B. E. GREEN.

BLACKBOARD MARKER.

APPLICATION FILED OCT. 27, 1911.

1,023,561. Patented Apr. 16, 1912.

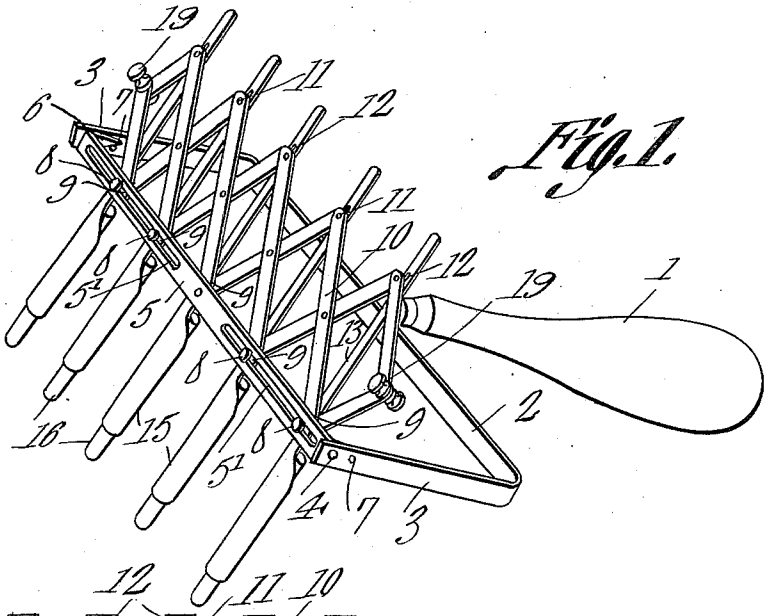

Fig. 1.

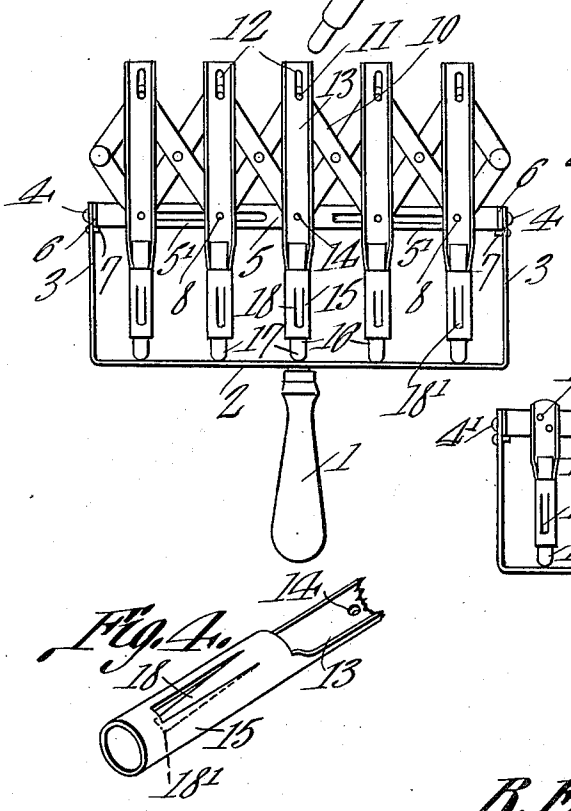

Fig. 2.

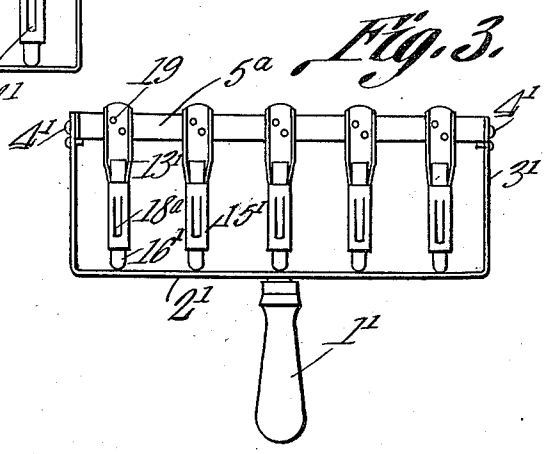

Fig. 3.

