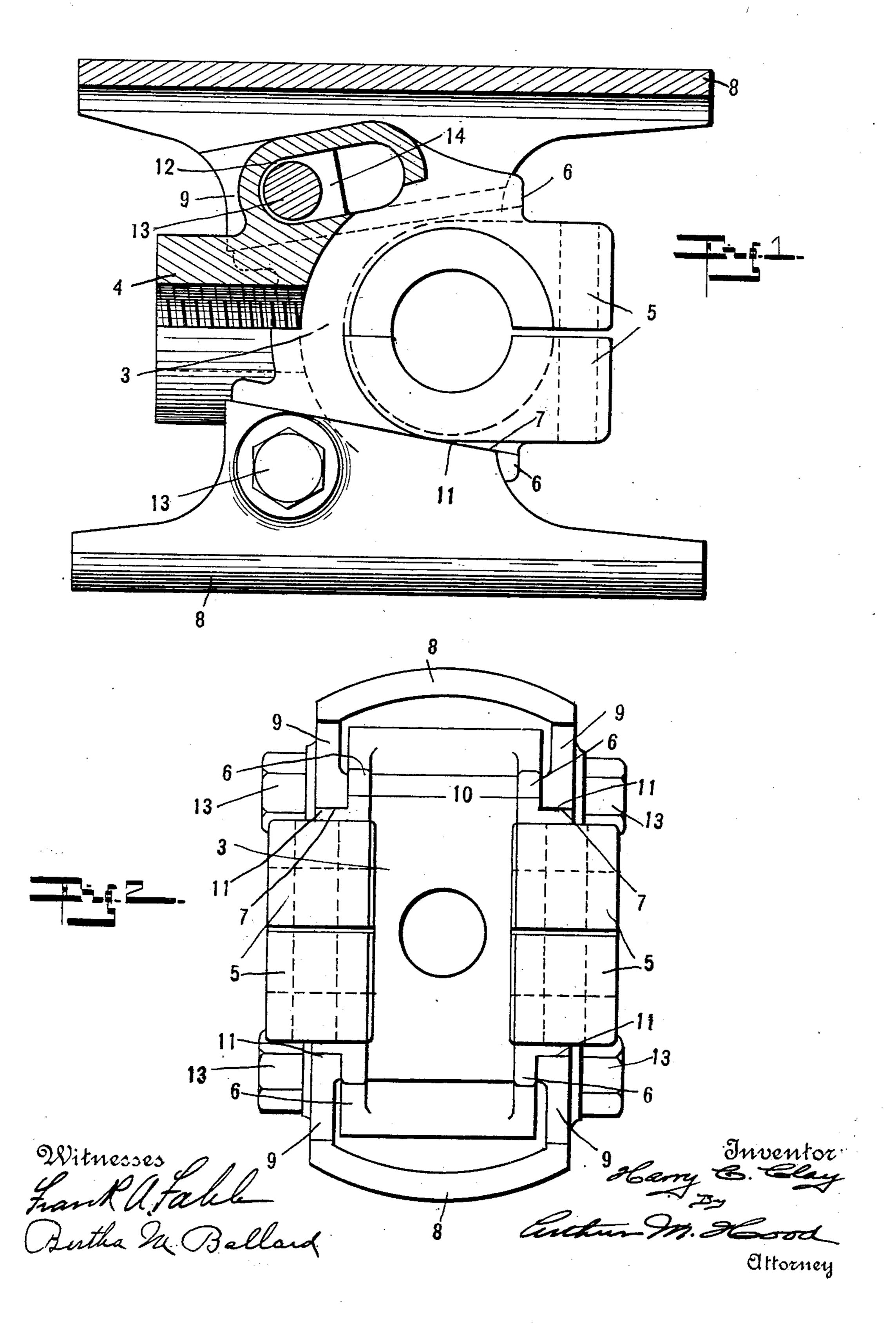
## H. C. CLAY. CROSS HEAD.

(No Model.)

(Application filed Feb. 25, 1901.)



## United States Patent Office.

HARRY C. CLAY, OF COLUMBUS, INDIANA, ASSIGNOR TO REEVES & COMPANY, OF SAME PLACE.

## CROSS-HEAD.

SPECIFICATION forming part of Letters Patent No. 677,338, dated July 2, 1901.

Application filed February 25, 1901. Serial No. 48,707. (No model.)

To all whom it may concern:

Be it known that I, HARRY C. CLAY, a citizen of the United States, residing at Columbus, in the county of Bartholomew and State of Indiana, have invented a new and useful Cross-Head, of which the following is a specification.

My invention relates to an improvement in means for supporting and adjusting the weario ing-shoes of a cross-head.

The object of my invention is to provide a rigid, cheap, and easily-adjusted support for the wearing-shoes of a cross-head.

The accompanying drawings illustrate my invention.

Figure 1 is a side elevation with a portion of the head and adjacent shoe in section. Fig. 2 is an end elevation.

In the drawings, 3 indicates the body of the cross-head, provided with a threaded boss 4, to which a piston-rod may be attached, and a pair of lugs 5, between which may be inserted the end of a connecting-rod, such as that shown in my application Serial No. 48,706.

The body 3 is provided on opposite sides with ears 6 6, the faces parallel to the crosshead guides being finished and each provided at the end nearest the axis with a shoulder 7, which is inclined toward the axis of move-30 ment of the head. Each shoe consists of a wearing-plate 8, the outer face of which is made to conform to the cross-head guide. Plate 8 is provided at each side with a flange 9, the distance 10 between the inner faces of 35 the two flanges being equal to the thickness of the ears 6. The outer end 11 of each flange 9 is given the same inclination as shoulder 7 and is adapted to rest thereon, the arrangement being such that when flanges 9 rest upon 40 shoulder 7 the wearing-face of the plate 8 will be parallel to the line of movement. Each ear 6 is provided with a slot 12, which extends |

therethrough parallel to shoulder 7. A clamping-bolt 13 is passed through openings 14 in flanges 9 and through slot 12. The wearing-45 face of each shoe 8 may be independently adjusted toward and from the axis of movement by loosening the bolt 13 and moving the shoe along the shoulders 7, the bolt 13 when tightened holding the shoe in position by clamping flanges 9 together upon the embraced ear 6. By this construction the edges of the shoes are rigidly supported. The several parts may be easily and quickly fitted, so that the construction is exceedingly cheap as well as efficient.

I claim as my invention—

1. The combination with the body of a crosshead having an ear projecting therefrom, of a shoe provided with a pair of flanges adapted 60 to straddle said ear, means for clamping said flanges upon the ear, and means carried by the body for engaging the shoe and holding the same in alinement with the body.

2. The combination with the body of a cross- 65 head having an ear projecting therefrom, and a shoulder formed at the inner end of said ear and inclined toward the axis of motion, of a shoe provided with a pair of flanges adapted to straddle said ear and rest upon said 70 shoulders, and means for clamping said flanges upon said ear.

3. The combination with the body of a crosshead having an ear projecting therefrom, and a shoulder formed at the inner end of said 75 ear and inclined toward the axis of motion, of a shoe provided with a pair of flanges adapted to straddle said ear and rest upon said shoulders, a slot formed in said ear, and a bolt passing through said flanges and slot.

HARRY C. CLAY.

Witnesses:

A. C. DENISON, BLANCHE HAMILTON.