

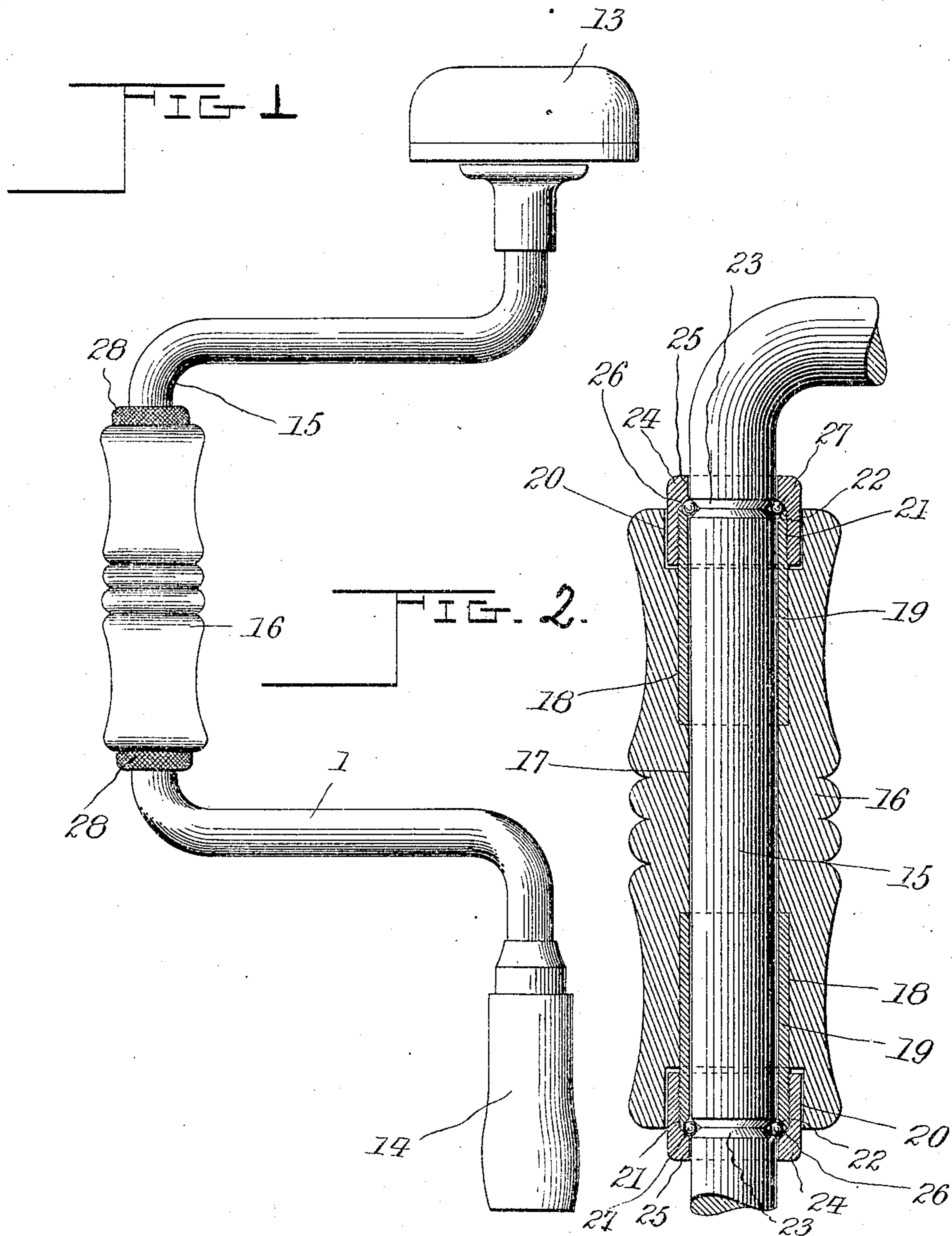
No. 773,576.

PATENTED NOV. 1, 1904.

A. D. LEBLANC.
HANDLE FOR CARPENTERS' BRACES.

APPLICATION FILED JULY 31, 1903.

NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE.

ADOLPHE D. LEBLANC, OF MONTREAL, CANADA.

HANDLE FOR CARPENTERS' BRACES.

SPECIFICATION forming part of Letters Patent No. 773,576, dated November 1, 1904.

Application filed July 31, 1903. Serial No. 167,772. (No model.)

To all whom it may concern:

Be it known that I, ADOLPHE D. LEBLANC, a subject of the King of Great Britain, residing in the city and district of Montreal, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Handles for Carpenters' Braces; and I do hereby declare that the following is 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.

My invention relates to braces such as used by mechanics, and especially by carpenters, in operations such as boring holes with an auger or bit or in operating a screw-driver. These braces usually consist, substantially, of a crank having a lower extension and an upper extension, to the former of which a chuck is attached and to the latter of which a swivel-head is attached. In operating the tool the swivel-head is usually held against the workman's body, and the tool is rotated upon the axes of the said extensions by means of the said crank. The wrist of the crank has a rotatable handle mounted thereupon; and it is the object of this invention to provide an improved construction and means for attaching this handle.

The invention consists in the construction and combination of parts to be more fully described hereinafter and definitely set forth in the claims.

In the drawings, which fully illustrate my invention, Figure 1 is a side elevation of a brace to which my invention has been applied. Fig. 2 is a vertical central section through the handle of the brace.

Throughout the drawings and specification the same numerals of reference denote like parts.

Referring more particularly to the parts, 1 represents the body of the brace, which consists, substantially as shown, of a crank providing a wrist 15, to which a handle 16 is attached. The brace further includes a chuck 14 of any suitable construction and a swivel-head 13.

The handle 16 is provided with a longitudinal bore 17 of slightly greater diameter than the wrist 15, the said bore having counter-

bored or enlarged bores 18 at the extremities, which receive the sleeves 19 in the manner shown. The counterbores 18 are themselves counterbored to form enlarged mouths or recesses 20, and at these recesses the extremities of the sleeves 19 are threaded externally, as indicated at 21. The edge of the extremities of these sleeves 19 is formed with a bevel 22, as shown, and these bevels are disposed respectively opposite to substantially V-shaped grooves 23, which are formed in the periphery of the wrist in the manner indicated. Upon the threaded extremities of the sleeves 19 caps 24 are attached, the same being received in the recesses 20. These caps have contracted openings 25 of slightly greater diameter than the wrist 15 and are provided internally, respectively, with an inclined shoulder 26. When the parts are assembled, these shoulders cooperate with the bevels 22 and the grooves 23, so as to form a raceway in which balls 27 are carried. In order to facilitate the attachment or adjustment of the caps 24, the same are knurled, as indicated at 28. The fact that these caps project beyond the extremities of the handle 16 enables them to be readily grasped by the workman's hand. The balls 27 afford means for preventing longitudinal movement of the handle upon the wrist.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structures set forth.

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

1. In a brace, the combination with a wrist, having a peripheral groove, of a handle comprising a body portion with longitudinal bore and rotatably mounted on said wrist, a sleeve received in a counterbore of said body and beveled at its outer end, and said beveled end disposed opposite the groove in the wrist, a

cap received in a counterbore at the end of the body and having threaded engagement with the sleeve, and balls in the groove of the wrist and held by the cap and having a bearing
5 upon the beveled end of the sleeve.

2. In a brace, the combination with a wrist having a peripheral groove near each end, of a handle, comprising a body portion rotatably mounted on the wrist and having an axial bore
10 and enlarged bores at the ends, and the enlarged bores counterbored, sleeves fitted in the enlarged bores and having their outer ends screw-threaded and beveled, caps having openings to receive the wrist and provided with

internal inclined shoulders, and annular por- 15
tions interiorly threaded and engaged on the threaded ends of the said sleeves, and balls disposed in the raceways formed by the said grooves, beveled ends of the sleeves and inclined shoulders of the caps, all substantially 20
as herein shown and described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ADOLPHE D. LEBLANC.

Witnesses:

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