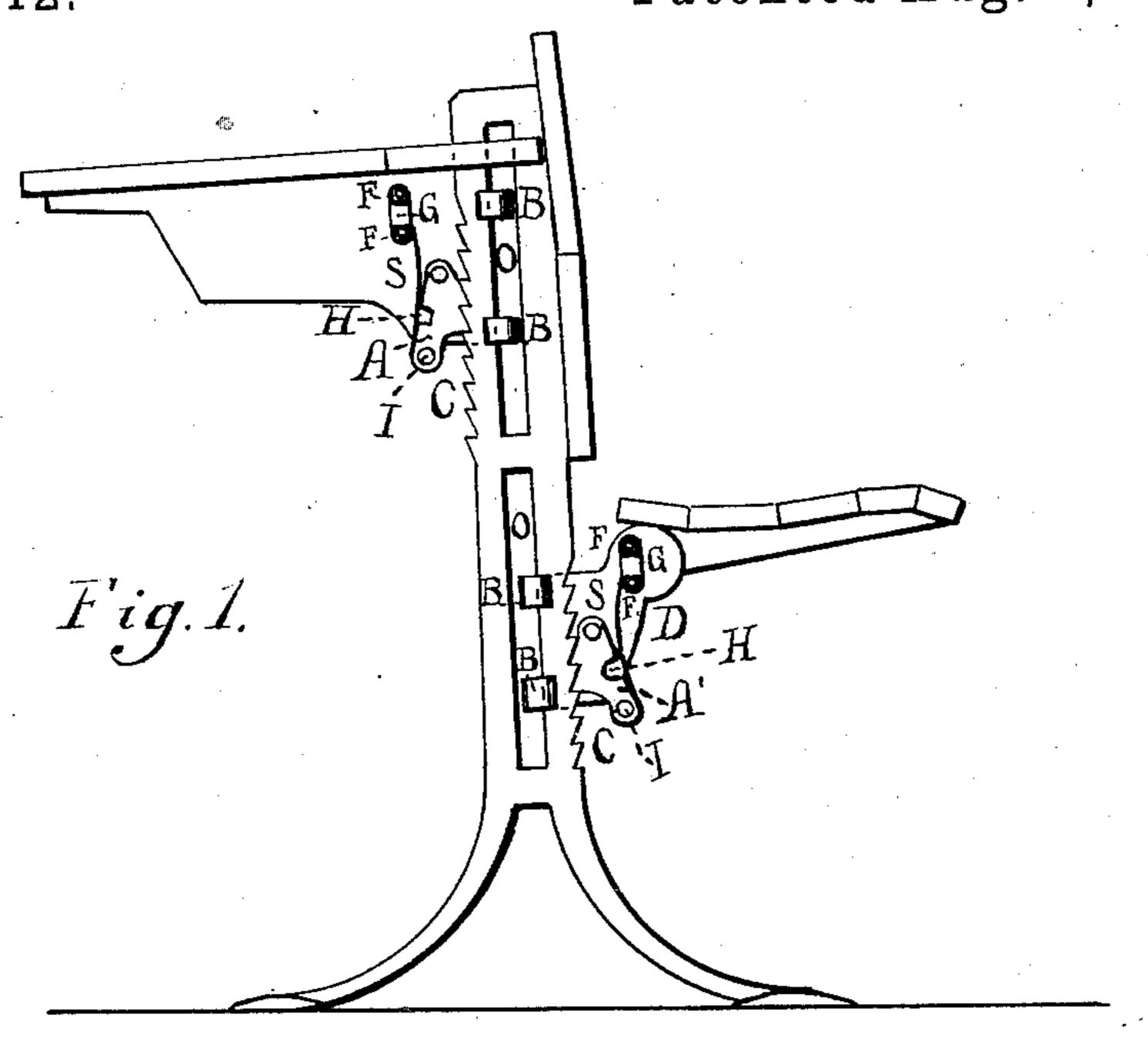
(No Model.)