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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BLACKBOARD-MARKER.

1,023,561. Specification of Letters Patent. Patented Apr. 16, 1912.

Application filed October 27, 1911. Serial No. 657,113.

To all whom it may concern:

Be it known that I, BYRON E. GREEN, a citizen of the United States, residing at Ilion, in the county of Herkimer and State of New York, have invented a new and useful Blackboard-Marker, of which the following is a specification.

The present invention relates to improvements in blackboard markers, the primary object of this invention being the provision of a marking device provided with a pivoted frame having a handle connected thereto, said frame being made of a strip of flat metal formed to provide terminals to which is pivoted a bar carrying a plurality of crayon holders with means for locking said holders and bar in the position for presenting the crayons to the blackboard and for permitting the crayons to fit within the inner face of the frame to protect the crayons while not in use.

A further object of the present invention is the provision of a plurality of transversely or longitudinally adjustable crayon supports carried by a lazy tong device by means of which the spaces between the marking points of the crayons may be varied, the said lazy tongs being carried by a pivoted bar connected to a U-shaped supporting frame, whereby the crayons may be positioned for producing marks upon a blackboard or held to have their projecting ends protected by said U-shaped frame.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings—Figure 1 is a perspective view of the complete adjustable device in the position the parts assume when producing the parallel marks upon the board. Fig. 2 is a front elevation of the device folded. Fig. 3 is a similar view of a modified form. Fig. 4 is a perspective view of one of the crayon holding devices or fingers removed.

Referring to the drawings, the numeral 1 designates the handle which is connected centrally to the underside of the plate or frame 2 provided with the upstanding terminals 3, which as shown in Fig. 2 present a U-shaped in elevation frame.

Pivoted by means of the pivotal pins or rivets 4 between the terminals 3 of the frame 2, is a bar or plate 5 whose projecting ends 6 are so disposed that when the device assumes the position as shown in Fig. 1, the said arms 6 will engage the studs or pins 7 projecting from the inside of the terminals 3, and thereby hold the pivoted bar 5 in the position as shown in Fig. 1, or permit the same to assume the position as shown in Figs. 2 and 3.

Formed through the bar 5 are the elongated slots 5′ in which are slidably mounted the headed studs or pins 8 which are connected to the pivotal points 9 of the lazy tongs 10, whose pivotal points 11 are provided with a pin which projects through the slots 12 of the plates 13, whereby the said lazy tongs may be folded to bring the said plates 13 closer together or farther apart to determine the space between the lines to be marked. These plates 13 are connected, as at 14, to the inner ends of the rivets or pins 8, the central point being the fixed point, while the point at 11 and slot 12 are the adjustable points, thus permitting with the slots 5′ of the bar 5, adjustment longitudinally of the bar 5 of the respective crayon holders or tubes 15, carrying the crayons 16 which project below the open ends thereof as clearly shown in Figs. 1, 2 and 3. In order to hold the crayons rigidly within the tubes, the spring hooks or clamps 18 are provided, the same being cut from the metal of the tube and disposed so that the cutting end 18′ thereof, is toward the lower end of the tube or ferrule 15, so that the tension of the crayon in writing, that is the pushing movement thereon will cause a gripping action of the ends 18′ of the spring hooks or clamps 18 to prevent the sliding upwardly of the respective crayons during such action.

In order to quickly adjust the lazy tong device so as to regulate the spacing of the crayons 16, the adjusting screws or knobs 19 are provided at the respective ends of the lazy tongs, as clearly shown, and by such means the said lazy tongs may be locked in the desired adjustment to prevent the slipping of the crayon holders during the manipulation of the marker.

