Coupling.

No. 120,145.

Patented Oct. 17, 1871.



Witnesses.

E. H. Bates

D. D. Fane

Inventor:

G. H. Zschech
Chipman & Co

Attys

UNITED STATES PATENT OFFICE.

GUSTAVUS H. ZSCHECH, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN UNIVERSAL SAFETY-COUPPLINGS.

Specification forming part of Letters Patent No. 120,145, dated October 17, 1871.

To all whom it may concern:

Be it known that I, GUSTAVUS H. ZSCHECH, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and valuable Improvement in Universal Safety-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal section of my improved safety-coupling taken across pin E. Fig. 2 is a longitudinal section of the same taken through the center of pin F.

This invention has relation to universal ball-and-socket coupling; and the novelty consists in the construction and arrangement of a segmental die applied to a ball-and-socket joint to relieve strain and increase the utility and durability of the coupling.

In the drawing, A represents the socket-section, B the socket, C the ball-section, and D the ball. E designates the pin on which the ball is

swiveled. It is traversed by the pin F attached to the socket. G represents a segmental slot cut in the ball on a plane at right angles to the axis of the pin E. Within said slot a segmental die, H, slides. The latter is pivoted to the pin F and turns around it with the ball, thus relieving the strain on the pin and preventing its too rapid wear from friction. The beveled projection I limits the pitch of the ball section.

I do not claim the ball-and-socket coupling or the combination therewith of the oscillating centers F E; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The ball-and-socket joint having the segmental recess G, segmental die H, and pins F E, as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GUSTAVUS H. ZSCHECH.

Witnesses:

WM. SULLIVAN,
JOHN FETROW.

(87)