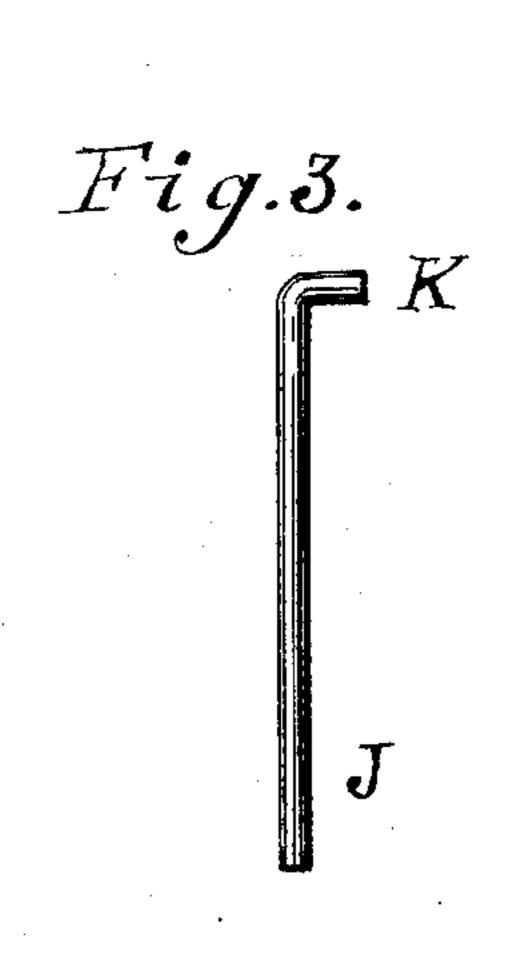
M. B. GARBER & J. W. McELVAIN.

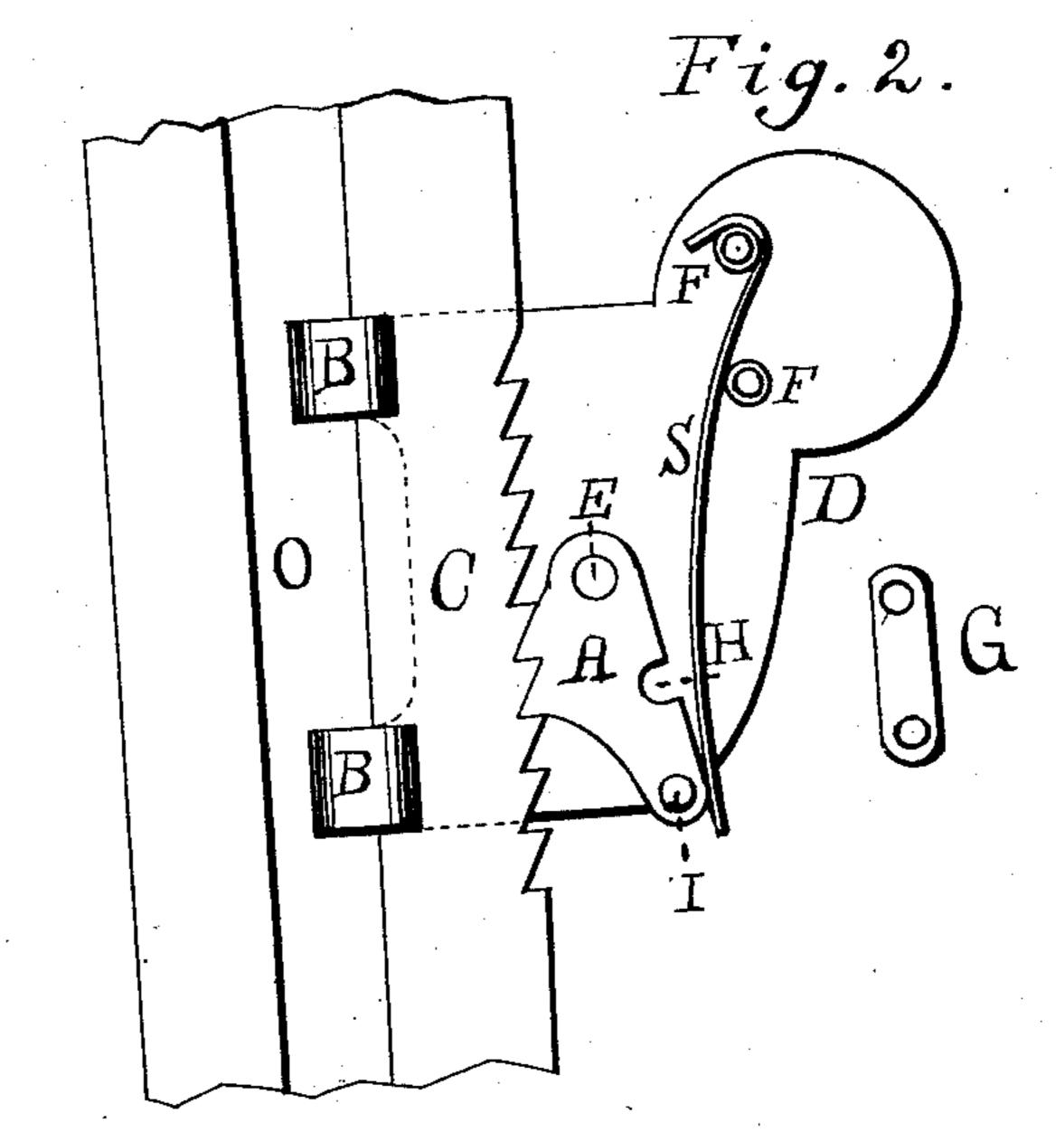
SCHOOL DESK.

