H. R. FRY.

School-Desk.

No. 164,160. Patented June 8, 1875.

Fig. 1.

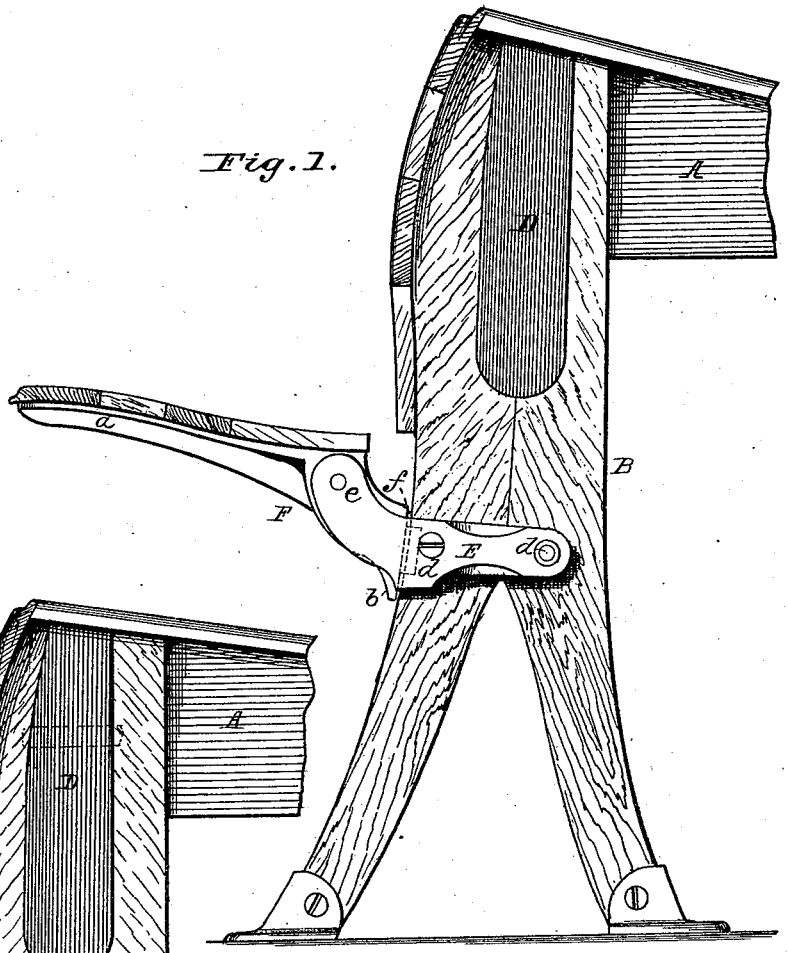


Fig. 2.

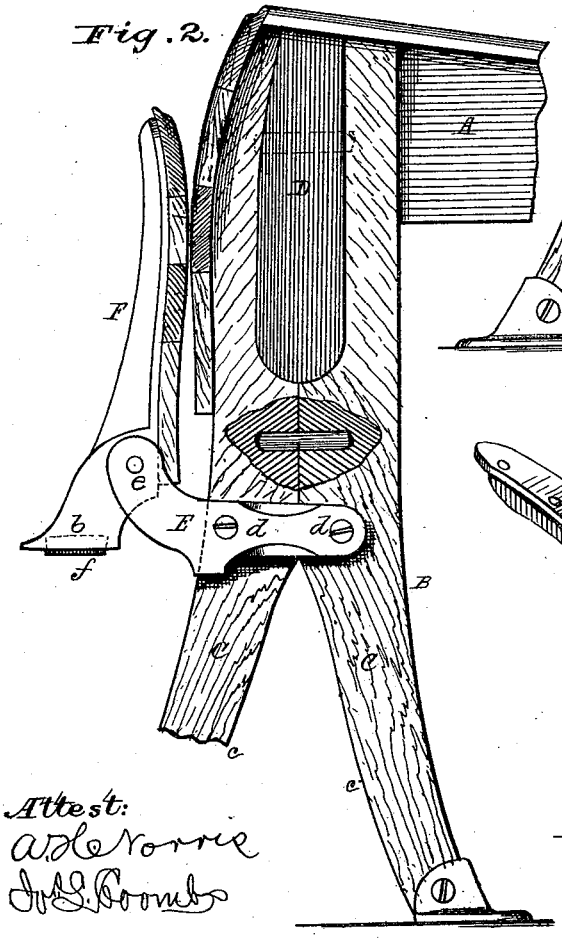
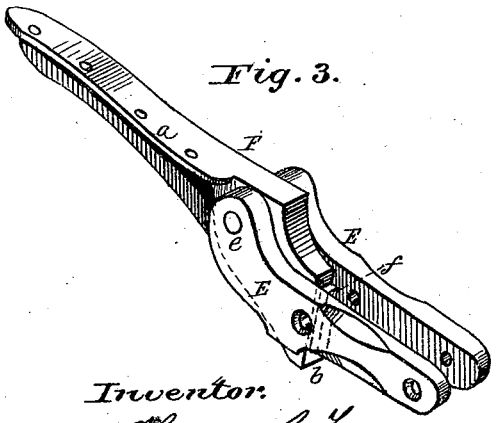


