I. F. HARRIS.

NUTCRACKER.

APPLICATION FILED DEC. 29, 1911.

1,052,663. Patented Feb. 11, 1913.

Fig. 1.

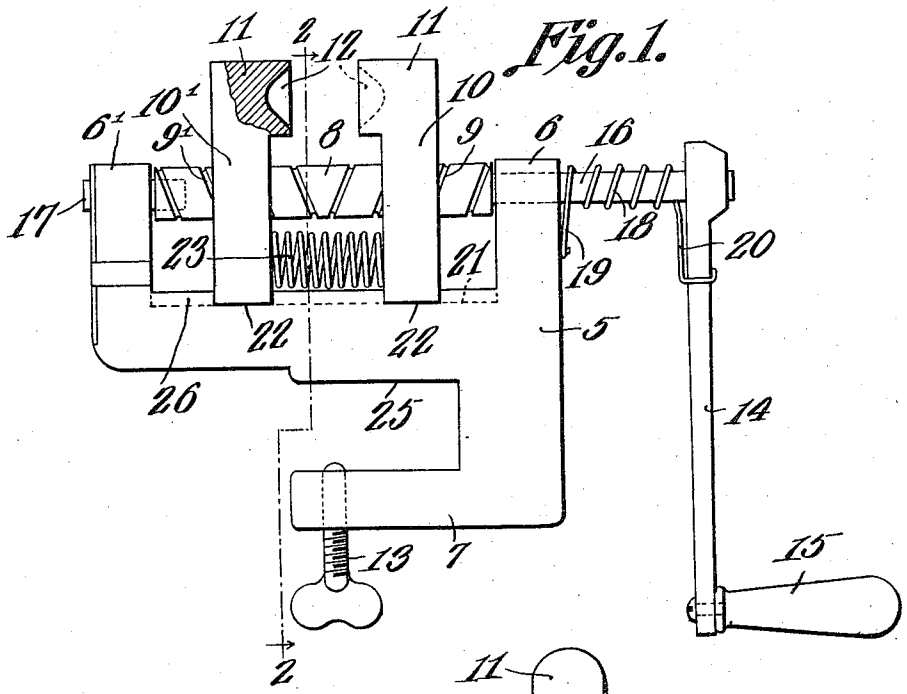


Fig. 2.

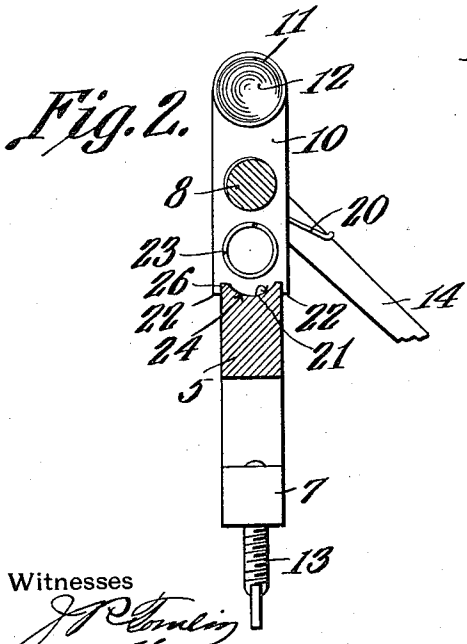
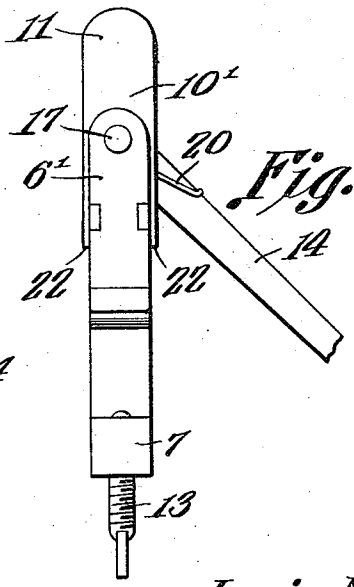


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

IRVIN F. HARRIS, OF WAXAHACHIE, TEXAS.

NUTCRACKER.

1,052,663. Specification of Letters Patent. Patented Feb. 11, 1913.

Application filed December 29, 1911. Serial No. 668,553.

To all whom it may concern:

Be it known that I, IRVIN F. HARRIS, a citizen of the United States, residing at Waxahachie, in the county of Ellis and State of Texas, have invented a new and useful Nutcracker, of which the following is a specification.

