B. S. THOMPSON.

ADJUSTABLE PARALLEL GAGE.

APPLICATION FILED FEB. 10, 1915.

1,161,753. Patented Nov. 23, 1915.

Fig. 1.

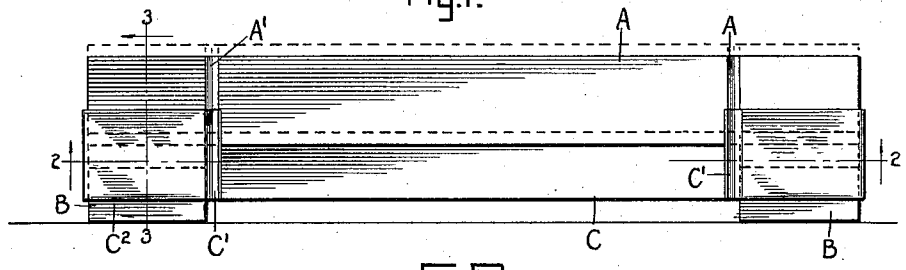


Fig. 2.

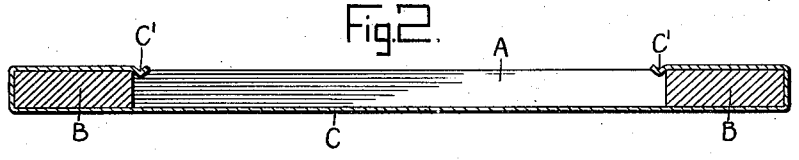


Fig. 3.

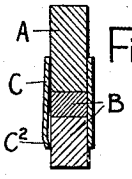
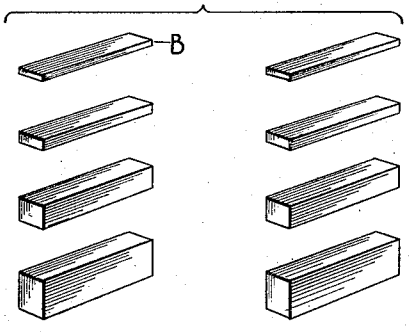


Fig. 4.



WITNESSES

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ADJUSTABLE PARALLEL GAGE.

1,161,753. Specification of Letters Patent. Patented Nov. 23, 1915.

Application filed February 10, 1915. Serial No. 7,281.

To all whom it may concern:

Be it known that I, BOYD S. THOMPSON, a citizen of the United States, and a resident of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and Improved Adjustable Parallel Gage, of which the following is a full, clear, and exact description.

The invention relates to gages used by machinists, pattern-makers and other mechanics, and its object is to provide a new and improved adjustable parallel gage for convenient use on planers, shapers, vises and other machines and tools for gaging the work in hand, and arranged to allow the mechanic to quickly and accurately adjust the gage to a desired height.

In order to accomplish the desired result, use is made of a retainer having a parallel sliding motion on a parallel gage block and forming pockets with the same, and pairs of filling pieces placed into said pockets to raise the top of the gage block to a desired height.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the adjustable parallel gage; Fig. 2 is an inverted sectional plan view of the same on the line 2—2 of Fig. 1; Fig. 3 is a cross section of the same on the line 3—3 of Fig. 1; and Fig. 4 is a perspective view of a graduated series of pairs of filling pieces.

The gage block A is of a desired length and of a predetermined height (say one half inch), and in order to increase the height of the gage block to suit the work in hand use is made of pairs of filling pieces B fitting against the under side of the gage block A at the ends thereof, the pairs of filling pieces being of different thicknesses. As shown in Fig. 4, for instance, the thinnest pair of filling pieces may be $\frac{1}{32}$ of an inch, the next $\frac{1}{16}$, the next $\frac{1}{8}$ and the last $\frac{1}{4}$ of an inch. By the use of any one or any number of pairs of filling pieces the block A may be raised to the desired height. In order to hold the pairs of filling pieces B in position at the ends of the gage block A, use is made of a retainer C in the form of a band extending over the back of the block A, then around the ends to the front of the block with a view to provide pockets at the ends of the gage block A for holding the filling pieces B in place. The terminals C′ of the retainer C are bent into V-shaped form and fit into correspondingly shaped guideways A′ formed in the front face of the gage block A. By the arrangement described the retainer C can be readily moved vertically on the block A and the terminals C′ form abutments for the inner ends of the filling pieces B placed in position in the pockets at the time. The lower edges C^2 of the front members of the retainer C are preferably curved inward to form flanges adapted to bear against the faces of the lowermost filling pieces B thus holding the filling pieces against accidental displacement in the pockets.

In practice the adjustable parallel gage is used in pairs, and each gage is provided with filling pieces of the same thickness. It will be noticed that by the arrangement described the length of the parallel gage remains always the same while the height thereof can be readily changed by the use of the corresponding pair of filling pieces B. As the height of the gage block A and the thickness of the filling pieces B is known to mechanics it is evident that the gage can be readily set for any desired height without requiring measuring on the part of the mechanic.

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

1. An adjustable parallel gage, comprising a gage block, a retainer held adjustable on the said gage block and forming pockets with the same, and filling pieces held in the said pockets.

2. An adjustable parallel gage, comprising a parallel gage block, a retainer mounted to slide in the direction of the height of the gage block and forming pockets at the ends of the gage block, and a pair of like parallel filling pieces in the said pockets to increase the height of the gage a distance corresponding to the thickness of the filling pieces.

3. An adjustable parallel gage, comprising a parallel gage block provided on front with spaced vertical guideways, a retainer in the form of a band extending lengthwise along the back of the block around the ends and over onto the front, the terminals of the

band slidingly engaging the said guideways, the said band forming pockets, and filling pieces in the said pockets.

4. An adjustable parallel gage, comprising a parallel gage block provided on front with spaced vertical guideways, a retainer in the form of a band extending lengthwise along the back of the block around the ends and over onto the front, the terminals of the band slidingly engaging the said guideways, the said band forming pockets, and filling pieces in the said pockets, the inner ends of the filling pieces abutting the said band terminals to hold the filling pieces against lengthwise movement.

5. An adjustable parallel gage, comprising a parallel gage block provided on front with spaced vertical guideways, a retainer in the form of a band extending lengthwise along the back of the block around the ends and over onto the front, the terminals of the band slidingly engaging the said guideways, the lower edges of the front portions of the band being bent inward to form retaining flanges, the end portions of the said band and the ends of the said block being adapted to form with each other pockets, and filling devices in the said pockets and abutting the said terminal, the said flanges bearing against the faces of the filling pieces.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BOYD S. THOMPSON.

Witnesses:

ALFRED KRAFT,

E. SHATTUCK.

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