O. P. HANSON.

ATTACHMENT FOR BIT BRACES.

APPLICATION FILED JUNE 24, 1908. RENEWED AUG. 8, 1910.

988,263. Patented Mar. 28, 1911.

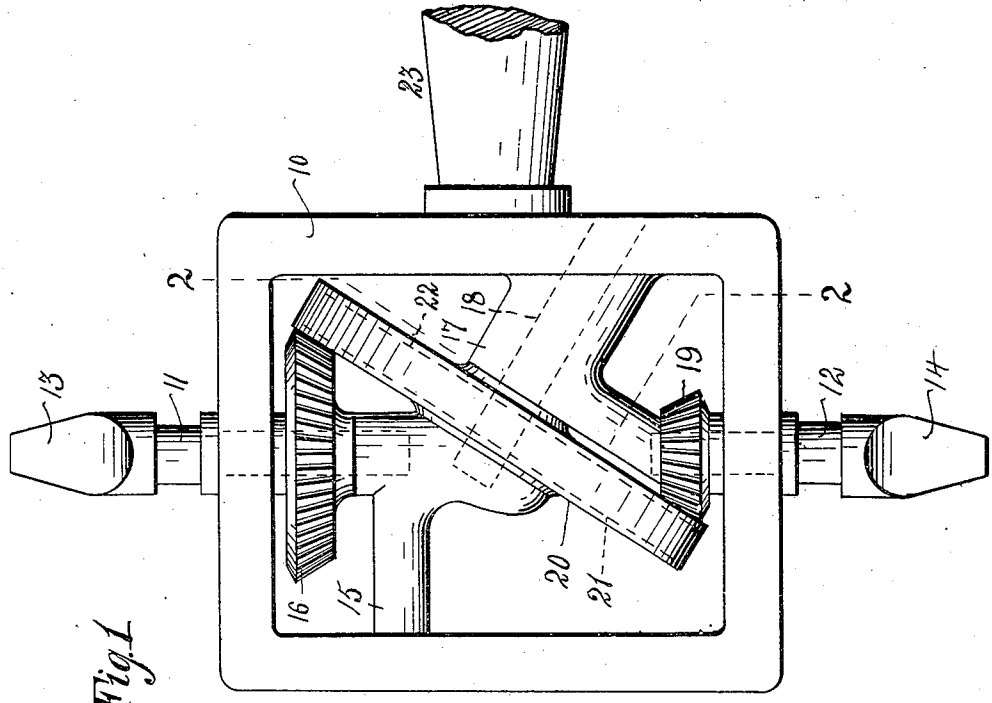

Fig. 1

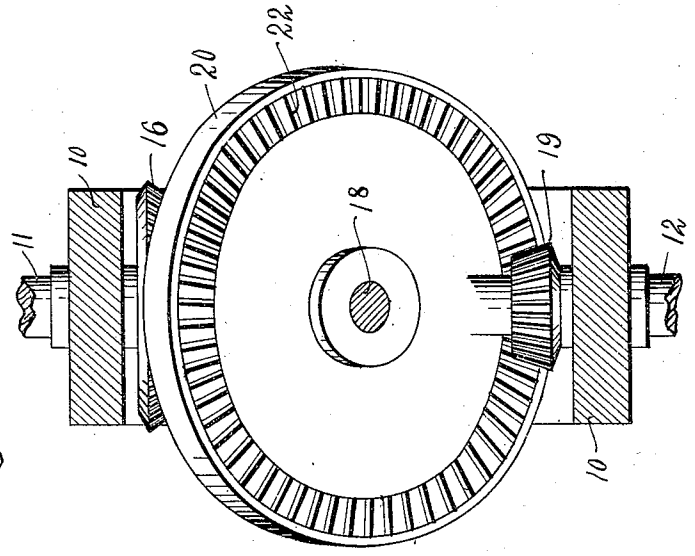

Fig. 2

Witnesses
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UNITED STATES PATENT OFFICE.

OSCAR P. HANSON, OF PLUM CITY, WISCONSIN.

ATTACHMENT FOR BIT-BRACES.

988,263. Specification of Letters Patent. Patented Mar. 28, 1911.

Application filed June 24, 1908, Serial No. 440,153. Renewed August 8, 1910. Serial No. 576,078.

To all whom it may concern:

Be it known that I, OSCAR P. HANSON, a citizen of the United States, residing at Plum City, in the county of Pierce, State of Wisconsin, have invented certain new and useful Improvements in Attachments for Bit-Braces; 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 attachments to bit braces and similar devices, and has for one of its objects to provide a simply constructed device whereby the speed of the bit may be increased or decreased as required.

With this and other objects in view, the invention consists in certain novel features of construction as hereafter shown and described and then specifically pointed out in the claim, and in the drawings illustrative of the preferred embodiment of the invention.

Figure 1 is a side elevation of the improved device. Fig. 2 is a section on the line 2—2 of Fig. 1.

The improved device comprises a supporting frame 10 having two shafts 11—12 mounted for rotation therein and preferably extending from opposite sides and in longitudinal alinement.

The shafts are provided at their outer ends with squared tapering shanks 13—14 to interchangeably receive a rotating means such as a bit brace upon one shank, and a bit or drill supporting means such as a chuck upon the other shank, but these devices are not shown as they form no part of the invention and their construction is so well known.

Extending inwardly from one of the side members of the frame 10 is a bracket 15 having a step to receive the inner end of the shaft 11, and mounted upon the shaft 11 within the frame 10 is a bevel gear 16. The bracket 15 is also provided with an oblique bearing at its inner end, and extending inwardly from the other side frame member is an obliquely extending bracket 17 having a shaft bearing to receive a stub shaft 18, the stub shaft extending obliquely of the frame and engaging in the obliquely arranged step of the bracket 15. The bracket 18 is also provided with an oblique bearing at its lower side to receive the inner end of the shaft 12. Mounted upon the shaft 12 within the frame is a smaller bevel gear 19. Mounted from the oblique shaft 18 is a gear 20 having oppositely arranged gear teeth 21—22 with which the gears 16—19 engage respectively, as shown. The frame 10 is also provided with a supporting handle 23. By this means it will be obvious that when a chuck member is applied to the shaft 12 and a rotating member applied to the shaft 11, the shaft 12 will be rotated at a relatively high speed, and then when the position of the rotating and chuck members are reversed, the shaft 11 will be rotated at a relatively low speed. Thus by simply interchanging the rotating and chuck members a slow or fast speed may be imparted to the bit or drill as required.

The improved device is simple in construction, can be inexpensively manufactured, and by means thereof a slow speed or a high speed may be imparted to the bit or drill supporting element by simply reversing the position of the rotating element and the bit supporting element and without structural change of any kind in the device.

What is claimed is:—

A device of the class described comprising a frame having bearings in two opposite sides, a bracket extending inwardly from another side member of said frame and provided with an oblique bearing on one side and a shaft step in alinement with one of said frame bearings, another bracket extending inwardly from another of said frame members and provided with an oblique bearing in alinement with the first mentioned oblique bearing and provided with a shaft step in alinement with the other frame bearing, shafts mounted for rotation in said frame bearings and engaging in said shaft steps, a shaft mounted for rotation in said oblique bearings, and intermeshing gears carried by said shafts.

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

OSCAR P. HANSON.

Witnesses:
CHAS. SCHNEKLOTH,
MARY MOSER.