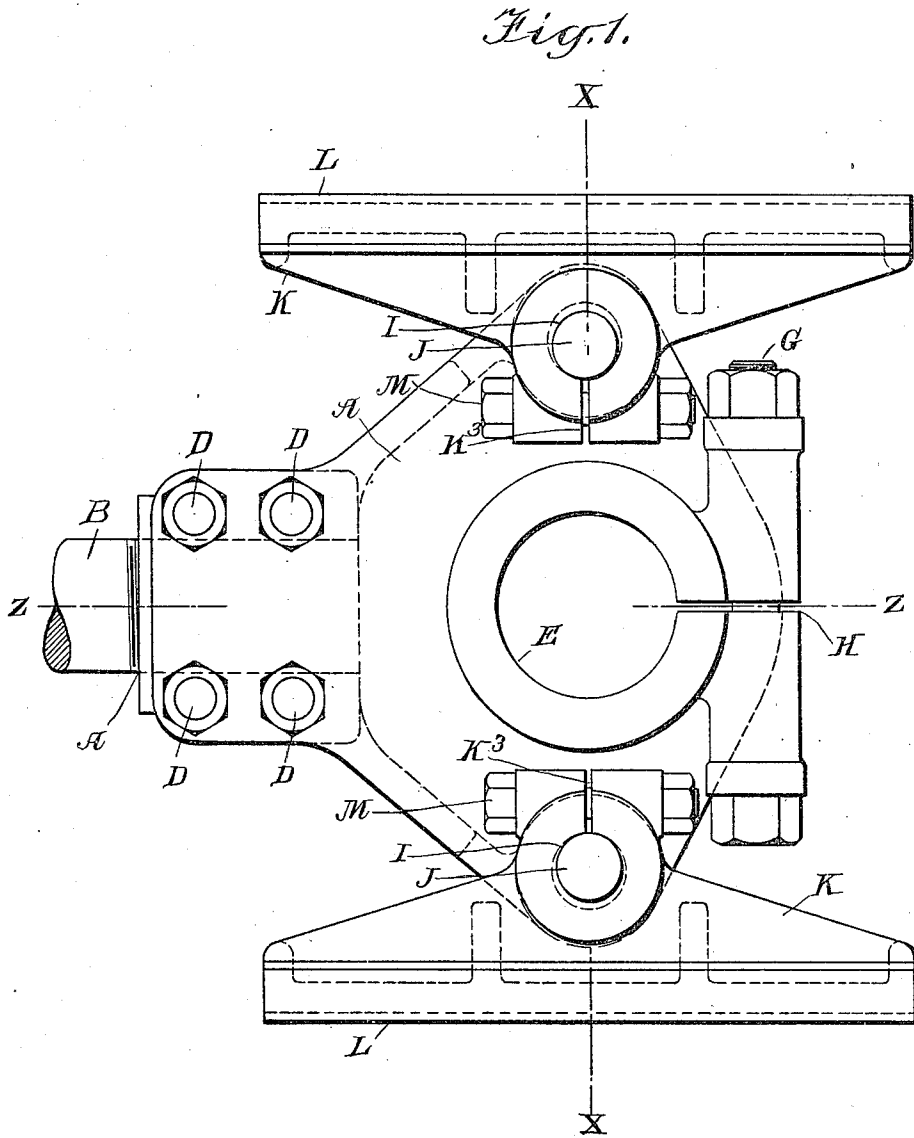


B. M. ASLAKSON.
CROSS HEAD.
APPLICATION FILED OCT. 14, 1907.

949,137.

Patented Feb. 15, 1910.
3 SHEETS—SHEET 1.



WITNESSES:

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Virginia J. Jis.

