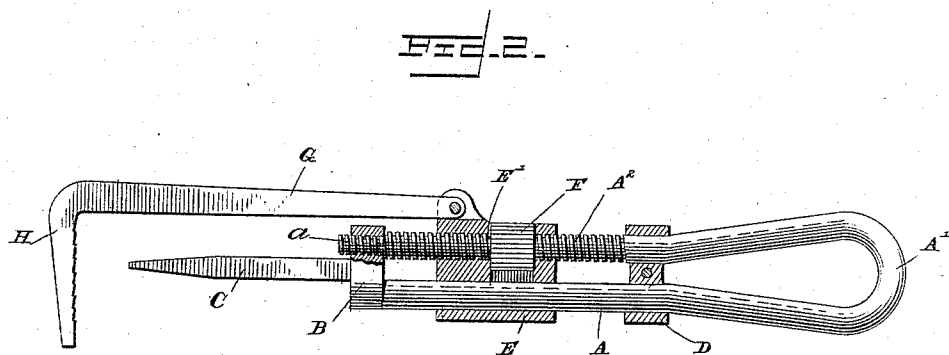
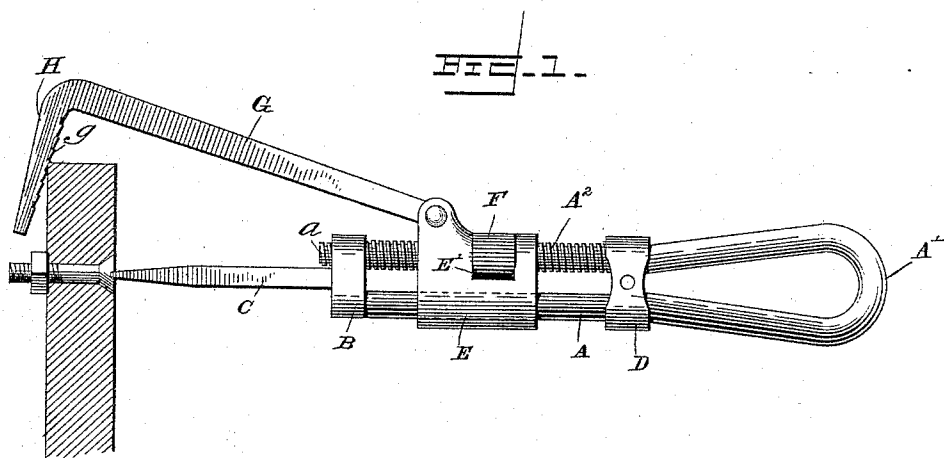


(No Model.)

C. C. REYNOLDS.
COMBINATION TOOL.

No. 489,875.

Patented Jan. 10, 1893.



Witnesses

Edw. J. Duval Jr.
Wm. B. Boyden

Inventor

Christopher C. Reynolds
per Fred W. Vaska
Attorney

UNITED STATES PATENT OFFICE.

CHRISTOPHER C. REYNOLDS, OF ELDORADO, UTAH TERRITORY, ASSIGNOR
OF ONE-HALF TO ELIZABETH BROWN, OF SAME PLACE.

COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 489,875, dated January 10, 1893.

Application filed April 12, 1892. Serial No. 428,878. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER C. REYNOLDS, a citizen of the United States, residing at Eldorado, in the county of Salt Lake and Territory of Utah, have invented certain new and useful Improvements in Combination-Tools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in combination tools, it being especially adapted for use as a device for holding bolts in position while the nuts thereon are being turned, but being also efficient for use as a screw driver, a wrench for turning nuts on bolts, a pinch bar, a pipe wrench, &c. the object of the invention being to provide a simple, cheap and efficient combination tool which may serve the various purposes named, as well as others, the device being primarily useful in holding the countersunk heads of bolts used on the fellies of vehicle wheels, and the invention consists in the construction, arrangement and combination of parts, substantially as will be hereinafter described and claimed.

In the accompanying drawings illustrating my invention: Figure 1 is a side elevation of my improved combination tool, shown in operative position holding the countersunk head of a bolt so that the nut on said bolt may be turned. Fig. 2 is a view of the device in its inoperative position, a portion thereof being shown in section.

