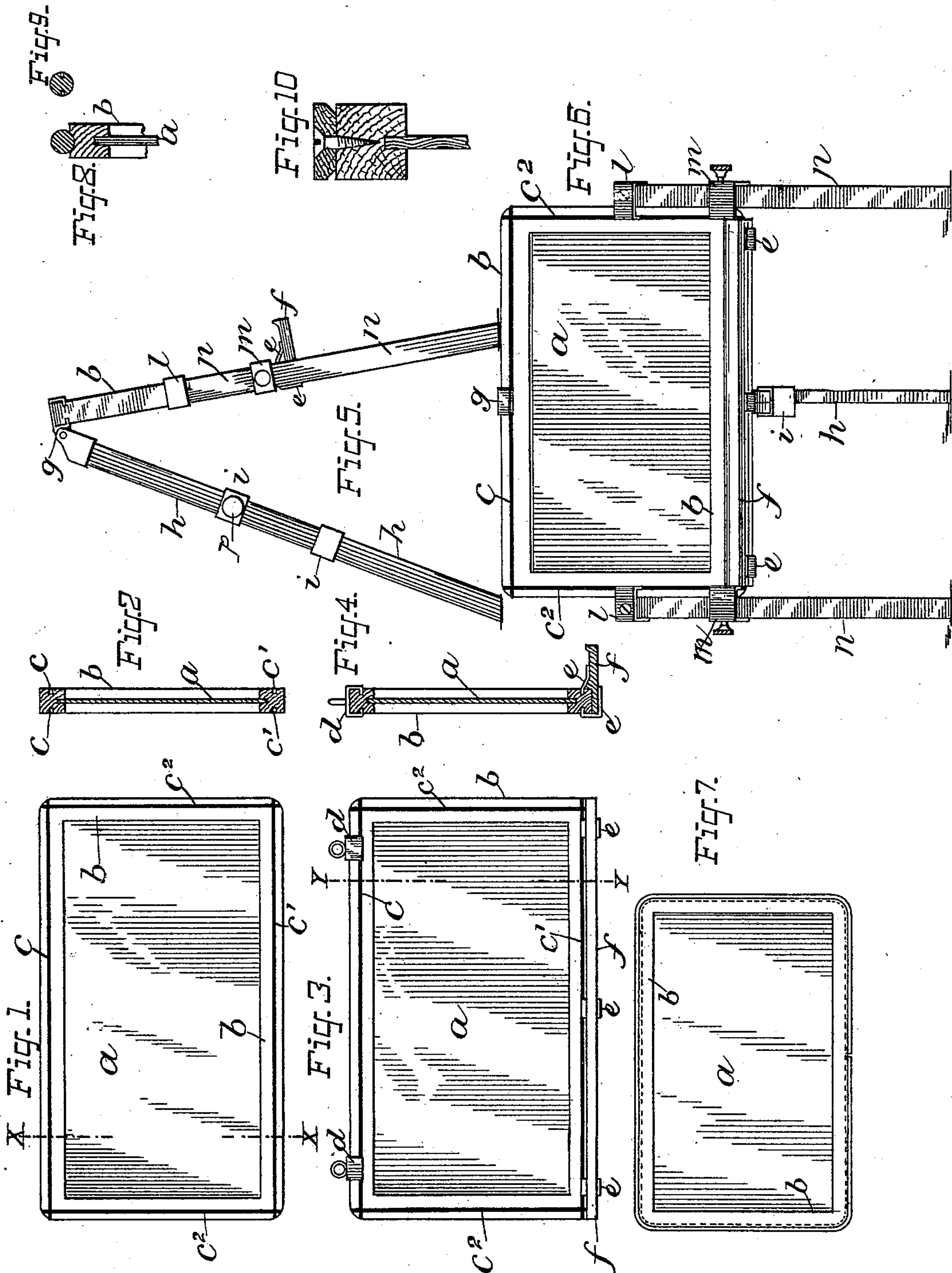


(No Model.)

F. K. HICKOK.
BLACKBOARD.

No. 515,335.

Patented Feb. 27, 1894.



Witnesses
R. H. Gaepes
J. Jordan

Inventor
Franklin K. Hickok
By *J. H. Mudd* Attorney

UNITED STATES PATENT OFFICE.

FRANKLIN K. HICKOK, OF NEW YORK, N. Y.

BLACKBOARD.

SPECIFICATION forming part of Letters Patent No. 515,335, dated February 27, 1894.

Application filed May 10, 1893. Serial No. 473,667. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN K. HICKOK, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Blackboards, of which the following is a specification.

My invention relates to improvements in blackboards of which a full and clear description will be given hereinafter.