INVENTOR

Baxter M. Aslakson

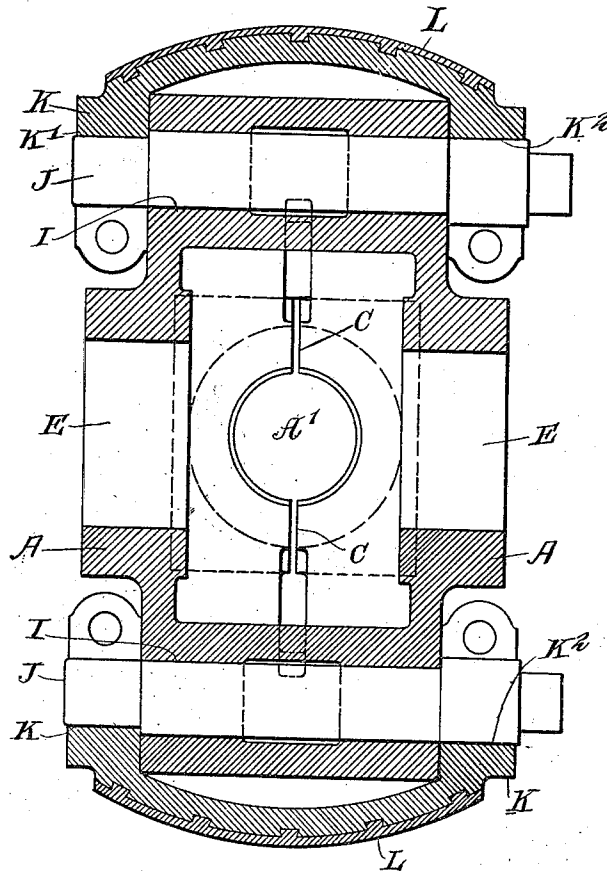
BY *Frank M. Ashley*
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3 SHEETS—SHEET 2.

Fig. 2.



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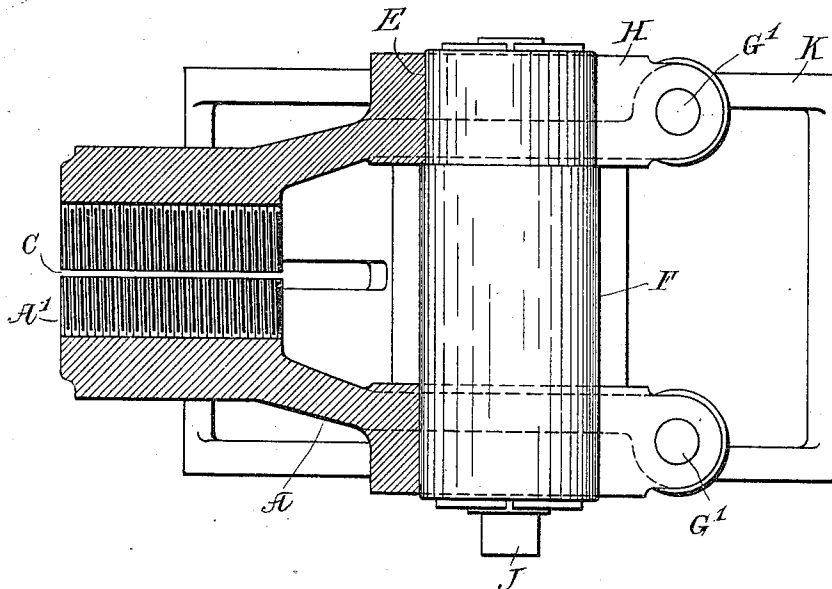
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3 SHEETS—SHEET 3.

Fig. 3.



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UNITED STATES PATENT OFFICE.

BAXTER M. ASLAKSON, OF SALEM, OHIO.

CROSS-HEAD.

949,137.

Specification of Letters Patent.

Patented Feb. 15, 1910.

Application filed October 14, 1907. Serial No. 397,413.

To all whom it may concern:

Be it known that I, BAXTER M. ASLAKSON, a citizen of the United States, and a resident of Salem, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Cross-Heads, of which the following is a specification.

My invention relates to cross heads for engines and the object thereof is to provide a cross head which may be easily adjusted to fit between the guides with the faces of the shoes in proper working relation with respect to the piston rod, and in case the guides are not in perfect parallelism with the cylinder bore, to provide a construction whereby the cross head will adapt itself to this condition without undue friction or wear.

A further object is to effect a simple and cheap construction which will be exceedingly durable.

Referring to the drawings which form a part of this specification,—Figure 1, is a side view of my improved cross head. Fig. 2, is a cross sectional view on the line $x-x$ of Fig. 1, disclosing the adjusting means for the shoes. Fig. 3, is a transverse sectional view on line Z-Z of Fig. 1.

