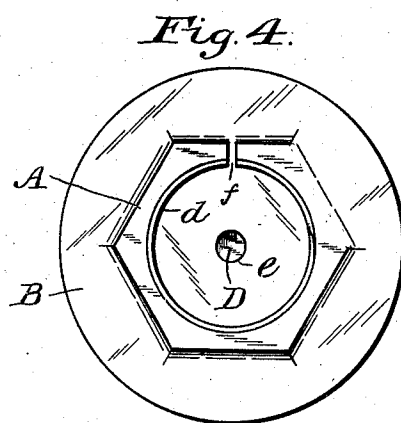
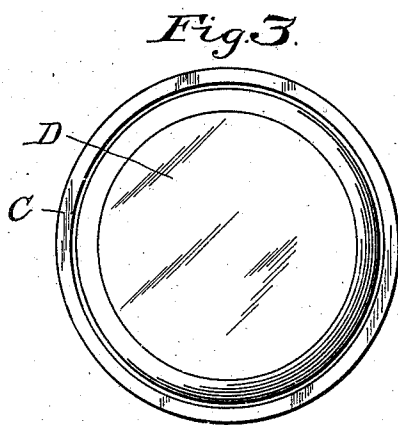
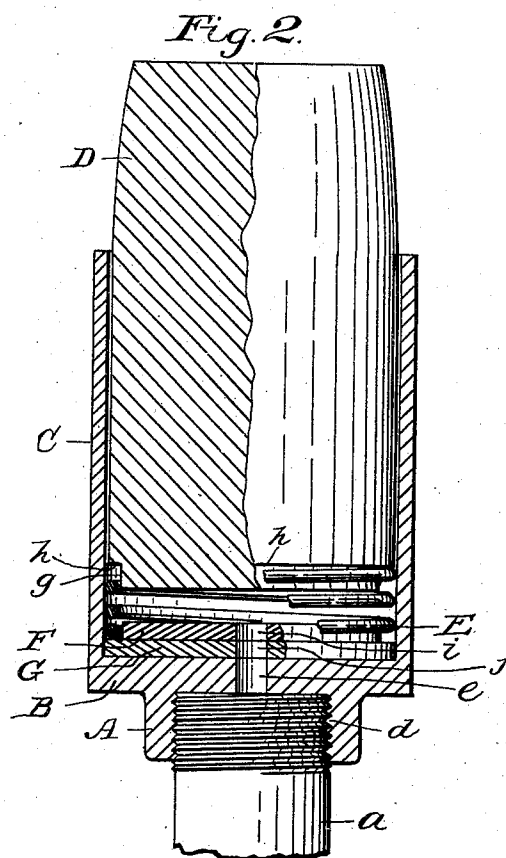
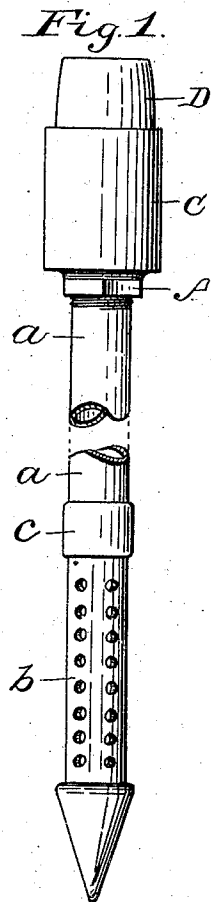


No. 845,953.

PATENTED MAR. 5, 1907.

S. S. HITCHCOCK.
DRIVE HEAD FOR WELL PIPES.
APPLICATION FILED FEB. 26, 1906.



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UNITED STATES PATENT OFFICE.

SAMUEL S. HITCHCOCK, OF INDIANAPOLIS, INDIANA.

DRIVE-HEAD FOR WELL-PIPES.

No. 845,953.

Specification of Letters Patent.

Patented March 5, 1907.

Application filed February 26, 1906. Serial No. 302,998.

To all whom it may concern:

Be it known that I, SAMUEL S. HITCHCOCK, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented new and useful Improvements in a Drive-Head for Well-Pipes; and I do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to holders for blocks that are customarily used on drive-well pipes to receive the blow of the driving-hammer; and the invention relates also to blocks of the above-mentioned character that are designed to be used in the holders.

Objects of the invention are to provide a block-holder for well-drivers, so that a helper may be dispensed with for holding a block on the pipe-cap, with which the well-pipe is ordinarily provided, temporarily, while driving the pipe into the ground, to the end that economy in operation may be attained; and a further object is to provide an improved block for the use of well-drivers, adapted to be used in the holder above mentioned—a block of metal, which may be cheaply produced and be more durable and economical in use than the ordinary wooden blocks.

With the above-mentioned and minor objects in view the invention consists in a block-holder adapted to be screwed onto well-pipes and having a guide-socket in which a block may be held while receiving the blows of the driving-hammer, for preventing injury to the well-pipe, the invention consisting, further, in a spring-supported block insertible into the socket of the holder. The invention consists also in the novel parts and in the combinations and arrangements of parts, as hereinafter particularly described and claimed.

