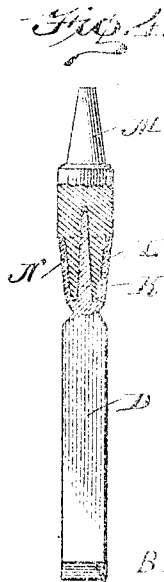
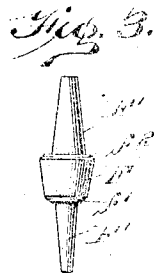
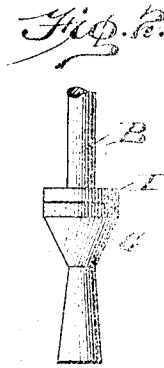
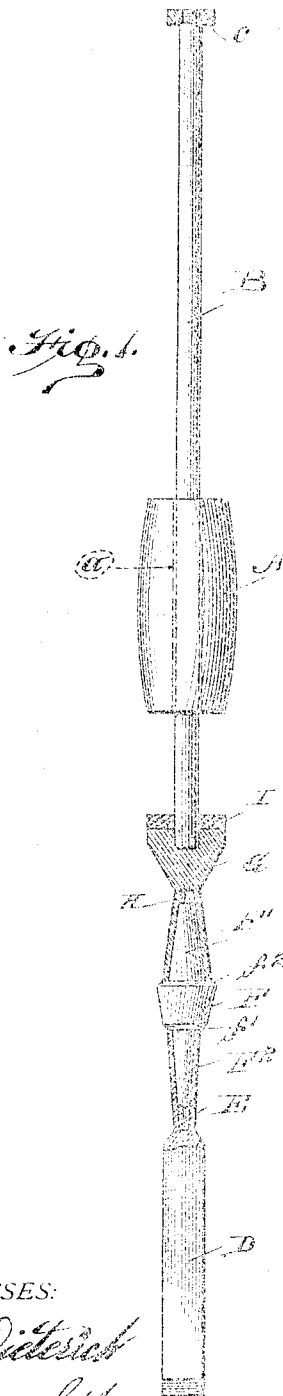


No. 875,940.

PATENTED JAN. 7, 1908.

D. L. MASON.  
PERCUSSIVELY DRIVEN TOOL.  
APPLICATION FILED AUG. 30, 1904.



WITNESSES:

*H. J. Dietrich*  
*O. Knight Jr.*

INVENTOR  
D. L. Mason

BY *Knights & Co.*

Attorneys

# UNITED STATES PATENT OFFICE.

DANIEL LEE MASON, OF LOUISVILLE, KENTUCKY.

## PERCUSSIVELY-DRIVEN TOOL.

No. 878,940.

Specification of Letters Patent.

Patented JAN. 7, 1908.

Application filed August 20, 1904. Serial No. 223,972.

To all whom it may concern:

Be it known that I, DANIEL L. MASON, a citizen of the United States, residing at No. 1716 Twenty-sixth street, in the city of Louisville, county of Jefferson, and State of Kentucky, have invented certain new and useful Improvements in Percussively-Driven Tools, of which the following is a specification.

10 My invention relates to a tool having combined therewith means through which percussive force necessary to drive the tool may be developed, and my invention consists in certain novel features of construction in a  
15 tool of this character whereby the tool is adapted to more readily and simply meet the requirements of shop usage by reason of compactness in form, convenience in manipulation, and replaceability of its parts, when  
20 worn or when necessary to meet changed conditions of work to be performed; and whereby much wear and tear on the tool is saved in consequence of the construction of the intermediate connection member  
25 which is adapted by its shape to be formed from a shock absorbing material; and whereby the instrument has a wider range of use in consequence of its adaptability to receive a tool of standard stock manufacture without  
30 necessity of expending additional labor thereon.

My invention will be understood upon reference to the accompanying drawings, in which

35 Figure 1 is an elevation of the instrument with the socket members in section. Fig. 2 is a detail view of the lower portion of the percussive device. Fig. 3 is a detail view of the double wedge connecting member,  
40 and Fig. 4 shows the double wedge connecting member confined by the socket and a chisel attached by a tang and having a shoulder to receive the compressing socket.

