A. R. WERNER.

FOLDING BENCH.

APPLICATION FILED JAN. 16, 1918.

1,284,512.

Patented Nov. 12, 1918.

2 SHEETS—SHEET 1.

Fig. 2.

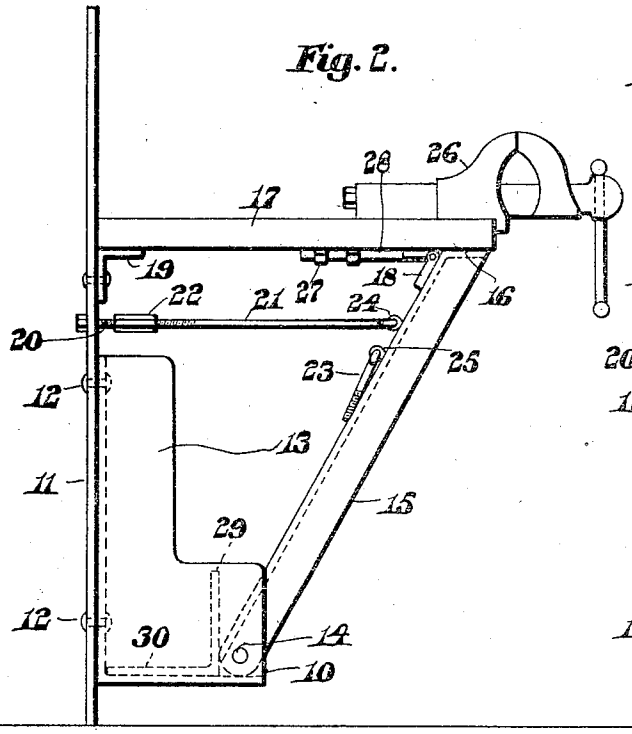


Fig. 3.

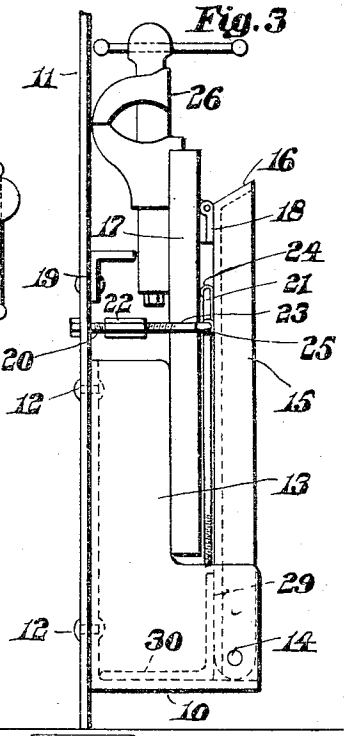
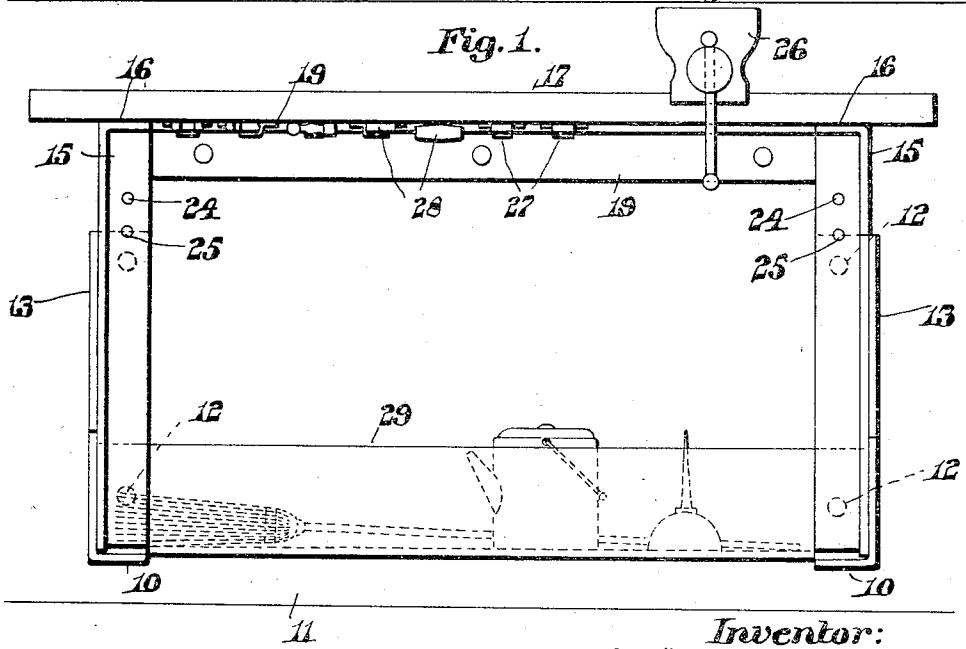


Fig. 1.



