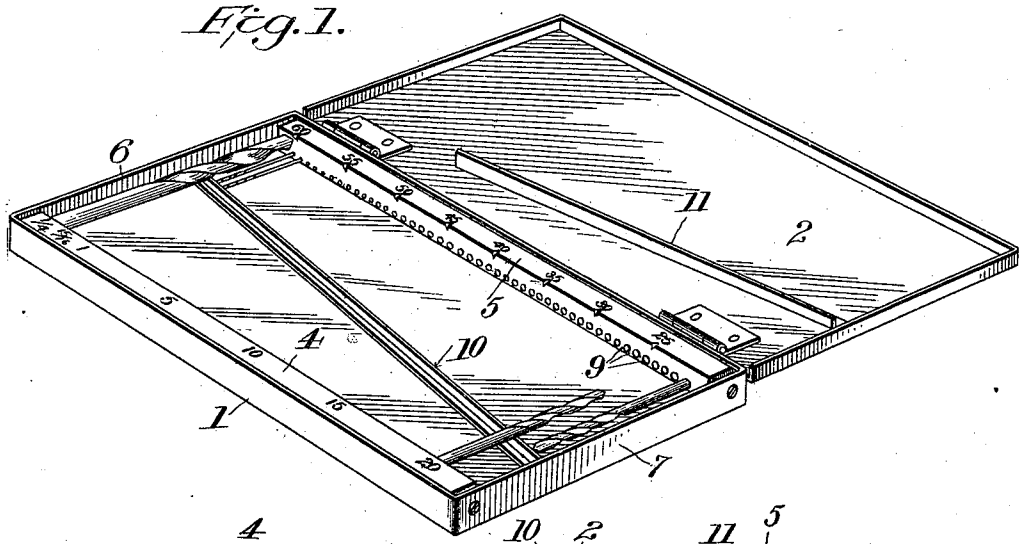
O. R. MILKE.

RECEPTACLE FOR BITS AND DRILLS.

APPLICATION FILED NOV. 11, 1909.

979,981. Patented Dec. 27, 1910.

Fig. 1.



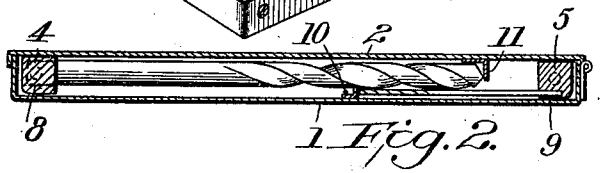


Fig. 2.

Fig. 3.

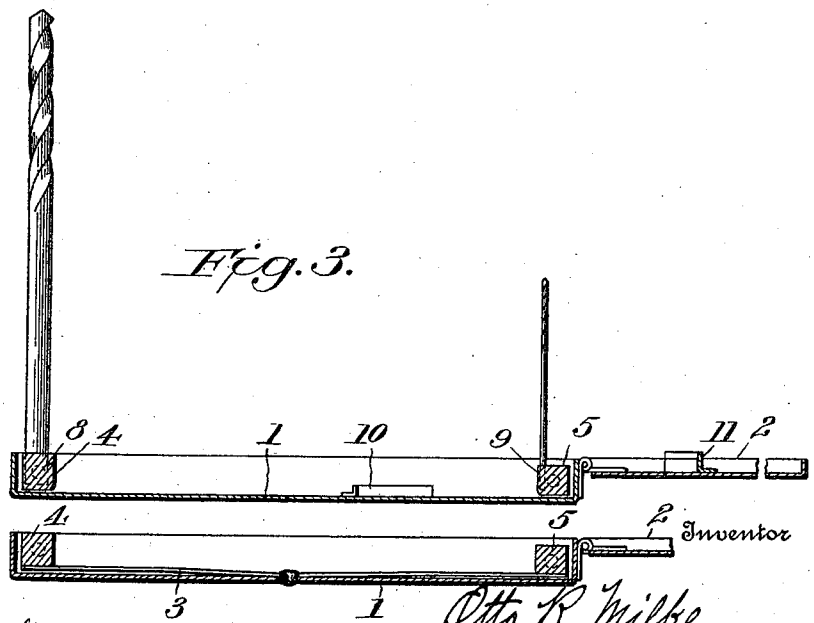


Fig. 4.

Witnesses

C. F. Walker.

H. R. Andrews.

Inventor

Otto R. Milke.

By Eugene H. Johnson

Attorney

UNITED STATES PATENT OFFICE.

OTTO R. MILKE, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-HALF TO HERBERT S. BERLINER, OF WASHINGTON, DISTRICT OF COLUMBIA.

RECEPTACLE FOR BITS AND DRILLS.

979,981. Specification of Letters Patent. **Patented Dec. 27, 1910.**

Application filed November 11, 1909. Serial No. 527,464.

To all whom it may concern:

Be it known that I, OTTO R. MILKE, a citizen of the United States of America, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Receptacles for Bits and Drills, of which the following is a specification.

This invention relates to receptacles for bits and drills; and the object thereof is to provide a receptacle with carriers for bits or drills, the device as an entirety comprising a box or receptacle in which carrier-bars which have formed therein sockets to receive the ends of bits or drills are journaled, the base and the cover for the receptacle each having attached thereto strips which are positioned to hold the bits or drills in the sockets of the carrier bars when the receptacle is closed, means also being provided for frictional engagement with the carrier bars to hold the same against rotation upon their journals, as will be hereinafter set forth.