Referring to the drawings more in detail,  
45 A indicates a batter having a longitudinal perforation *a* by which it is permitted to slide on a guiding stem B and upon which it is confined by a head *c*.

D represents a tool of standard stock  
50 manufacture to which it is desired to apply driving force by percussion. For purposes of illustration, the tool represents a standard chisel. It is constructed with a tapering socket E to receive the part through which  
55 the tool is to be handled and through which percussion is to be imparted to it. While

this socket is preferably formed integral with the tool, the advantage thereof might be measurably attained by forming the socket as a separate member in the form of  
60 a ferrule L as indicated in Fig. 4, arranged to bear upon the upper shoulder of the tool so as to transmit percussion to the latter, in which event the tool will be provided with a tang K which enters the connecting mem-  
65 ber.

F represents a connecting and transmitting member of the instrument which, for the sake of convenience of application and durability,  
70 is constructed in the form of a double wedge or with its respective ends conical, one of which *f*<sup>2</sup> is adapted to enter socket E (Fig. 1) or receive tapered ferrule L (Fig. 4) so that when driving force is transmitted through  
75 said member F, its tapered end is compressed by the socket and thereby prevented from splitting or breaking; the other tapered end *f*<sup>1</sup> being adapted to enter the downwardly presented tapered socket H carried by the  
80 impact member G and wedging into said socket under the impact against said member G, with the same compression and consequent preservation of the connecting and transmitting member. The double wedge transmitting and connecting member F is preferably  
85 constructed with a central enlargement which provides shoulders *f*<sup>1</sup> and *f*<sup>2</sup> against which the ends of the respective sockets may abut. The upper tapered compression end of the  
90 connecting and transmitting member illustrated in Fig. 4 is indicated at M.

The impact member G is provided with a cylindrical or other suitable form of socket in its upper portion to receive the guide stem B.

I represents a washer fitted to the upper  
95 end of the impact member and held in place by the stem B. This washer prevents direct contact between the batter A and the impact member G and by its construction is obviously adapted to be made of material to save these  
100 parts from destruction.

In using the instrument above described, the parts are assembled as shown in Fig. 1, when the batter A is grasped by one hand  
105 and by reciprocating the batter on the stem the necessary force to drive the chisel D or other tool in the performance of its work may be conveniently developed percussively. The double wedge connecting and transmitting  
110 member F, is so confined at its ends by the tapered sockets, and compressed thereby in

the transmission of the driving force as to be preserved against fracture or splitting; moreover, the shape and construction of this intermediate transmitting member is such as to permit the use of a shock absorbing material, such as wood, in its construction, without destroying its effectiveness in the performance of its functions.

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

1. In a percussion tool, the combination of means through which to develop driving force by percussion, comprising an impact member, provided with an upwardly extending guide stem, and a downwardly presented tapering socket, and a batter mounted to reciprocate on said stem and impinge the impact member; a connecting and transmitting member having tapered ends, one of which fits the downwardly presented socket of the impact member, a socket in which the other tapered end of the connecting and transmitting member fits and a suitable tool receiving the driving force from said connecting and transmitting member, through the socket last named.

2. In a percussion tool, the combination of means through which to develop driving force by percussion, comprising an impact member, provided with an upwardly extending guide stem, and a downwardly presented tapering socket, and a batter mounted to reciprocate on said stem and impinge the impact member; a connecting and transmitting member having tapered ends, one of which fits the downwardly presented socket of the impact member, a socket in which the other tapered end of the connecting and transmitting member fits and a suitable tool receiving the driving force from said connecting and transmitting member, through the socket last named; said connecting and transmitting member being constructed with an intermediate enlargement providing shoulders against which the sockets abut.

The foregoing specification signed this 27th day of August, 1904.

DANIEL LEE MASON.

In presence of—

J. A. MAYFIELD,  
JACOB J. BEELER.