No. 367,512.

Patented Aug. 2, 1887.







Witnesses;-

D. F. Talbott.

Inventors;-

Michael B. Garber. James H. McElmin

United States Patent Office.

MICHAEL B. GARBER, OF SPRINGFIELD, AND JAMES W. McELVAIN, OF AUBURN, ILLINOIS.

SCHOOL-DESK.

SPECIFICATION forming part of Letters Patent No. 367,512, dated August 2, 1887.

Application filed October 14, 1886. Serial No. 216,200. (No model.)

To all whom it may concern:

Be it known that we, MICHAEL B. GARBER and JAMES W. MCELVAIN, citizens of the United States, residing at Springfield and Auburn, respectively, in the county of Sangamon and State of Illinois, have invented a new and useful Improvement in School Desks, of which the following is a specification.

Our invention relates to school desks used by young and middle-aged pupils in common,

private, and public schools.

The object of our invention is to raise and lower the seat and top of a school-desk by means of a device or an attachment to adjust them to pupils of all ages and size. We attain this object by an apparatus illustrated in the accompanying drawings, in which—

Figure 1 is an end elevation of a desk, showing the manner in which the attachment is made. Fig. 2 is an enlarged view of the seat attachment, showing the way in which it is constructed and used. Fig. 3 is a small lever-rod with which the seat or top is raised and

lowered.

The desk standards are cast, as shown in Fig. 1, with ratchet notches at C C. The seat and top are held in place at any height set, by means of the apparatus more clearly illustrated in Fig. 2. The ratchet A, hinged to the solid pivot E, swings so as to fit into the notches C, while the grooved shoulders or lugs BB, sliding in the opening O of the cast standard, hold the attachment rigidly in place at any point. The strong steel spring S, set between the solid posts F F, acts against the lower end of the ratchet A and holds it firmly into the notches C, thus preventing any looseness or movement of the attachment while in

use. The thin plate G fits over the posts F F, and is held in place by nuts turned on their 40 ends to keep the spring from slipping out.

Fig. 2 shows the casting D, to which the seat. is hinged, and the above-described apparatus is attached to it. The apparatus for raising and lowering the desk-top is constructed in 45 exactly the same manner and is attached to

the casting of the desk-top.

The seat or top is raised or lowered by means of the small lever-rod represented by Fig. 3. The end J is taken in the hand and the bent 50 end K is set in the notch H of the ratchet A. The lever-arm is brought against the small post I, and the ratchet A is swung forward, bending the spring S, and throwing the catches out of the notches C, the seat or top may be 55 raised or lowered with ease.

We are aware that prior to our invention vertically-adjustable school-desks have been made and patents granted therefor. We therefore do not claim this feature, broadly; but to

What we do claim as new and useful, and desire to secure by Letters Patent, is—

In a school-desk, the combination of the cast standards with the openings O O and the notches C C, the pawl A, the grooved lugs B 65 B, and the spring S, with plate G, for adjusting the seat and top vertically, substantially as described, and for the purposes set forth.

In testimony whereof we set our hands in the presence of two witnesses.

MICHAEL B. GARBER.
JAMES W. MCELVAIN.

Witnesses:

B. F. TALBOTT,

D. RUNYON.