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E. & A. A. HOPKINSON.
TOOL HOLDER FOR CUTTER CHAINS OF COAL CUTTING MACHINES.

APPLICATION FILED APR. 7, 1905.

2 SHEETS—SHEET 1.

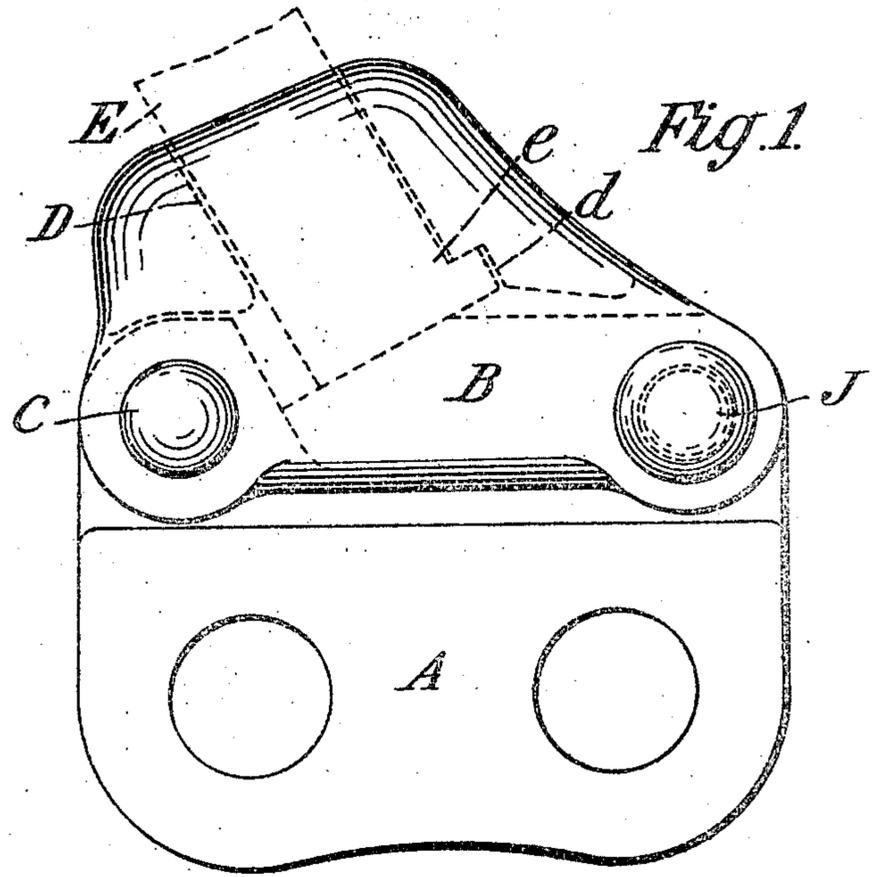
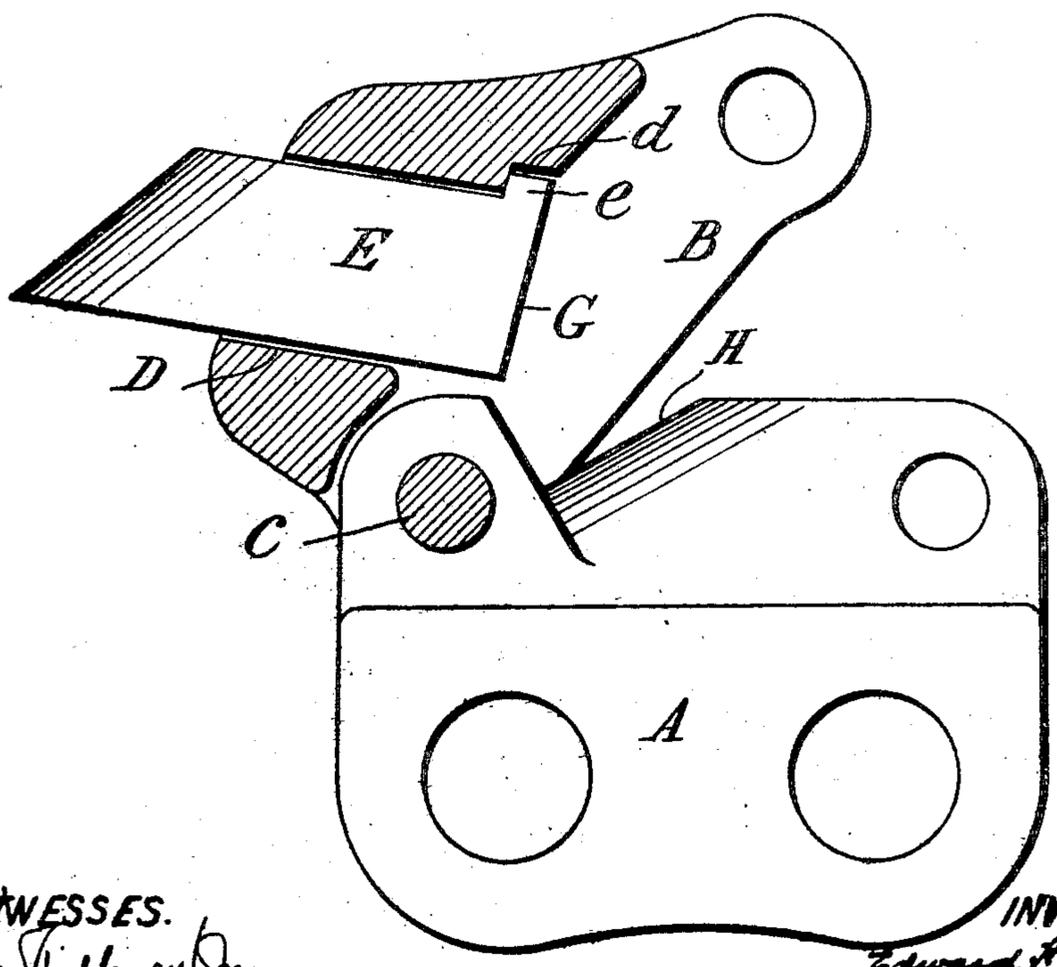


