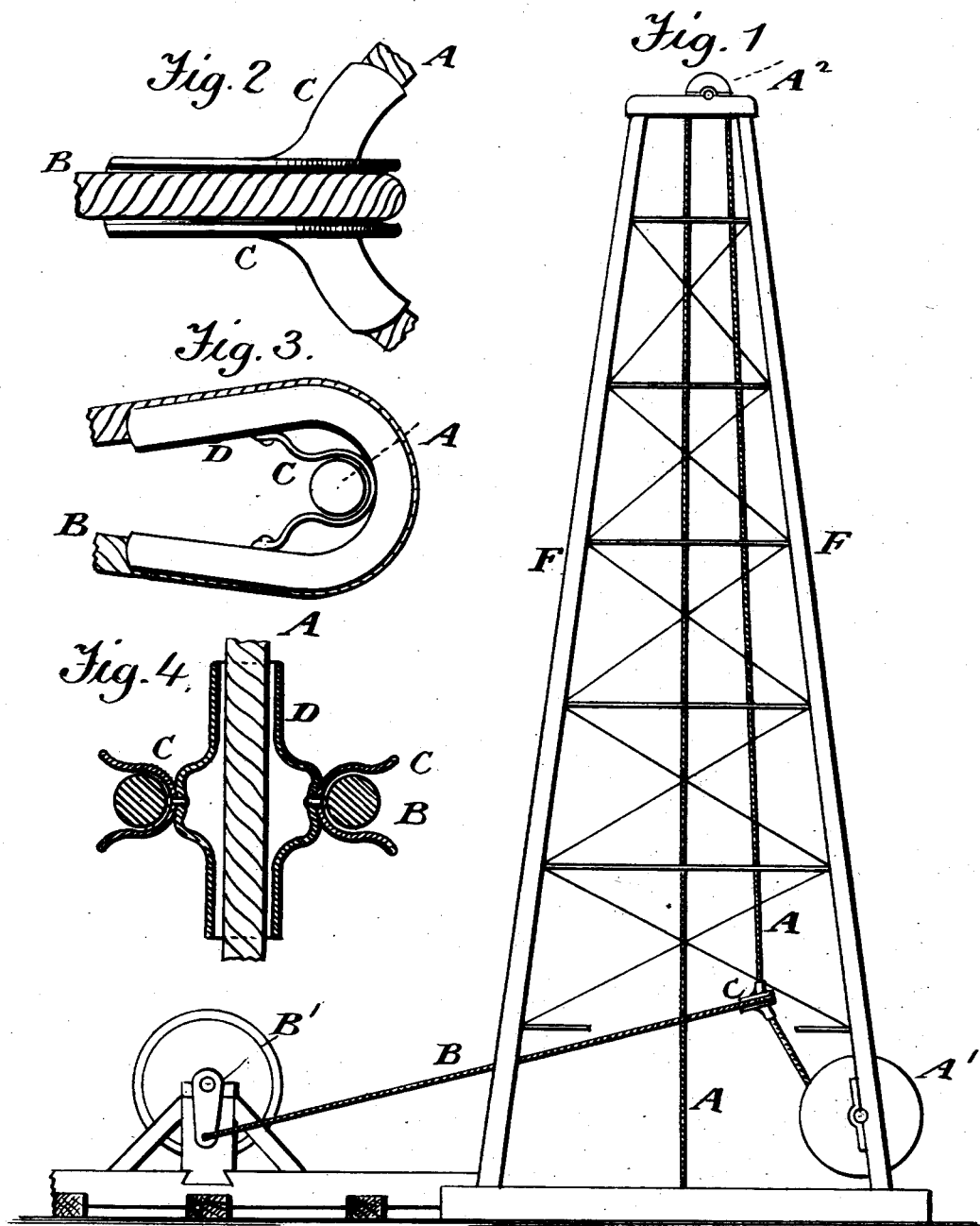


(No Model.)

J. H. KOCH.
PROTECTOR FOR DRILL ROPES.

No. 525,605.

Patented Sept. 4, 1894.



Witnesses.
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UNITED STATES PATENT OFFICE.

JERRY HENRY KOCH, OF LAMARTINE, PENNSYLVANIA.

PROTECTOR FOR DRILL-ROPE.

SPECIFICATION forming part of Letters Patent No. 525,605, dated September 4, 1894.

Application filed June 22, 1894. Serial No. 515,377. (No model.)

To all whom it may concern:

Be it known that I, JERRY HENRY KOCH, a citizen of the United States, residing at Lamartine, in the county of Clarion and State of Pennsylvania, have invented certain new and useful Improvements in Protectors for Drill-Ropes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The special object of the invention is to prevent the drill-ropes from being strained, broken or otherwise injured at or near the point where the two ropes are looped around each other, in a machine for drilling wells.

Figure 1 of the drawings is a side-elevation, showing the relative positions of the two ropes, on a well-drilling machine. Figs. 2, 3 and 4 are detail views, showing the application of my drill rope protector.

In the drawings, A represents the rope which is fastened at one end to a reel A', passes over the pulley A² journaled in the top of the supporting frame F, and carries, at its other end, the drilling tool.

B is a rope having one end attached to the crank B' on the end of a suitable powershaft and the other looped around the rope A.

C represents a V-shaped piece of flanged

metal open at one side and curved longitudinally so as to admit the rope B and the rope A, the latter being caused to take a curve, instead of an angle, as clearly shown in Fig. 2 of the drawings.

In Fig. 3 of the drawings, is shown another curved and flanged piece of metal D in which is shown the position of the rope B as it is looped around the rope A and then carried back to the crank shaft.

In Fig. 4 of the drawings, I show the two V-shaped plates C D, the one in longitudinal and the other in cross-section, both presenting an edge view.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

In an oilwell rig, a connection between the jerk-line and the drillrope comprising the two curved and open clips C D, the clip D open on the front side and the clip C open in the rear side, the two clips being so connected as to lie in planes substantially at right angles to each other as described and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JERRY HENRY KOCH.

Witnesses:

HARRY F. KREAR,
HARRY A. DAVISON.