

No. 799,787.

PATENTED SEPT. 19, 1905.

J. GESSERT.
TOOL CHUCK AND TOOL THEREFOR.
APPLICATION FILED SEPT. 1, 1904.

Fig. 1.

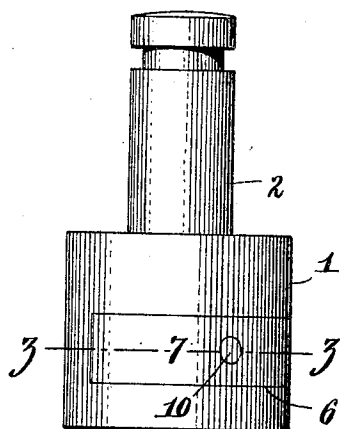


Fig. 2.

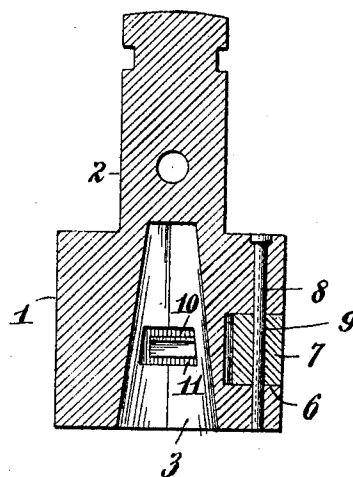


Fig. 3.

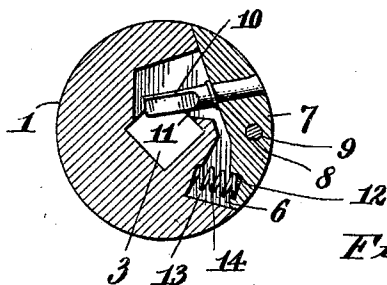


Fig. 5.

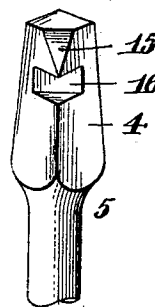
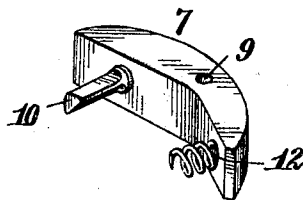


Fig. 4.



Witnesses:

Julius Lankes
Edwin Maier

Jacob Gessert, Inventor.
By Neukart & Burkhardt,
Attorneys.

UNITED STATES PATENT OFFICE.

JACOB GESSERT, OF BUFFALO, NEW YORK.

TOOL-CHUCK AND TOOLS THEREFOR.

No. 799,787.

Specification of Letters Patent.

Patented Sept. 19, 1905.

Application filed September 1, 1904. Serial No. 222,967.

To all whom it may concern:

Be it known that I, JACOB GESSERT, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Tool-Chucks and Tools Therefor, of which the following is a specification.

My invention relates to improvements in tool-chucks and tools therefor; and it has for its object the production of a simple and durable chuck which provides for the automatic locking of a tool therein by the insertion of the tool into the socket of the chuck.

To this end the invention consists in the construction, arrangement, and combination of parts to be hereinafter described, and particularly pointed out in the subjoined claim.

In the drawings, Figure 1 is a side elevation of my improved chuck. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a transverse section taken on line *zz*, Fig. 1. Fig. 4 is a detached perspective view of the locking-dog. Fig. 5 is a perspective view of the upper end of a tool used in connection with my improved chuck.

Referring to the drawings in detail, similar numerals of reference refer to similar parts in the several figures.

The reference-numeral 1 designates the cylindrical body of the chuck, which has projecting from one end thereof a shank 2, adapted for connection to a bit-brace, drill, lathe, or other like tools or machines. The chuck, as illustrated in the drawings, is particularly designed for use in bit-braces, and is therefore provided with an axial tapering four-sided socket 3, into which the upper tapering squared end 4 of a tool 5 is inserted.

One side of the chuck-body is recessed, as at 6, to form a pocket for the reception of a locking-dog 7, which lies parallel with the end surface of the chuck and has its outer surface curved to conform to the cylindrical form of the chuck, thus avoiding all projecting parts. A pivot-pin 8 passes longitudinally through the chuck and through an aperture 9, formed in the locking-dog between its ends. A locking pin or nose 10 is formed on or affixed to said dog at one side of its pivot and projects at substantially a right angle from the inner face thereof through an

opening 11, connecting the recess 6 with the socket 3, into which latter said pin projects. The said pin is substantially triangular in cross-section and is arranged to present an inclined surface to a tool inserted in the socket. The inner surface of the dog at the other side of its pivot-pin is recessed, as at 12, and at this point the recess 6 is of increased depth to provide a space 13 between the rear wall thereof and the inner face of the dog. A spiral spring 14 is located in said space and has one end inserted in the recess 12 of the dog and its other end bearing against the rear wall of the recess 6, serving to hold the opposite end of the dog against the inner wall of the last-mentioned recess, which limits the extent to which the locking-pin 10 enters the socket, and at all times holds the dog in locked position.

The tools to be used in connection with this chuck have their upper edges beveled, as at 15, at one of the four longitudinal edges of the tapering head thereof, and at the lower end of such beveled portion a transverse notch 16 is formed. The locking of the tool within the chuck is extremely simple, it being simply necessary to bring the beveled and notched edge of the tool in line with the locking-pin and force the tool into the socket. When said beveled portion comes in contact with the inclined face of said pin, it forces the latter outward until the notch 16 is brought in line with the pin, which latter is then forced to enter said notch through the efforts of the spring 14. In removing the tool from the chuck inward pressure against that end of the dog against which the spring 14 acts causes the locking-pin to become disengaged from the notch 16 in the tool and permits the latter to be withdrawn.

Having thus described my invention, what I claim is—

In a chuck, the combination of a cylindrical body portion having a tool-socket and a transverse recess in its outer surface opening into said tool-socket, a transversely-arranged dog lying in said recess and having its outer surface curved to conform to the cylindrical form of the body portion, a longitudinally-disposed pivot-pin passing through said dog between its ends, a spring interposed between said

body portion and the dog at one side of said
pivot-pin, and a locking-pin projecting sub-
stantially at a right angle from the inner face
of said dog and entering the tool-socket, said
5 pin having a longitudinal inclined surface
facing the entrance of said socket.

In testimony whereof I have affixed my sig-

nature in the presence of two subscribing wit-
nesses.

JACOB GESSERT.

Witnesses:

EMIL NEUHART,
EDWIN MAIER.