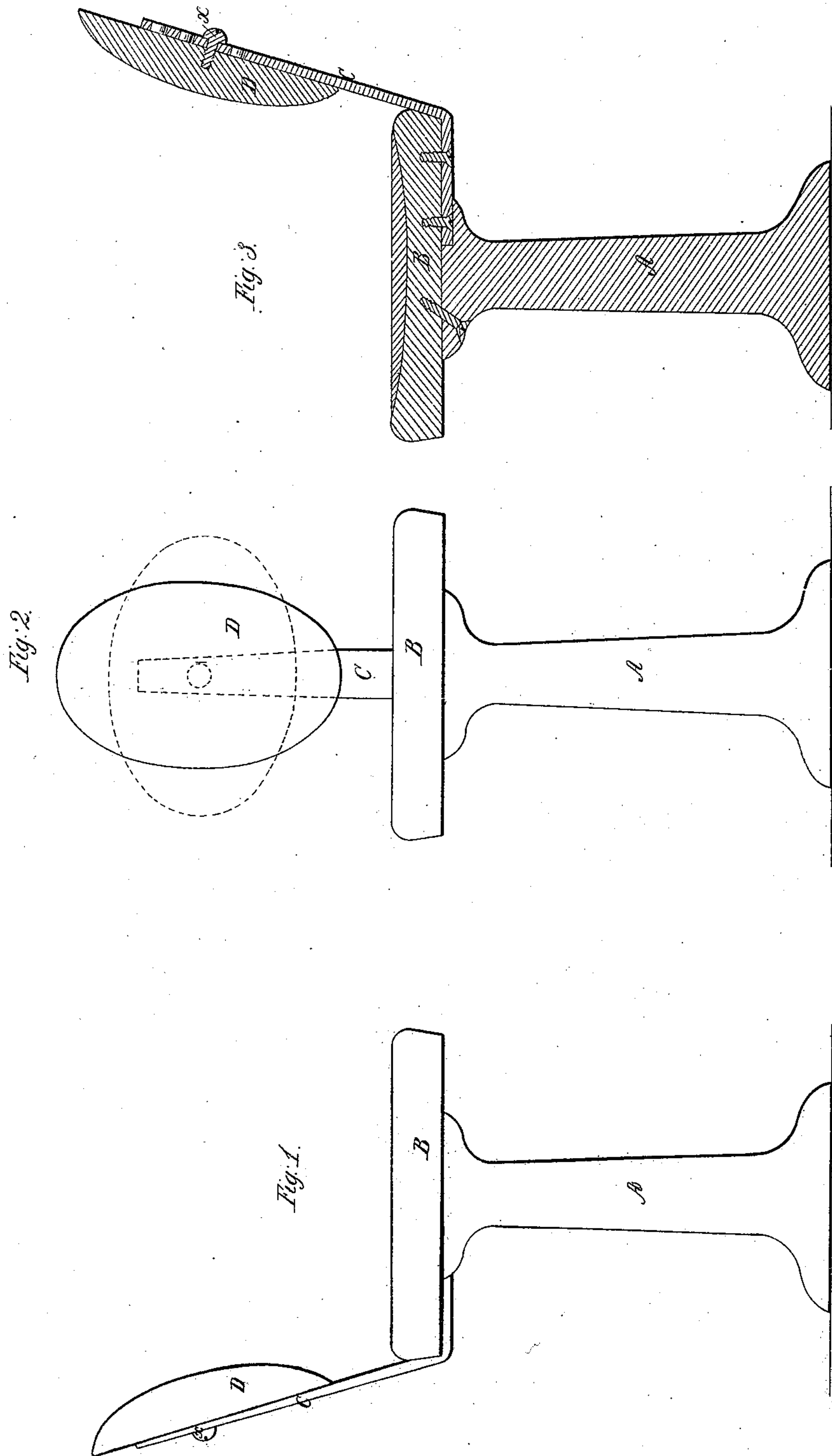


J. Fernald,

Opera Chair,

N^o 15,405.

Patented July 22, 1856.