My invention consists of the combination of certain mechanical devices and conformation whereby blackboards usually used for schools may be so arranged that they could be either suspended upon hooks or hangers, or they may be made to operate as a portable and adjustable stand. These devices are so made that they come within the dimensions of the blackboard when packed for transportation.

The invention also consists of a removable chalk trough, the latter of which is adapted to engage with either the end or sides forming the frame of the blackboard. It will therefore be obvious that blackboards now in existence may be made to conform with this change without changing its conformation to a degree of disfiguration; thus producing a compact and interchangeable piece of furniture that will overcome the objections heretofore made to similar devices that occupied considerable space when packed for transportation, and which were also considered flimsy in their construction.

In the drawings, Figure 1 represents a blackboard having its frame provided with a groove extending clear across and parallel with the ends and sides thereof. Fig. 2 is a transverse section taken on the line X. X. of Fig. 1. Fig. 3 represents the blackboard having adjustable hangers mounted on the upper portion of the frame thereof and a removable chalk trough mounted on the lower portion. Fig. 4 is a transverse section taken on the line Y. Y. of Fig. 3; in this view the adjustable hangers are represented as clips a portion of which engages with the grooves as shown. Fig. 5 represents an end elevation of the same blackboard but transformed into an adjustable stand. Fig. 6 is a front elevation of Fig. 5, in which the operation of the device is clearly

illustrated. Fig. 7 represents a modification in which the groove upon the frame of the blackboard is dispensed with and a continuous wire mounted upon the edge of the frame serving the same purpose as the clips may be made to engage with the wire just a trifle below the horizontal center thereof. Fig. 8 represents an enlarged transverse section of a portion of the frame shown in Fig. 7. Fig. 9 represents the wire having an indentation or groove made therein; and, Fig. 10 represents another modification in which a strip is fastened upon the outer edge of the blackboard frame, said strip having a portion of its lower corners cut away in order to form a channel for the clips to play.

I do not wish to confine myself to these exact shapes or conformations, as I may change the designs thereof in many other ways without departing from the spirit of my invention.

Similar letters refer to similar parts throughout the drawings in which—

a represents the blackboard mounted in the frame *b*, the latter of which being provided with the grooves *c*, *c'* and *c''*, the former adapted in this case to receive the inwardly projecting ears of the adjustable hangers or clips *d*, and *c'* adapted to receive the ends of the clips *e* carrying the chalk trough *f*. In this condition the device is in readiness for suspension from hooks or pegs.

In Figs. 5 and 6 a change is made; the hangers or clips *d* are removed and the hinged clip *g* inserted into the grooves; a portion of the hinged clip *g* is provided with an adjustable rod *h* or back support and is made in separate parts but connected by bands *i* in a manner that will enable it to operate lithoscopically thus obtaining any degree of adjustability. The vertical grooves *c''* arranged in the ends of the frame of the blackboard are adapted, in this case, to receive the clips *l*, *m*; the former is rigidly secured to one end of the standard or leg *n*, while the latter may move freely upon it until the desired height shall have been obtained, when it is made fast by the tightening screw *p*. In this condition the blackboard serves as an adjustable and portable stand.

It will be obvious that the simplicity and utility to which the invention presents itself

will undoubtedly be a great boon to institutions using the same, and desirable to manufacturers when they realize its compactness when ready for transportation.

5 I am aware that black-boards have heretofore been provided with interchangeable devices. I am also aware that slate frames have been provided with grooves upon their planes at a distance from the edges thereof, but I
10 am not aware that black-boards having a groove upon the planes of its frame and extending lengthwise therewith, and to the edges thereof, and adapted to receive interchangeable devices as herein described.

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

1. In a black-board, the combination substantially as shown and described, consisting
20 of the black-board *a*, the frame *b* provided with the grooves *c*, *c'*, and *c''*, the adjustable hangers or clips *d*, the latter provided with inwardly projecting ears, the removable and adjustable chalk trough *f* and the clips *e* se-

cured to said chalk trough, the whole forming a complete device. 25

2. In a black-board, the combination consisting of the frame thereof, having longitudinally and vertically arranged grooves on the planes thereof, the removable adjustable standard or rear guard, the clips thereof
30 engaging with one portion of the said frame, the removable and telescopically adjustable standard or legs, the clips of the latter secured to or engaging with the grooves on either end
35 of said frame, and a removable and adjustable chalk trough, the clips of the latter mounted in the grooves on the lower portion of the said frame, substantially as shown and described. 40

In testimony whereof I hereunto sign my name, in the presence of two subscribing witnesses, this 9th day of May, 1893.

FRANKLIN K. HICKOK.

Witnesses:

R. H. GALPEN,
J. J. JORDAN.