As clearly shown in Fig. 2, it is evident that when the device is not in use, that the pivoted bar 5 may be swung so that the

crayons 16 will have their terminals presented as at 17, so that the bar 2 of the frame will protect the crayons when not in use.

As clearly shown in Fig. 3, the lazy tong device is dispensed with, and the device in this instance consists of the handle 1′, the frame 2′ with the upstanding terminals 3′, while pivoted at 4′ is the pivotal bar 5ª having rigidly connected as at 19, the upper ends of the plates 13′ which are provided with the crayon carrying ferrules or sleeves 15′ for the crayons 16′, the spring 18ª being similar to the springs 18 of the device as shown in Figs. 1 and 2. By this means it will be seen that the crayons are not transversely or longitudinally adjustable to produce lines of varying distances apart, but are in fixed relation and provide a marker which is set at all times, the principal feature of the pivoting of the bar 5′ being maintained in this structure, so that the crayons are protected when not in use, as clearly shown.

The bars 2 and 2′, are also used as a leveling medium whereby the crayons may be alined so that their marking ends will be in the same plane.

From the foregoing description taken in connection with the drawings, it is evident that when manipulating the device, the parts will assume the position as shown in Fig. 1, and by reason of the fact that the ends of the bars 5 and 5′ are provided with the projections 6, the pins 7 will limit the movement thereof, so that the same will be locked in the position as shown in Fig. 1 to present the crayons so that any pulling movement upon the handle 1 will produce the desired marking effect without collapsing or folding the marker.

By reason of the crayon fingers or sleeves having the spring devices, it is evident that the crayons are held properly therewithin and as may be readily moved manually to project at the desired distance.

By making the bars 5 and 5′ pivoted, it is evident that the ends of the crayons when not in use are protected by the frame 2 and that the device will occupy a minimum amount of space and will be ever ready for use.

What is claimed is:

1. In a device of the class described, a handle carried frame having spaced terminals, a bar pivotally connected to the terminals of said frame, means for limiting the pivotal movement thereof, and a plurality of crayon holding devices carried in spaced relation upon said pivotal bar and disposed to be thrown into and out of the plane of the connections of the terminals of the frame.

2. In a device of the class described, a handle carried frame having two spaced terminals, a bar pivotally connected to the terminals of said frame, means for limiting the pivotal movement thereof, a plurality of crayon holding devices carried in spaced relation upon said pivotal bar and disposed to be thrown into and out of the plane of the terminals and the connecting portion of the frame, and means for adjusting said crayon carrying devices with relation to each other.

3. A device of the class described, comprising a handle, a U-shaped frame carried by said handle, the portion connected to the handle being projected in opposite directions therefrom on a straight line, a bar pivotally connected between the terminals of said frame, a plurality of crayon carrying devices carried by said bar, said devices being adapted to be swung into and out of the plane of the straight connection of the frame, and means for holding the pivotal bar and crayon carrying devices when out of alinement with the frame.

4. A device of the class described, comprising a handle, a U-shaped frame carried by said handle, the portion connected to the handle being projected in opposite directions therefrom on a straight line, a bar pivotally connected between the terminals of said frame, a plurality of crayon carrying devices carried by said bar and adapted to be swung into and out of alinement with the straight connection of the frame, and means for holding the pivotal bar and crayon carrying devices when out of the plane of the frame, said crayon devices being laterally adjusted with relation to each other and longitudinally with relation to said pivotal bar.

5. A device of the class described, having a U-shaped frame, a handle carrying the same, a bar pivotally connected between the terminals of said frame and provided with elongated slots through the body thereof, a lazy tongs having all, but one of the lower pivotal points thereof mounted for sliding movement within the slots of the bar, the center pivot of the lazy tongs being rigidly connected to said bar, and a plurality of crayon carrying devices carried by said lazy tongs, means for locking the lazy tongs in adjusted position, said crayon devices being of such a length as when the lazy tongs are collapsed to have their ends within the U-shaped frame.