Similar letters of reference designate corresponding parts in both figures.

My improved combination tool has been devised especially for the use of mechanics in holding round headed bolts so that the work in which they are found may be taken apart without destroying the bolt. The tool is valuable for use in connection with old work and also with new work. The tool is particularly useful in holding the countersunk heads of bolts employed with the fellies of vehicle wheels.

The tool comprises in a part, a bar which is bent to provide the section A, the looped portion A' and the screw-threaded section A² which lies parallel to and alongside of the sec-

tion A, the extreme end of the screw-threaded section A² having short screw-threaded part *a*, of less diameter than the diameter of the main screw-threaded section A².

D designates a clamp or connection which assists in holding the two rod sections A and A² at the proper distance apart and in a state of parallelism.

E designates a metallic block which slides upon the rods A and A², being provided with parallel circular passages within which said rods A and A² are respectively situated. On the screw-threaded section A² is an adjusting nut F, similar to that commonly employed in monkey wrenches, said nut F lying within a slot E' cut in the metallic block E. It will thus be evident that as the adjusting nut F is manipulated and caused to travel backward or forward upon the screw-threaded part A², the block E will likewise travel backward or forward under the impulse of the motion imparted thereto by the adjusting nut.

C designates a screw-driver having at its inner end a head B. One part of this head is provided with a screw-threaded passage which receives the small-diameter screw-threaded end *a* of the screw A². The other part of the screw driver head is designed to abut closely against the extreme end of the rod A as shown in Figs. 1 and 2. It will thus be seen that the screw driver can whenever desired be readily removed from the other part of the device by simply unscrewing it from the screw-threaded end *a*.

G denotes a hook or hooked bar, having the hooked end H which extends beyond the end of the screw driver C, when the latter is connected in its normal position to the other parts. Said hooked end H is preferably bent at about a right angle to the bar G and has its inner edge provided with a series of dentations or notches *g*. The bar G is pivotally attached to the movable block E having its end held therein by means of a small bolt which acts as a pivot and is clearly shown in Figs. 1 and 2. It will be obvious that as the block E is adjusted to various points under the manipulation of the adjusting nut F, the hooked bar G will, likewise be adjusted so as to change the distance between the hooked end H and the chisel point or screw-driver end C,

so as to adapt the device for use with fellies or other objects of different sizes.

In order to show the practical application of my present invention, I have in Fig. 1, delineated a wooden section which may be a portion of a felly, and through the section passes a bolt having a countersunk head which receives the chisel-point C, while the other end of the said bolt is provided with a nut. It will be seen that when the screw driver part C has been connected to the block carrying looped rod and is situated in operative position, it will stand in direct line with the bolt upon which it is exerting a pressure and that the chiseled or sharpened point of the said screw driver part will enter the countersunk head of the bolt and hold the same firmly. The hooked bar will at the same time be in the position shown, with the hooked end H on the opposite side of the object that contains the bolt and the dentations or teeth in engagement with said opposite side or edge of said object so as to keep it from slipping and then by the proper manipulation of the device it is made to exert a strong pressure upon the bolt so as to hold the same in proper position while the nut thereon is being turned.

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

1. In a combination tool, the combination of the bent rod, one section of which is screw-threaded, the movable block on said parallel sections, an adjusting nut, the removably-connected screw-driver and the hooked bar pivoted to the movable block, substantially as described.

2. In a combination tool, the combination of the looped rod, providing two parallel sections, one of which is a screw, a screw driver whose head is connected to the end of said screw, a movable block mounted on the parallel sections, an adjusting nut engaging the block and the screw and operative upon the block and a hooked bar pivoted upon the block, substantially as described.

3. The combination, in a combination tool, of the parallel sections A and A², the latter being a screw, the block E, adjusting nut F on the screw A² and located within a slot in the block E the hooked bar pivoted to the block E and the chisel pointed part C connected to the device, substantially as described.

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

CHRISTOPHER C. REYNOLDS.

Witnesses:

G. W. PARKS,
BYNUM CROSBY.