Fig. 3.



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UNITED STATES PATENT OFFICE.

HENRY R. FRY, OF MARION, INDIANA.

IMPROVEMENT IN SCHOOL-DESKS.

Specification forming part of Letters Patent No. **164,160**, dated June 8, 1875; application filed April 16, 1875.

To all whom it may concern:

Be it known that I, HENRY R. FRY, of Marion, in the county of Grant and State of Indiana, have invented certain new and useful Improvements in School-Desks, of which the following is a specification:

This invention relates to certain improvements in desks, such as are designed for use in schools or halls, although applicable to desks used for general business purposes.

The object of the invention is to simplify and improve the end pieces or standards which support the desk, the seat, and its back, so as to impart to such end pieces great rigidity and firmness; and, further, to improve upon the means generally employed for connecting the seat with the standards which support the back of said seat.

Each end piece for supporting a desk has hitherto been constructed of skeleton iron-work, or of a solid piece of timber divided longitudinally for a certain distance to form two members, which, after being steamed, are bent outwardly from each other, so that each member forms a leg or support.

When made of iron the cost of the desk is enhanced to such an extent as to embarrass its introduction into general use; and, further, unless the parts are made of heavy material, the strain exerted during usage is liable to break or injure the same. When made of a single piece of timber of a width sufficient to support at its top the desk proper, while its lower end is divided longitudinally to form two members, and such parts steamed and bent outwardly to form a supporting-leg, or secure a proper basis, the parts so steamed and bent are liable in course of time to warp and become distorted, and by such, even of the slightest nature, the firmness and steadiness of the desk are impaired, and its utility to some extent lessened.

Having stated briefly the object of my invention, and the state of the art as far as known by me, I will now state what constitutes my invention.

It consists in constructing the end piece or support of a desk of two separate and independent pieces or sections, each section being sawed from a piece of timber which is marked from a prepared pattern, so that when such pieces are sawed into the desired shape for supporting the desk and the back of the seat they are brought edge to edge, and connected together so as to form a close joint, the construction and arrangement being such that they are divided at their lower end to form two legs at a proper distance apart to form a broad basis for the desk to rest upon, the parting seam between the sections being concealed by a cap-plate, which serves also to impart strength and rigidity to the entire end support, and bestows upon it a neat, attractive, and finished appearance.

The invention further consists in applying metallic plates to the inner and outer sides of the standards of a desk, and pivoting between the outer ends of the same a lever, which is constructed with a foot extending in rear of its pivot, in such manner that said foot will bear against the edge of the standards, as will more fully hereinafter appear.