Inventor:
Adolph R. Werner,
by Watters & Lombard.
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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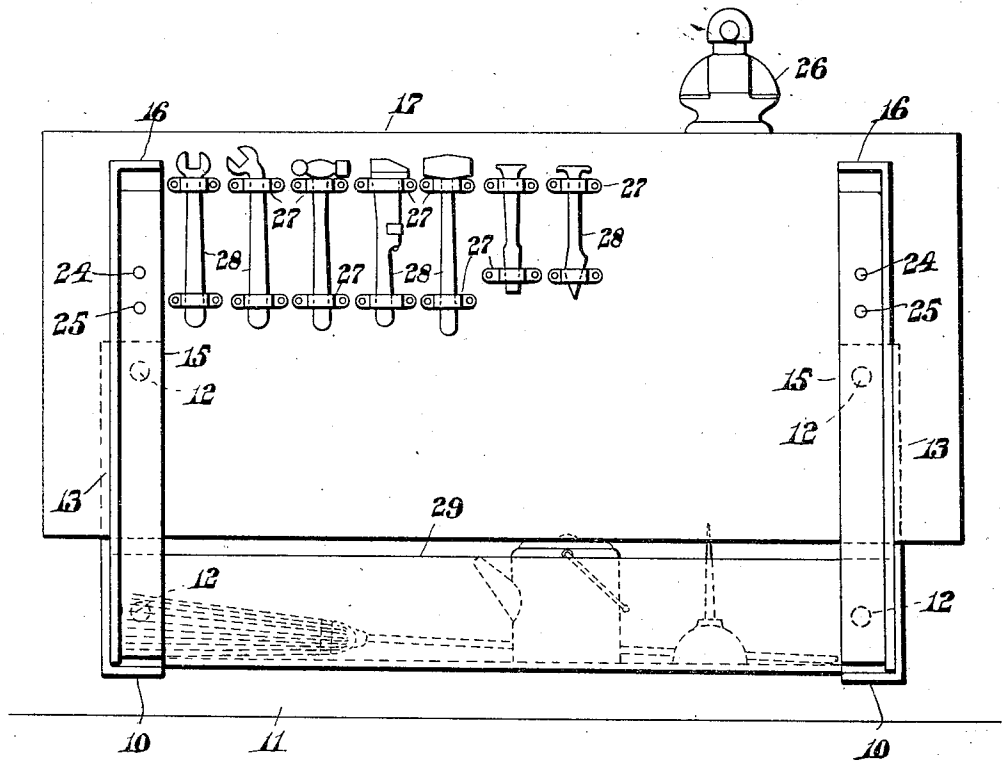
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2 SHEETS—SHEET 2.

Fig. 4.



Inventor:
Adolph R. Werner,
by Walter E. Lombard,
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ADOLPH R. WERNER, OF EAST MILTON, MASSACHUSETTS.

FOLDING BENCH.

1,284,512. Specification of Letters Patent. Patented Nov. 12, 1918.

Application filed January 16, 1918. Serial No. 212,354.

To all whom it may concern:

Be it known that I, ADOLPH R. WERNER, a citizen of the United States of America, and a resident of East Milton, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Folding Benches, of which the following is a specification.

This invention relates to work benches and particularly to folding benches which will occupy but little space when not in use and which may be quickly placed in condition for use with all its parts rigidly locked together when in operative position.

The principal object of the invention is to produce a work bench for use on vessels either in the engine room or in any other room where a bench of this character may be required, said bench being pivoted to a bulkhead in such a manner that when not in use it will be locked in vertical position adjacent to said bulkhead and form a cupboard in which various articles may be stored.

Another object of the invention is to provide means for securely locking the bench to the bulkhead when it is in position for use, thereby giving it the necessary rigidity.

A further object of the invention is the provision of means on the under side of the bench for retaining thereon various articles which may be required from time to time when the bench is in use and which articles will be readily accessible when the bench is in inoperative position.

The invention consists in brackets permanently bolted to a bulkhead and having pivoted thereto the lower ends of a pair of struts or braces, said struts or braces having hinged to their upper ends a bench adapted, when not in use, to fold down against the rear faces of said struts or braces and rest at its rear end on a shelf secured to the bulkhead when the bench is in operable position.

The invention further consists in providing each of the braces with two threaded rods of different lengths and pivoted thereto, either of which is adapted, by means of a suitable turn buckle, to be secured to a threaded rod secured in said bulkhead, the longer pivoted rod being used when the bench is in operable position and the shorter rod being used when the bench is in inoperable position.

The invention further consists of certain novel features of construction and arrangement of parts which will be fully understood by reference to the description of the drawings and to the claims hereinafter given.

For the purpose of illustrating the invention one preferred form thereof is illustrated in the drawings, this form having been found to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and the invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described, except as required by the scope of the appended claims.

Of the drawings:

Figure 1 represents a front elevation of a bench embodying the principles of the present invention, said bench being shown in operative position.

Fig. 2 represents an end view of the same.