UNITED STATES PATENT OFFICE.

JAMES FERNALD, OF BOSTON, MASSACHUSETTS.

CHAIR.

Specification forming part of Letters Patent No. 15,405, dated July 22, 1856; Reissued October 12, 1858, No. 611.

To all whom it may concern:

Be it known that I, JAMES FERNALD, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and
5 useful or Improved School-Chair; and I do hereby declare that the accompanying specification and annexed drawings fully describe and illustrate the said invention.

The objects I have had in view in my experiments, resulting in the invention of the
10 said chair, have been to produce an article which shall be beyond any chair I know of conducive to the health and easy position of any person who may be obliged to occupy
15 the same for long periods, at successive intervals, and at the same time shall be an article which can be manufactured in quantities at prices which (beyond their worth for comfort) shall commend them for use in
20 the school room, and in all public halls.

Figure 1 of the drawings represents a side elevation of my improved chair. Fig. 2 is a front view and Fig. 3 a central vertical cross section of it.

25 In the drawings above mentioned A denotes the pedestal or stand on which the seat B of the chair is to be properly fastened. Said pedestal is made of iron or other suitable material, and is intended to be screwed
30 down upon the floor of the room, where the chair is to be placed. The seat B is to be made any convenient form, either round, oblong, or square, and of a proper thickness, and is to have fastened to it and rising from
35 its back an inclined metal spring C, extending from the seat, as seen in Figs. 2 and 3. Upon the front of this spring, and at a suitable distance above the seat, the back D of the chair is applied. This back D is con-
40 structed from a flat piece of wood, turned into an oval shape, and with its front face convex, as seen particularly in Fig. 3. This back piece is to be fastened to the spring by a screw x passing through the spring into
45 the center of the back piece, said spring having several holes or a slot made through it, so that the back rest can be elevated or depressed to any convenient height above the seat. By loosening the screw the rest
50 can be turned so as to take the position represented by dotted lines in Fig. 2, or it can

be rotated any less part of a circle, so as to be presented in any inclined position, if required. The lower end of the spring is bent and extends under the seat B, to which it
55 is properly fastened. This constitutes the whole construction of my improved chair. Its advantages above others are many.

The comfort of our children during the many and tedious hours they have to spend
60 in the school room is an object which can be perhaps better promoted by the use of seats upon which they can study in an easy posture than by any other means, while the production of a good comfortable and
65 simple lecture or hall chair is a hardly less desideratum. The most of such seats or chairs in common use are not only very painful to sit in for great lengths of time, but oftentimes productive of serious injury
70 and contortions of the spine and back. The backs of such chairs are made with sharp protuberances, square corners, and stiff unyielding backs, thereby inducing the injuries spoken of, while many school chairs
75 have no backs at all, thus leaving the spine entirely unsupported and producing great weariness to the occupants. Now the changes or alterations I have effected in the general form of such chairs, though very
80 simple, have produced a much better, easier and cheaper chair than any I have ever seen. The convex back, being made so as to be adjusted at the proper height, is caused to
85 fit against the spine, just in the position where support is most wanted, in such manner as shall leave the shoulders free to be thrown back and the chest brought forward, while by making it in an oval form and to
90 be rotated as described support may be obtained across the back, or for the shoulders when necessary. The spring C is made of such flexibility as will allow the rest piece to yield by gentle pressure of the back
95 against it.

As will be seen from the description, the whole chair (excepting the fastening screws) is composed of but four pieces, the pedestal, the seat, the spring and the back, so that the seat can be manufactured at little cost,
100 and being put together forms a very neat and symmetrical chair, not at all liable to

get out of order and free from projecting corners and the other evils above alluded to.

I claim—

5 The oval back rest D, or its equivalent, when made to rotate in manner, and for the purpose essentially as described.

In testimony whereof I have hereto set

my signature this twenty first day of February, A. D. 1856.

JAMES FERNALD.

Witnesses:

FRANCIS B. HAYES,
FRANCIS GOULD.

[FIRST PRINTED 1912.]