Fig. 1.

Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

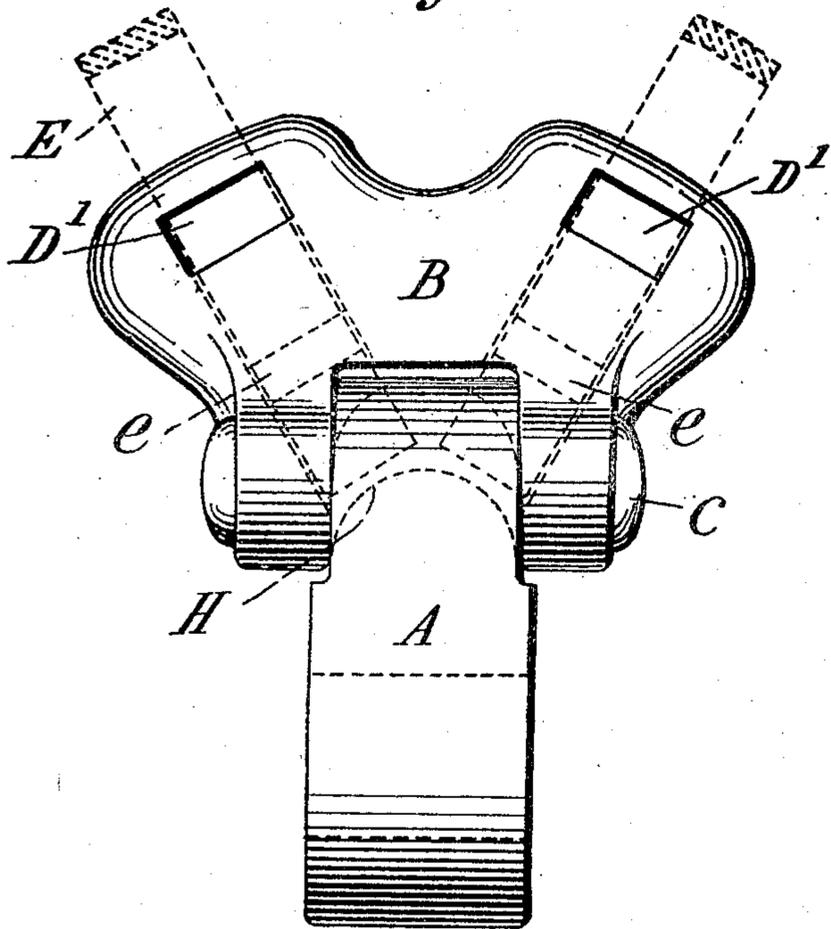
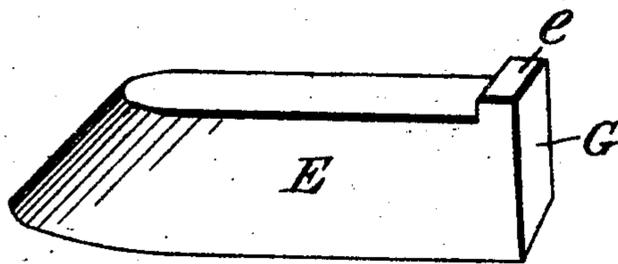


Fig. 4.