Referring to the drawings, Figure 1 is a side elevation of a well pipe or tube, partially broken away, with a well-point attached and the block-holder connected to the top of the well-pipe, the improved block being in the holder; Fig. 2, a vertical central sectional view of the block-holder connected to the well-pipe, showing the improved block and its spring in the holder, partially in elevation and partially in section, there being also filling-plates under the block; Fig. 3, a top plan

view of the block and its holder, and Fig. 4 a bottom plan view of the block-holder.

Similar reference characters in the drawings designate like elements or features.

In the drawings, *a* designates a well-pipe, screw-threaded at its ends, as is customary, *b*, a well-point, and *c* a pipe-coupling connecting the well-point to the well-pipe.

The block-holder comprises a novel form of cap *A*, in which are screw-threads *d*, adapted to hold the cap on the end of the well-pipe, the cap having an air-hole *e* in the top thereof, although the cap may in small sizes be imperforate. The cap is formed as a nut externally, with facets, so that a wrench may be applied thereto for forcing the cap on or off of the well-pipe, and the cap has a lateral flange to which is attached an annular collar *C*, having considerable length, the flange and the collar, with the top of the cap, forming a socket in which a block of suitable material may be placed. The threaded part of the cap has a slot *f* in its wall to permit expansion diametrically.

The improved block comprises a solid body *C*, composed, preferably, of either wrought or cast iron of cylindrical form, the upper portion being slightly tapering, and the lower end has a neck *g* of less diameter than the body of the block, there being a shoulder *h* at the junction of the neck with the body, and a coiled spring *E* is seated against the shoulder and extends about and beyond the end of the neck. A filler *F*, which is preferably composed of leather, so as to serve as a cushion, is placed within the coil of the spring, being of the same diameter as the neck *g*, the filler preferably having an air-hole *i* therein. When the block is new or only partially worn away at its top by the repeated hammering, the cushion-filler *F* is to be placed directly upon the bottom of the socket, the spring resting on the bottom, and a suitable filler *G*, of metal, is provided to be placed on the bottom of the socket under the spring and the filler *F* when the block may have become so short from wear as to not project above the top of the socket-wall, thus elevating the block and rendering it fit for further service.

In practical use the slot *f* in the cap will permit direct contact of the top of the cap with the end of the pipe, so as to avoid injuring the threads thereof when using a heavy hammer. When the improved block *D* is

employed, the shock of the hammer-blow on the well-pipe will be reduced by reason of the spring and the cushion-filler, the leather filler being also a safeguard in case the spring becomes weak or broken, or if for any reason the spring may not be employed.

Having thus described the invention, what is claimed as new is—

1. A block-holder for well-pipes comprising a threaded cap part having a slot in the wall thereof interrupting the continuity of the threads thereof, and a collar part having connection with the cap part.
2. A block-holder for well-pipes formed with a cap part having a top part provided on the top thereof with a cushion, and a cylindrical collar part on the cap part extending about the cushion, the collar part having an appreciably greater length than diameter for holding a relatively long and narrow block upright on the cushion.
3. A block-holder for well-pipes formed with a threaded cap part having a top part and a circular-flange part, all integral, the flange part extending outwardly beyond the side wall of the cap part, and a cylindrical collar part having an appreciably greater dimension on its longitudinal axis than the diameter thereof.
4. A drive-head for well-pipes comprising a block having a neck and a shoulder, a spring coiled about the neck and seated against the shoulder, a threaded pipe-cap provided with a socket inclosing the spring and parts of the block, and a cushion-filler in the socket opposite the block and encircled by the spring, the spring being seated on the bottom of the socket.
5. A block-holder for well-pipes formed

with a threaded cap part having a perforation in the top thereof and with facets on the exterior thereof, and a collar part attached to the cap part and having an appreciably greater diameter than that of the cap part.

6. A block-holder for well-pipes formed with a threaded cap part having external facets and a slot in the wall thereof interrupting the continuity of the threads thereof, and a collar part attached to the cap part.

7. A drive-head for well-pipes comprising a block provided with a coiled spring at an end thereof, a cushion-filler opposed to the end of the block guided by the spring, and a holder for the block, the filler and the spring.

8. A drive-head comprising a block having a neck and a shoulder, a spring coiled about the neck and seated against the shoulder, and a threaded pipe-cap provided with a socket inclosing the spring and parts of the block, the spring being seated on the bottom of the socket.

9. A drive-head comprising a perforated threaded pipe-cap provided with a socket having a cushion thereon having an opening opposite the perforation of the cap, and a block seated on the cushion in the socket.

10. A drive-head for well-pipes comprising a threaded pipe-cap provided with a socket, a cylindrical block having a relatively greater length than diameter, and a cushion in the socket between the cap and the block.

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

SAMUEL S. HITCHCOCK.

Witnesses:

HARRY D. PIERSON,
E. T. SILVIUS.