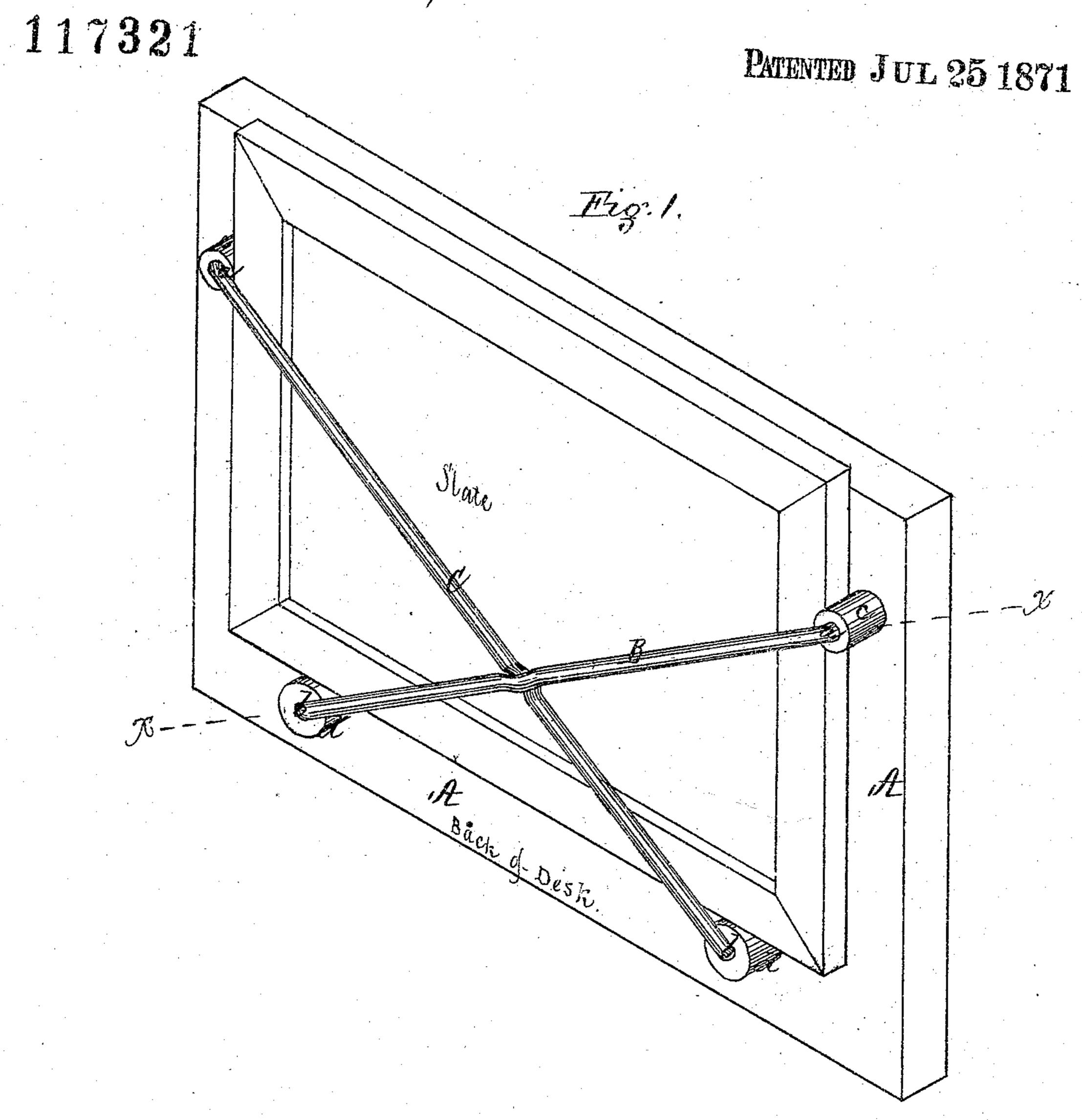
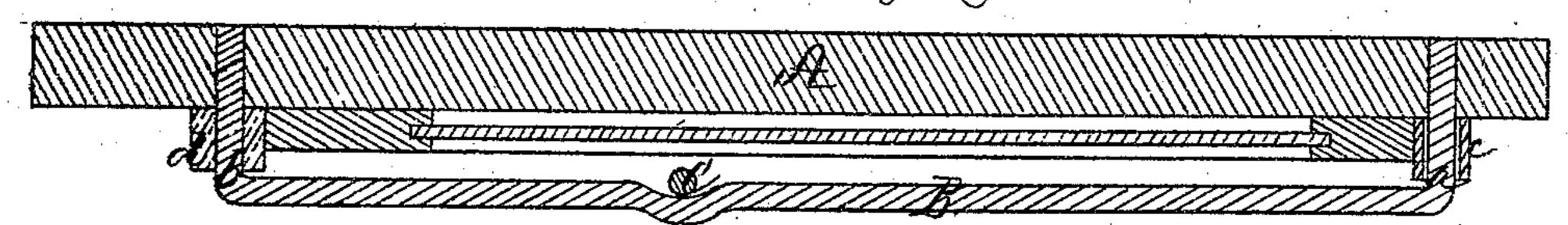
Tames K. Otis' Improved State and Book Rack.