Fig. 3 represents an end view of the same when in inoperative position, and

Fig. 4 represents a front elevation of the bench when not in use.

Similar characters designate like parts throughout the several figures of the drawings.

In the drawings, 10, 10 are two wall brackets secured to a bulkhead 11 by means of the rivets 12. These brackets 10 have vertical plates 13 extending outwardly from the bulkhead 11 and perpendicularly thereto and to the lower outer corner of said plates 13 are pivoted at 14 the lower ends of the struts or braces 15 preferably formed of angle iron, with the upper ends inclined to the rear faces thereof as shown in Figs. 2 and 3 at 16.

These inclined faces 16 form a support for the front end of the bench 17 which is connected to the struts or braces 15 by means of hinges 18 the leaves of which are secured respectively to the under face of the bench 17 and the rear faces of said struts or braces 15.

The rear end of the bench 17 is adapted when in operative position to rest on the shelf support 19 secured to the bulkhead 11, with the rear face of said bench 17 abutting the said bulkhead.

The bench 17 is rigidly locked in this operative position by means of tie members consisting of a threaded stud 20 fixedly secured in the bulkhead 11, a threaded rod 21 pivotally connected to the rear face of a strut or brace 15, and a turn-buckle 22 con-

necting the threaded ends of said stud and rod.

As the threads on the ends of said stud and rod are right and left handed it is obvious that by turning the turn-buckle 22 the inner end of the bench 17 may be drawn into firm contact with the bulkhead 11 or said turn-buckle 22 may be turned in the opposite direction to disconnect said stud 20 and rod 21 so that the bench 17 may be folded into the position shown in Fig. 3 with the top of the bench 17 facing the bulkhead 11.

The bench 17 may be locked in this position by means of another rod 23 pivotally connected to each strut 15, this other rod being much shorter than the rod 20 and having a threaded end adapted to be received in the turn-buckle 22 all in an obvious manner. The rod 21 is pivotally connected to the strut 14 by means of an eye 24 secured to said strut while the rod 23 is similarly connected to an eye 25 secured to said strut at a lower point but in the same vertical plane.

When the bench 17 is installed in an engine room of a vessel to be used for repair work, it is usually provided with a vise 26 and on the under side has secured thereto a plurality of retainers 27 adapted to receive various tools 28 required from time to time in making repairs.

When the bench is folded in inoperative position the tools 28 are exposed to view as shown in Fig. 4 and are readily accessible while when the bench 17 is in operative position the tools 28 may be easily withdrawn from the retainers 27.

The wall brackets 10 are connected by a tie plate 29 interposed between the end vertical plates 13, said plate 29 being provided with a bottom plate 30 which with the front plate 29 and end plates 13 forms a receptacle adapted to receive oil cans, brooms, etc., which it is desired to place out of the way where they will not be exposed to view but which may be obtained quickly when wanted.

This makes a very simple work bench which is particularly desirable for the engine rooms of war vessels as the bench occupies but little space when not in use and even then forms a closed cupboard for the storage of various forms of articles.

When the bench is in use it is very rigid and may be utilized in making repairs to the engines and other machines located on the vessel.

It is believed that the operation and many advantages of the invention will be fully understood without further description.

Having thus described my invention, I claim:

1. In a device of the class described, the combination of a pair of wall brackets; a strut pivoted to each bracket; a bench hinged to the inner faces of the upper ends of said struts; a fixed rigid wall support on which the rear end of said bench is adapted to rest; and means pivotally connected to said struts for locking said bench in operative position.

2. In a device of the class described, the combination of a pair of wall brackets; a strut pivoted to each bracket; a bench hinged to the upper ends of said struts; a fixed rigid wall support on which the rear end of said bench is adapted to rest; two stationary members at the rear of said struts; a member pivoted to each strut; and locking connectors between said pivoted members and said stationary members and adjustable thereon to force the rear edge of said bench into firm contact with the face of the wall to which said brackets are secured.

3. In a device of the class described, the combination of a pair of wall brackets; a strut pivoted to each bracket; a bench hinged to the upper ends of said struts; a fixed rigid wall support on which the rear end of said bench is adapted to rest; two stationary members at the rear of said struts; a threaded member pivoted to each strut; and means rotatable on said stationary members and provided with threads coacting with the threaded ends of said pivoted members, whereby said bench may be locked in operative position.

4. In a device of the class described, the combination of a pair of wall brackets; a strut pivoted to each bracket; a bench hinged to the upper ends of said struts; a wall support for the rear end of said bench; two stationary threaded members at the rear of said struts; a threaded member pivoted to each strut; and turn-buckles for connecting the threaded ends of said pivoted members and said stationary members.

Signed by me at 4 Post Office Sq., Boston, Mass., this 14th day of January, 1918.

ADOLPH R. WERNER.

Witnesses:
WALTER E. LOMBARD,
NATHAN C. LOMBARD.

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