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EDWARD HOPKINSON AND ALFRED AUSTIN HOPKINSON, OF SALFORD,
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TOOL-HOLDER FOR CUTTER-CHAINS OF COAL-CUTTING MACHINES.

No. 797,958.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed April 7, 1905. Serial No. 254,404.

To all whom it may concern:

Be it known that we, EDWARD HOPKINSON and ALFRED AUSTIN HOPKINSON, subjects of His Majesty the King of Great Britain, and residents of Salford, in the county of Lancaster, England, have invented a certain new and useful Improvement in Tool-Holders for Cutter-Chains of Coal-Cutting Machines, of which the following is a specification.

The present invention relates to the tool-holders for cutter-chains of coal-cutting machines, the object being to provide means whereby the cutting-tools may be removed from the chain more easily and also for securely holding the cutters in said chains.

Referring to the drawings, which illustrate this invention, Figure 1 is a plan of the complete holder for a single cutter in its closed position. Fig. 2 is a plan, partly in section, of the holder, showing the carrier portion opened with the tool inserted. Fig. 3 is an end view of a holder for use with two cutters. Fig. 4 is a perspective view of the cutter.

The holder shown in Figs. 1 and 2 consists of two parts, the link portion A, which lies on the inside when the chain is in its working position and constitutes one of the links of the said chain, being attached in the ordinary manner to the plain links by pins passing through lugs. A cover or carrier B is hinged to the portion A by any suitable means, such as by a permanent hinge-pin C, passing through lugs formed on the parts A and B. A hole D is provided in the carrier B, such hole being formed on a line passing directly through a saddle-piece H, hereinafter described, which hole is adapted to receive the cutting-tool E, the inner part thereof being provided with a recess *d*, adapted to receive a lug or projection *e*, formed on the tool, so that when the carrier is closed down the tool cannot slip through.

When the tool is in position and the holder closed, the butt-end G of the tool bears against the top of a saddle-shaped piece H on the link portion A, by means of which the tool is held firmly in cutting position. The parts A and B are held in closed position by means of a

removable loose locking-pin J passing through holes in lugs on the link portion and carrier, respectively, which pin may be simply dropped into position from the upper side of the chain without any riveting or otherwise, or any other easily-opened form of means for holding the parts closed may be used.

Fig. 3 shows a modified form of tool-holder, the part B being constructed to hold two tools, being provided with two holes D', which are set on lines passing through the saddle H, as in the previous case. The butt-ends of the tools thus bear against the sides of the saddle-shaped piece H. In practice it is found preferable to alternately place single and double tool-holders on the chain, or they may be placed in any convenient order, as the saddle-shaped piece H is suitable either for use with one or more tools.

What we claim is—

1. In a tool-holder of the character described the combination with a link portion forming one of the links of a chain, of a tool-carrier permanently hinged thereto, and means for securing a tool in said carrier and holding the parts closed.

2. In a tool-holder of the character described the combination with a link portion forming one of the links of a chain, of a saddle-piece formed thereon, a tool-carrier permanently hinged to said link part and means for holding the carrier closed on said link portion.

3. In a tool-holder of the character described the combination with a link portion forming one of the links of a chain, of a saddle-piece formed thereon, a tool-carrier permanently hinged to said link part, adapted to partly embrace said saddle and having a hole for a tool the line of which opening passes directly through the saddle and means for holding the carrier closed on said link portion.

4. In a tool-holder of the character described the combination with a link portion forming one of the links of a chain, of a carrier permanently hinged thereto, a tool carried thereby, a projection on said tool adapted to seat in a recess formed in the carrier, a saddle-shaped part on the link portion adapted to

abut against the tool when in closed position, and means for holding the carrier closed on said link portion.

5. In a tool-holder of the character described the combination with a link portion forming one of the links of a chain, of a carrier permanently hinged thereto, a tool carried by said hinged carrier, means for holding the tool in place on the closing of the carrier, lugs formed on said link part and carrier, and a loose pin adapted to drop through holes formed in said lugs whereby the parts are held closed.

In testimony whereof we have hereunto set

our hands in the presence of two subscribing witnesses.

EDWARD HOPKINSON.

ALFRED AUSTIN HOPKINSON.

Witnesses to the signature of Edward Hopkinson:

JNO. R. THORNHILL,

JAS. STEWART BROADFOOT.

Witnesses to the signature of Alfred Austin Hopkinson:

GERALD B. HERTZ,

ALFRED HOPKINSON.