6. A device of the class described, having a U-shaped frame, a handle carrying the same, a bar pivotally connected between the terminals of said frame and provided with elongated slots through the body thereof, a lazy tongs having the pivotal points thereof mounted for sliding movement within the slots of the bar, the center pivot of the lazy tongs being rigidly connected to said bar, a plurality of crayon carrying devices carried by said lazy tongs, means for locking the lazy tongs in adjusted position, said crayon devices being of such a length as

when the lazy tongs are collapsed to have their ends within the U-shaped frame, and means for limiting the pivotal movement of the bar when in marking position.

7. In a device of the class described, a U-shaped frame formed with a flat connection between its terminals, a bar pivotally connected to the terminals of said frame, means for limiting the pivotal movement thereof, a plurality of crayon holding devices carried in spaced relation upon said pivotal bar and disposed to be thrown into and out of the plane of the flat connection of the frame, and a spring grip carried by each crayon holding device for locking the crayons against upward movement.

8. In a device of the class described, a U-shaped frame formed with a flat connection between the terminals thereof, a bar pivotally connected to the terminals of said frame, means for limiting the pivotal movement thereof, a plurality of crayon holding devices carried in spaced relation upon said pivotal bar and disposed to be thrown into and out of the plane of the flat connection of the frame, means for adjusting said crayon carrying devices with relation to each other, and a spring grip carried by each crayon holding device for marking the crayons against upward movement.

9. A device of the class described, comprising a handle, a U-shaped frame carried by said handle, the portion connected to the handle being projected in opposite directions therefrom on a straight line, a bar pivotally connected between the terminals of said frame, a plurality of crayon carrying devices carried by said bar and adapted to be swung into and out of the plane of the straight connection of the frame, means for holding the pivotal bar and crayon carrying devices when out of alinement with the frame, and a spring grip carried by each crayon holding device for locking the crayons against upward movement.

10. A device of the class described, comprising a handle, a U-shaped frame carried by said handle, the portion connected to the handle being projected in opposite directions therefrom on a straight line, a bar pivotally connected between the terminals of said frame, a plurality of crayon carrying devices carried by said bar and adapted to be swung into and out of the plane of the straight connection of the frame, means for holding the pivotal bar and crayon carrying devices when out of alinement with the frame, said crayon carrying devices being longitudinally adjustable with relation to each other upon said pivotal bar, and a spring grip carried by each crayon holding device for locking the crayons against upward movement.

11. A device of the class described, having a U-shaped frame, a handle carrying the same, a bar pivotally connected between the terminals of said frame and provided with elongated slots through the body thereof, a lazy tongs having all but one of the lower pivotal points thereof mounted for sliding movement within the slots of the bar, the center point of the lazy tongs being rigidly connected to said bar, a plurality of crayon carrying devices carried by said lazy tongs, means for locking the lazy tongs in adjusted position, said crayon devices being of such a length as when the lazy tongs are collapsed to have their ends within the U-shaped frame, and a spring grip carried by each crayon holding device for locking the crayons against upward movement.

12. A device of the class described, having a U-shaped frame, a handle carrying the frame, a bar pivotally connected between the terminals of said frame and provided with elongated slots through the body thereof, a lazy tongs having the pivotal points thereof mounted for sliding movement within the slots of the bar, the center point of the lazy tongs being rigidly connected to said bar, a plurality of crayon carrying devices carried by said lazy tongs, means for locking the lazy tongs in adjusted position, said crayon devices being of such a length as to when collapsed to have their ends within the U-shaped frame, means for limiting the pivotal movement of the bar when in marking position, and a spring grip carried by each crayon holding device for locking the crayons against upward movement.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

BYRON E. GREEN.

Witnesses:
M. ANGELL,
C. F. ENGLERT.