(No Model.)

B. F. E. JAHR & R. H. BOECHER.

EDUCATIONAL APPLIANCE.

No. 445,782. Patented Feb. 3, 1891.

Fig. 3.

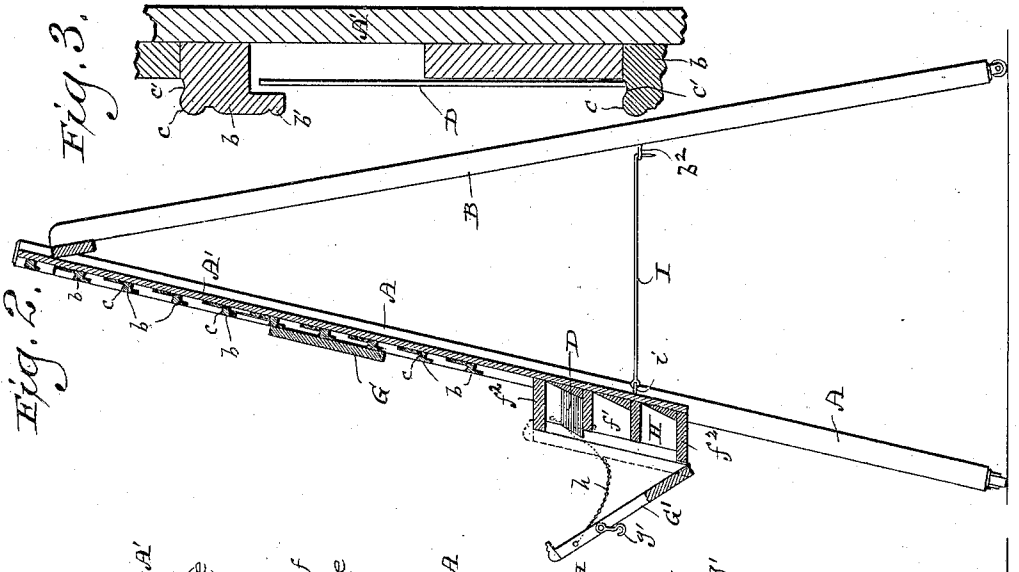


Fig. 2.

Fig. 1.

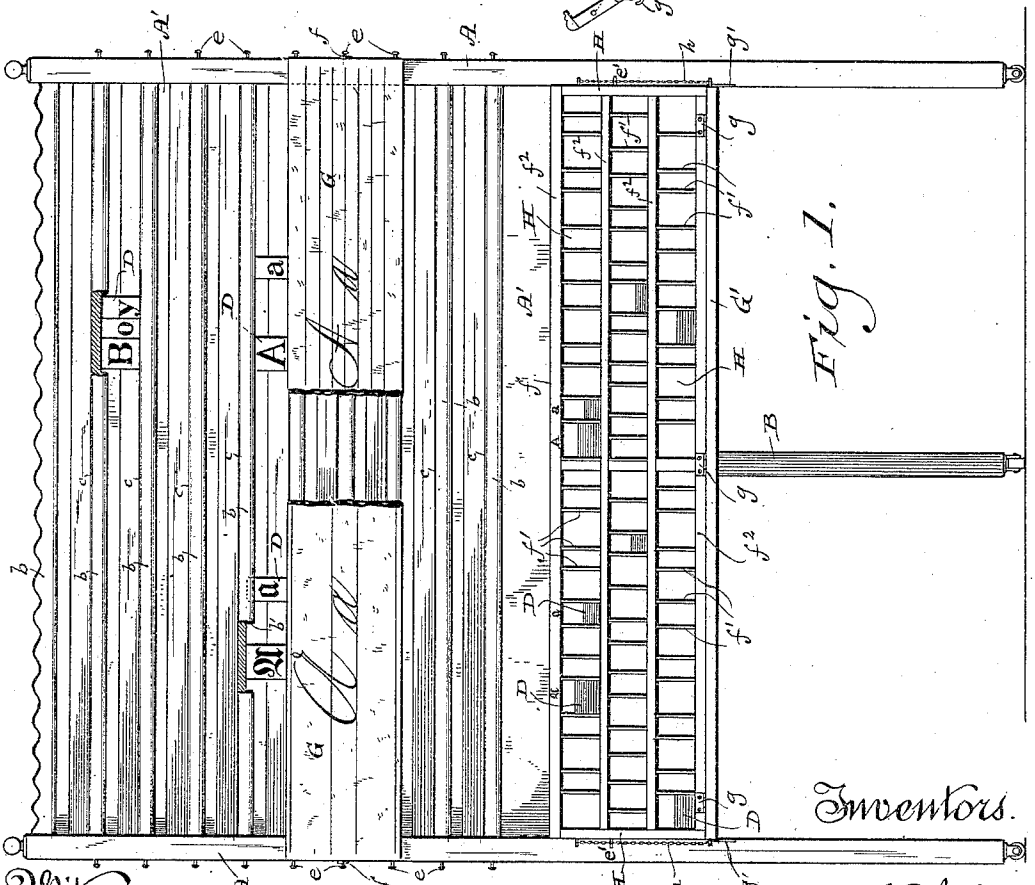
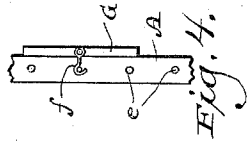


Fig. 4.