In the accompanying drawings, Figure 1 is a perspective view of a receptacle for bits and drills constructed in accordance with the invention and showing a preferred form thereof; Fig 2, is a transverse section taken through the receptacle when closed; Fig. 3, is a section showing the receptacle with its lid swung back and with the drills maintained in a vertical position, and Fig. 4 is a transverse section taken adjacent to one of the ends of the receptacle.

The box or receptacle comprises a base or bottom section 1, a top or cover 2 being hinged or connected thereto in any suitable manner, and in practice the base is made up so that its depth will be slightly in excess of the diameter of the largest drill. The inner face of the bottom portion of the base has secured thereto a spring 3, or equivalent friction device, located preferably adjacent to one end and maintained so that the resilient ends of the spring will bear against one of each of the ends of the carrier-bars 4 and 5, said bars each being journaled to the ends 6 and 7 of the base or bottom section. The carrier-bars 4 and 5 are maintained by their journals to be parallel with the longer sides of the bottom section of the receptacle, the ends against which the spring abuts may be slightly reduced and one corner of each bar is rounded, as shown. Each of the carrier bars have formed therein a series of sockets 8 and 9 for the reception of the butt ends of drills, the sockets in the carrier-bars being positioned so that one of the walls of the sockets will be in line with one side of the carrier-bar, and in practice the sockets in the carrier-bar 4 that are intended to receive the butts of the larger drills will be in line with the upper face of said bar when the drills carried thereby are positioned so that the top 2 is placed to overlie the drills. The sockets in the opposite bar 5 are positioned to be in line with that side of the bar that is immediately above the inner side of the bottom of the base of the receptacle. By having the larger sockets at opposite ends of the carrier-bars the larger drills carried by one of the bars will overlie the smaller drills carried by the other bar, such arrangement permitting the use of a box or tray the depth of which will be but slightly in excess of the diameter of the largest drill. The pivoted carrier-bars 4 and 5 are preferably provided on the sides or faces that will be uppermost when the drills are parallel to the bottom of the case, with gage-marks which indicate the diameter of the drills.

When all of the drills are of equal length the ends opposite the butts, when the butts are housed in the sockets, may lie adjacent to the opposite bar and either under or above the drills carried thereby, and with such type of drills no strips or equivalent means will be necessary to retain the drills in the sockets, and to adapt my invention to a carrier and support for drills or bits the lengths of which vary with their diameters, I provide the base and its cover strips 10 and 11 with taper from one end to the other end, the greatest projecting portion being opposite the socket for the largest drill. The strip 10 extends diagonally from one end of the base to the opposite end, and it is against this strip that the smaller drills carried by the bar 5 abut when said drills are housed in the base of the receptacle, and the larger drills carried by the bar 4 will rest upon the upper edge of said flanged strip. The strip 11 that is attached to the inner face of the cover or top 2, is tapered in a direction opposite to the strip 10, and is preferably of less length, for it is unnecessary to provide means for retaining several of the larger drills or bits in their

sockets for the ends will abut against one of the sides of the carrier 5 when positioned so that the lid may be closed.

The case or receptacle is preferably made entirely of metal and not only serves as a carrier but also as a holder for bits or drills or for similar tools, and when not used as a packing case the bars are turned and will hold the objects in a vertical position so as to be readily accessible to the mechanic.

The annexed drawings illustrate a preferred form of construction for drills that do not greatly exceed a quarter of an inch in diameter, and the details of construction as to the journals for the carrier bars, the spring and manner of attaching the strips may be varied without departing from my invention, and it is within the scope of this invention to apply the novel features thereof to a case or receptacle having a central partition and to duplicate the carriers except as to size on both sides of the partition, and in such case two covers will be provided.

In addition to the variations as to construction herein reserved, a partition plate or subsidary cover for each series of drills may be provided, such partition plate or cover being made of metal, cardboard or paper of a size to overlie the under series of drills and thus tend to press the lower series against the bottom of the receptacle and separate such series of drills from the other series, and such cover will assist in insuring snug packing of the drills in the case. When the case is made of other material than metal it may be lined with any suitable material.

I claim.

1. The combination with a receptacle for bits or drills having parallel carrier-bars attached thereto so as to be revoluble upon the attaching means, each carrier-bar having therein a series of sockets which gradually diminish as to their diameters and arranged so that the walls of the sockets in one of the bars will be in line with one of its sides; as its upper surface; the sockets in the other carrier-bar being in line with one of the sides as its lower surface, a longitudinally tapered strip attached to the bottom of the receptacle to form a rest for the bits or drills carried by one of the carrier-bars and retaining means for the bits or drills carried by the opposite carrier-bar, and an oppositely tapered strip attached to the inner side of the cover for the receptacle, substantially as shown.

2. A carrier and support comprising a receptacle and its cover, carrier-bars revolubly connected to the receptacle, means extending diagonally across the bottom of the receptacle to retain bits or drills in one of the carrier-bars and means that projects from the inner side of the cover to retain bits or drills in the other carrier-bar.

3. A receptacle for bits or drills comprising a base and a cover that is hinged to the base, parallel carrier-bars journaled to the base and provided with sockets graduated as to size to receive bits or drills of different diameters, strips which project from the base and from the cover to lie in the same plane as the ends of the bits or drills when the carrier bars therefor are turned to position the bits or drills parallel with the bottom of the base.

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

OTTO R. MILKE.

Witnesses:

EUGENE W. JOHNSON,

FRANK S. APPLEMAN.