This invention relates to nut crackers, and has for its object to provide a simple and inexpensive machine for cracking nuts of various kinds in a convenient and efficient manner.

To this end this invention is embodied in the novel construction and combination of parts hereinafter described and claimed, reference being had to the accompanying drawings, wherein similar reference characters indicate similar parts, and wherein,—

Figure 1 is a side elevation of the nut cracker, parts being broken away. Fig. 2 is a section on the line 2—2 of Fig. 1, parts broken away. Fig. 3 is an end elevation of the device, parts being broken away.

Referring in detail to the drawings, 5 designates a frame of suitable metal which has a horizontal slideway 26 and ears 6 and 6′ at the ends of the slideway. A rotary member 8 is disposed between the ears 6 and 6′ parallel with the slideway 26 and has the right and left hand screw threads 9′ and 9 receding from each other from the center of the said member. The said member 8 also has the respective trunnions 16 and 17 projecting from the ends thereof and journaled in the ears 6 and 6′. The trunnion 16 is elongated to project beyond the ear 6 and a crank 14 is secured to the outer end of the trunnion 16. A coiled torsional spring 18 is arranged on the trunnion 16 between the crank 14 and the ear 6 and has its extremities secured to the said crank and ear, respectively. The crank 14 is provided with a handle 15 for manually turning same to rotate the member 8. A pair of blocks 10 and 10′ are mounted on the rotary member 8 and are engaged by the respective screw threads 9 and 9′ whereby when the member 8 is rotated the blocks are caused to travel along the said member to reciprocate to and from each other. The slideway 26 is provided with a longitudinal concaved channel 21 and the blocks 10 and 10′ have the convexed faces 24 fitting in the said channel and lips 22 fitting over the edges of the slideway to constrain the blocks against rotation. The blocks 10 and 10′ have the heads 11 projecting therefrom opposite the slideway, which heads are provided in their inner faces with nut-receiving sockets 12, and a coiled compression spring 23 is arranged between the lower ends of the said blocks adjacent the slideway tending to force the blocks apart.

The frame or body 5 is secured to a table or other similar object by means of a depending elbow 7 adapted to pass below the table and bearing a clamping bolt 13. The lower edge of the body or frame 5 directly above the elbow 7 is dropped slightly as designated at 25 whereby the table or other object is conveniently received between the portion 25 and the elbow 7 to be clamped between the portion 25 and the bolt 13.

In use, the blocks 10 and 10′ are made to travel toward each other by turning the crank 14 in the proper direction and the nut in being placed between the heads 11 will be received in the sockets 12 and may be readily cracked by forcing the blocks 10 and 10′ inwardly, a sufficient leverage being provided by the crank 14 and the screw threads 9 and 9′, which screw threads in moving both of the blocks 10 and 10′ also facilitate the action. Upon the crank 14 being turned to force the blocks 10 and 10′ toward each other, the coiled spring 18 is wound, or brought under tension as well as the compression spring 23, and upon releasing the crank 14, the coiled spring 18 reverses the member 8 to return the said member and crank 14 to normal position, the spring 23 also assisting by forcing the blocks 10 and 10′ apart against the ears 6 and 6′. The spring 23 not only forces the blocks 10 and 10′ apart, but prevents the said blocks from binding on the slideway 26 to prevent the said blocks from returning to normal position. It will be noted that the spring 23 is arranged between the double screw 8 and the slideway, and that the heads 11 are arranged at the side of the double screw opposite the spring 23, so that when the nut is being crushed between the heads 11, the tendency of the blocks 10 to swing together at their lower or inner ends is overcome by the compression of the spring 23, thus preventing the blocks from binding on the double screw.

With a machine of this character, nuts of various kinds may be readily cracked and with considerable rapidity.

This machine is simple in construction

rendering it inexpensive to manufacture, and in use is both convenient and efficient, being preferable over the ordinary nut crackers in use.

What is claimed as new is:—

In a nut cracker, a double screw, means for rotating the same, blocks mounted on the screw to move to and from each other and designed to receive a nut therebetween at one side of the double screw, means for constraining the blocks against rotation, and a compression spring disposed between the blocks at the opposite side of the double screw and resisting the tendency of the blocks to bind on the double screw when a nut is being crushed between the blocks.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

IRVIN F. HARRIS.

Witnesses:
J. W. P. TURNS,
P. BRATCHER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."