A, indicates a casting provided with a bore A', which is threaded to receive the threaded end of the piston rod B. The casting A, is separated on each side of the bore A', by slots C, and bolts D, D, D, D, serve to contract said slots and thus lock the casting to the end of the rod, as will be readily understood. The casting A, is further provided with a bore E, in which is seated a wrist pin F, held in locked engagement by means of the bolts G, inserted in the holes G', respectively, and serving to decrease the width of the slots H. The casting A, is further provided with holes I—I, in which are located pins J—J respectively, the ends of which support the shoes K—K, which shoes have soft metal faces L—L respectively. The pins J are small enough in diameter on one end to pass through the holes I, in casting A, and enter holes K', in the shoes K, and at their other ends are of larger diameter and made to fit holes K². Each end of the pins J, is formed eccentric to the axis of the body of the pin, each eccentric having the same pitch, so that when the pins J, are turned on their axis, the shoes

K will be moved to effect their vertical adjustment, as will be easily understood.

Slots are made at K³, which may be contracted by bolts M, to lock the shoes to the pins J. This construction permits the shoes K, to rock on the casing A. The pins J, are formed square at one end to receive a wrench. It is believed that all of the objects set forth are fully attained by this construction.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is,—

1. A cross head comprising a casting presenting an interiorly threaded split socket for the reception of a piston rod, and an immediately perforated split portion for receiving a wrist pin, a shoe having pivotally mounted split parts, bolts for contracting the socket, intermediate perforated portion and split parts, and eccentric means for adjusting the shoe relative to the casting.

2. A cross head comprising a casting presenting an interiorly threaded socket for the reception of a piston rod, and an immediately perforated portion for receiving a wrist pin, revoluble eccentrics carried by the casting, a shoe having split parts mounted on said eccentrics and means for contracting said split parts.

3. A cross head comprising a casting, presenting an interiorly threaded socket for the reception of a piston rod, and an immediately perforated portion for receiving a wrist pin, a pin bearing in said casting and presenting eccentrics at its ends, a shoe having split parts mounted on said eccentrics, and means for contracting said split parts.

4. A cross head comprising a casting presenting an interiorly threaded split socket for the reception of a piston rod, and an immediately perforated split portion for receiving a wrist pin, a shoe having pivotally mounted split parts, bolts for contracting the socket, intermediate perforated portion and split parts, and means for adjusting the shoe relative to the casting.

5. A cross head comprising a casting presenting an interiorly threaded split socket for the reception of a piston rod, and an immediately perforated split portion for receiving a wrist pin, the casting also containing upper and lower transverse bearings, pins in said bearings, shoes having split

parts pivotally mounted on said pins, and bolts for contracting the socket, intermediate perforated portion and split parts.

6. A cross head comprising a casting presenting an interiorly threaded split socket for the reception of a piston rod, and an intermediately perforated split portion for receiving a wrist pin, the casting also containing upper and lower bearings, pins in said bearings and having eccentric ends, shoes having split parts pivotally mounted on said eccentric ends, and bolts for contracting the socket, intermediate perforated portion and split parts.
7. A cross head comprising a casting having an internally threaded slotted socket for the reception of a piston rod, and means for contracting said socket to embrace the end of said rod, said casting having an opening at its upper and lower ends; shoes each having extended sides forming lugs which are slotted; an eccentric bolt secured in each of said openings and means for contracting said slots to secure said shoes in position; said casting having an opening for the reception of a wrist pin and provided with slots which extend from said openings to

the forward end of said casting, and means for contracting the last said named slots to hold said wrist pin in position.

8. A cross head comprising a casting having an internally threaded slotted socket for the reception of a piston rod, and means for contracting said socket to embrace the end of said rod, said casting having an opening at its upper and lower ends; shoes pivotally supported each having extended sides forming lugs which are slotted; an eccentric bolt secured in each of said openings and means for contracting said slots to secure said shoes in position; said casting having an opening for the reception of a wrist pin and provided with slots, which extend from said openings to the forward end of said casting, and means for contracting the last said named slots to hold said wrist pin in position.

Signed at Salem in the county of Columbiana and State of Ohio this 16th day of September A. D. 1907.

BAXTER M. ASLAKSON.

Witnesses:

HARRY DEWEES,
R. B. CAREY.