Section on D. B. of The 1.



Lames H. Olis Inventor,

## UNITED STATES PATENT OFFICE.

JAMES K. OTIS, OF EAST CAMBRIDGE, MASSACHUSETTS.

## IMPROVEMENT IN BOOK-RACKS.

Specification forming part of Letters Patent No. 117,321, dated July 25, 1871.

To all whom it may concern:

Be it known that I, James K. Otis, of East Cambridge, in the county of Middlesex and State of Massachusetts, have invented an Improved Slate-and-Book Rack, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view illustrating my

invention. Fig. 2 is a section.

The object of my present invention is to provide, for schools, churches, public buildings, &c., a simple and convenient rack in which to deposit slates and books when not required for use; and consists in a pair of cross-bars secured to the front, back, or side of a desk, pew, settee, or other piece of furniture, the upper ends of the cross-bars being provided with friction-rollers and the lower ends with elastic cushions, whereby the operation of entering or removing the book is greatly facilitated, and the noise incident to the use of racks as heretofore constructed is entirely avoided.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it

out.

In the said drawing, A represents the back of a pew or the side of a school-desk, into which the ends of two cross-bars or rods, B C, are secured, each bar being bent near its ends so as to form horizontal shoulders or portions a a b b, upon the upper portions a a of which loosely turn friction-rollers c c, for while the lower portions b b are provided with elastic cushions d d,

the friction-rollers serving to assist or facilitate in the removal from or entrance of the book or slate within the rack, and the elastic cushions serving to break the fall of the book or slate, thus preventing the noise ordinarily experienced in using racks as heretofore constructed. The bars B C are each struck up or provided with a "gain" at a point between its center and its lower end, by which means the place where they cross each other, and their relative position to the back or side of the desk or pew, is regulated in a ready manner, the two bars, when the gains are fitted or locked together, lying flush or in the same plane.

A rack constructed as above described is not only compact, but may be applied at a very trifling expense, and may occupy any position where convenience would suggest, the book or slate being close at hand when required. It is evident that my improved rack may be applied to settees and chairs or other pieces of furniture for schools, churches, private or public buildings, without departing from the spirit of my in-

vention.

What I claim as my invention, and desire to secure by Letters Patent, is—

The cross-bars B C, with their friction-rollers c c and elastic cushions d d, substantially as and for the purpose described.

Witness my hand this 19th day of June, A. D. 1871.

JAMES K. OTIS.

Witnesses:

N. W. STEARNS, W. J. CAMBRIDGE.