In the drawings, Figure 1 illustrates an end view of a school-desk with its seat in a horizontal position, the desk having on its front a seat and back, such as wherein the desk supports the seat for the desk in front of it. Fig. 2 is a similar view with the seat in a vertical position, the position it occupies when not in use. Fig. 3 is a detached view of the seat-supporting lever and its bracket.

In the accompanying drawings like letters of reference indicate corresponding parts in each figure.

Referring to the drawings, the letter A designates a desk, in the present example such as are used in schools or halls, but may be a desk of any desired construction, such as used for the ordinary business purposes. Said desk is supported upon novel and peculiarly-constructed end pieces or standards B B, each of which is made up of two independent trusses or sections, C C′, each section being sawed out from a suitable piece of lumber, approximating in form the shape and contour that it is to permanently retain.

These sections are each marked out on the lumber with the aid of a pattern, which coincides in every particular in outline with the form of each section to be made, and the pieces sawed from the lumber are brought edge to edge, and connected together by

dowel-pins, so as to form a close joint, and their construction and arrangement are such that they are divided at their lower end to form two legs, *c c*, at a proper distance apart to form a broad basis for the desk to rest upon, the parting seam between the two sections concealed by a cap-plate, D, which latter also subserves the purpose of imparting strength and rigidity to the entire end support, and, moreover, bestows a neat and finished appearance to the desk. The sections or pieces from which to make the end support are so constructed and sawed from the lumber that when brought together edge to edge the grain of the wood will run crosswise at the upper portion or top of said standard, while in the lower portion, or in that part which forms the two legs *c c*, the grain runs vertically, and it will be observed that by this means the grain of the wood at such points is not disturbed in any manner, and will permanently and always retain its original position without liability of becoming distorted or warped. To the inner and outer sides of the end supports is applied metallic castings or plates E E, which are confined in place by bolts *d* passing through the castings and the end supports, and by which means the sections forming the end supports are also firmly connected and held together, and great strength and rigidity are imparted to the end supports, due to the bracing effect of the said castings. The projecting ends of the plates form a jaw or bracket in which or to which is pivoted or hinged a lever, F, which supports and carries the seat of the desk. The long arm of this lever may be of the usual or any preferred construction, in the present instance it having a lateral flange, *a*, provided with a series of perforations, through which to pass screws in order to secure to the lever the slats comprising the seat. The rear end of the lever is extended beyond the pivotal point *e*, and the end bears or rests upon the edge or end piece of the standard or support of the desk, and thereby the downward motion of the seat is arrested, and a positive, firm, and substantial stop for the seat is provided when it has been changed from a vertical to a horizontal position.

It will be seen that the rearwardly-projecting end or foot *b* of the lever is constructed flat and with lengthened bearing-surface, which provides a broad shoulder for said lever to form a stop against the edge or end of the standard or support. In order to deaden the sound produced by the shock when the seat is lowered to a horizontal position, which is due to the rearwardly-extending foot of the lever striking the edge of the desk-standard, I provide the latter at the point where the said foot strikes with a packing or cushion, *f*, of rubber or such similar material, which effectually obviates and prevents any noise or sound which would be annoying and unpleasant. Instead of applying this cushion to the standard, it will, of course, be evident that it can be secured to the foot or end of the lever carrying the seat.

It will be also noticed that the shape of the pieces or sections to form the end pieces of the desk is made in outline the same as the pattern from which they are marked out, and by such it will be perceived that the sections permanently retain the form in which they are sawed out, the final operation being simply the dressing and finishing of the same. In this manner the positions of the fibers of the wood are not disturbed, so that the wood retains its original strength, such not being decreased, as would be the case if the wood were steamed and afterward bent into shape.

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

1. The end support of a desk constructed of two independent pieces or sections, each sawed into the desired shape, and connected edge to edge, substantially as described.

2. The metallic castings or plates applied to the inner and outer sides of the standards, in combination with the lever carrying the seat, and pivoted between said plates, and having the rearwardly-extending foot, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand.

HENRY R. FRY.

Witnesses:

JOS. L. COOMBS,

ALBERT H. NORRIS.