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EDUCATIONAL APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 445,782, dated February 3, 1891.

Application filed September 1, 1890. Serial No. 363,608. (No model.)

To all whom it may concern:

Be it known that we, BERNHARD F. E. JAHR, of Milwaukee, in the county of Milwaukee and State of Wisconsin, and ROBERT H. BOECHER, of Chicago, in the county of Cook, and in the State of Illinois, respectively, have invented certain new and useful Improvements in Educational Appliances; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention relates to appliances for educational purposes; and the invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described, and pointed out in the appended claims.

In order that our invention may be fully understood, we will proceed to describe it, with reference to the accompanying drawings, in which—

Figure 1 is a front elevation of our improved educational appliance. Fig. 2 is a side elevation of the same partially in vertical cross-section. Fig. 3 is a detached sectional view of a portion of the board with one of our removable letters in position thereon. Fig. 4 is a detached side elevation of a portion of the supporting-frame, showing the means for attaching the exhibition-board thereto.

The object of our invention is to produce a convenient and easily-portable structure by means of which the translation of various languages can be readily taught to children or other beginners, and this result we accomplish by virtue of the construction which we will now proceed to describe.

Referring to the drawings, A, A′, and B designate a frame, which is constructed in easel form. The legs A A of said frame carry cross-pieces *b*, which are formed with downwardly-extending flanges *b′*. Interposed between these cross-pieces *b* are ledges *c*, which are grooved, as shown at *c′*, to receive the lower edges of lettered cards D, the upper edges of which are retained by the flanges *b′* of the cross-pieces *b*. The arms A A of the frame are provided with pins or nails *e*, which receive hooks *f*, which are secured to the ends of a reversible board G, upon opposite sides of which may be inscribed alphabetical characters of different languages—such, for example, as English and German. The lower portion of the frame-pieces A A carry longitudinal offset ledges f^2, which are divided into compartments by vertical partitions *f′*, and the compartments thus formed are designed to receive the various cards D. A front piece G′ is hinged at its lower edge, as shown at *g*, to the outer portion of the lower ledge f^2 of the offset ledges, and this front piece carries at either end a hook *g′*, which engages with the adjacent pins or nails *e′*, so as to retain the front piece G′ in closed condition. A chain, cord, or other flexible connection *h* connects the ends of the front piece G′ with the side pieces H of the offset-ledges f^2 f^2, and thus retains said front piece in proper position when opened. Hooks I, which are pivoted at *i*, engage at their free hooked ends with eyes b^2 upon the leg B of the supporting-frame, and thus retain the frame in rigid position.

In using this device the letter-cards of one language are placed between the cross-pieces *b*, either to express words, sentences, or more or less advanced examples for the pupils' observation, and then the movable board G is transferred in position, so as to be under the characters thus placed, and after the pupils have endeavored to copy the characters their proper rendition is shown by reversing the board G. Thus it will be seen that we have devised a simple and effectual apparatus for instructing pupils in the learning of different languages.

In the drawings we have shown only three horizontal rows of the boxes or compartments which contain the letters; but in practice we usually employ at least five such rows, or more, if necessary.

The reversible board G is shown broken away in Fig. 1, so as to show the opposite sides thereof. It will be noted that the portion of the board G shown at the left in said figure has German letters written thereon and has only two horizontal spacing-lines, while the portion of the board G shown at the right in said figure has English letters written thereon and shows a greater number of spacing-lines, the latter being especially adapted for the Spencerian-penmanship system. These spacing-lines are a very considerable assistance to the student in writing out the letters

in script (either English or German) according to the various rules of penmanship.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. An improved appliance for educational purposes, consisting of an easel-shaped frame the front portion of which is provided with cross-pieces for receiving alphabetical characters, in combination with a reversible board removably connected to said frame and provided upon its opposite faces with spacing-lines arranged at different widths apart on the different sides, substantially as set forth.

2. An improved educational appliance consisting of an easel-shaped frame having cross-pieces to receive alphabetical characters and vertical series of pins or nails projecting from the side arms of said frame, in combination with a reversible board having hooks pivoted to its side edges for engagement with said pins or nails, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands, at Milwaukee, in the county of Milwaukee and State of Wisconsin, and at Chicago, in the county of Cook and State of Illinois, respectively, each in the presence of two witnesses.

BERNHARD F. E. JAHR.
ROBERT H. BOECHER.

Witnesses to signature of B. F. E. Jahr:
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