

(No Model.)

T. C. OAKMAN.
MITER BOX.

No. 455,351.

Patented July 7, 1891.

Fig. 1.

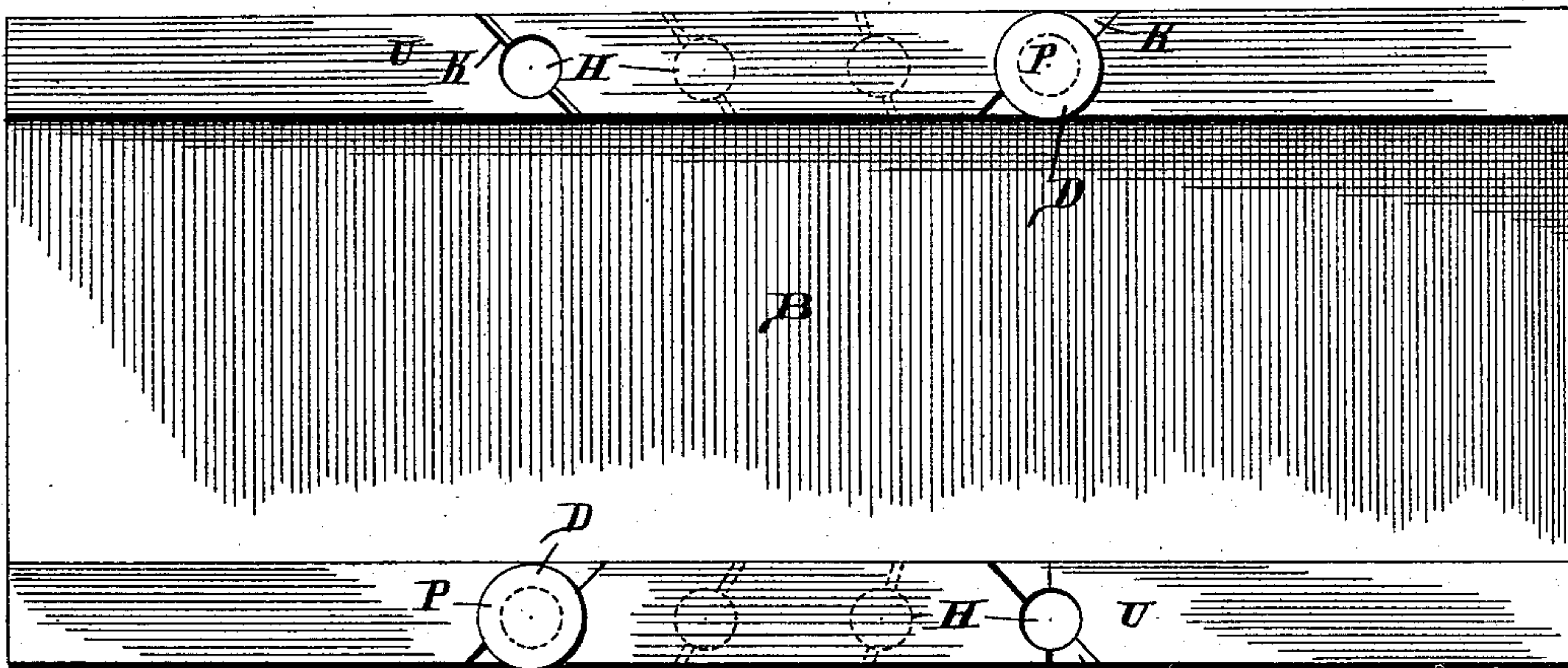


Fig. 2.

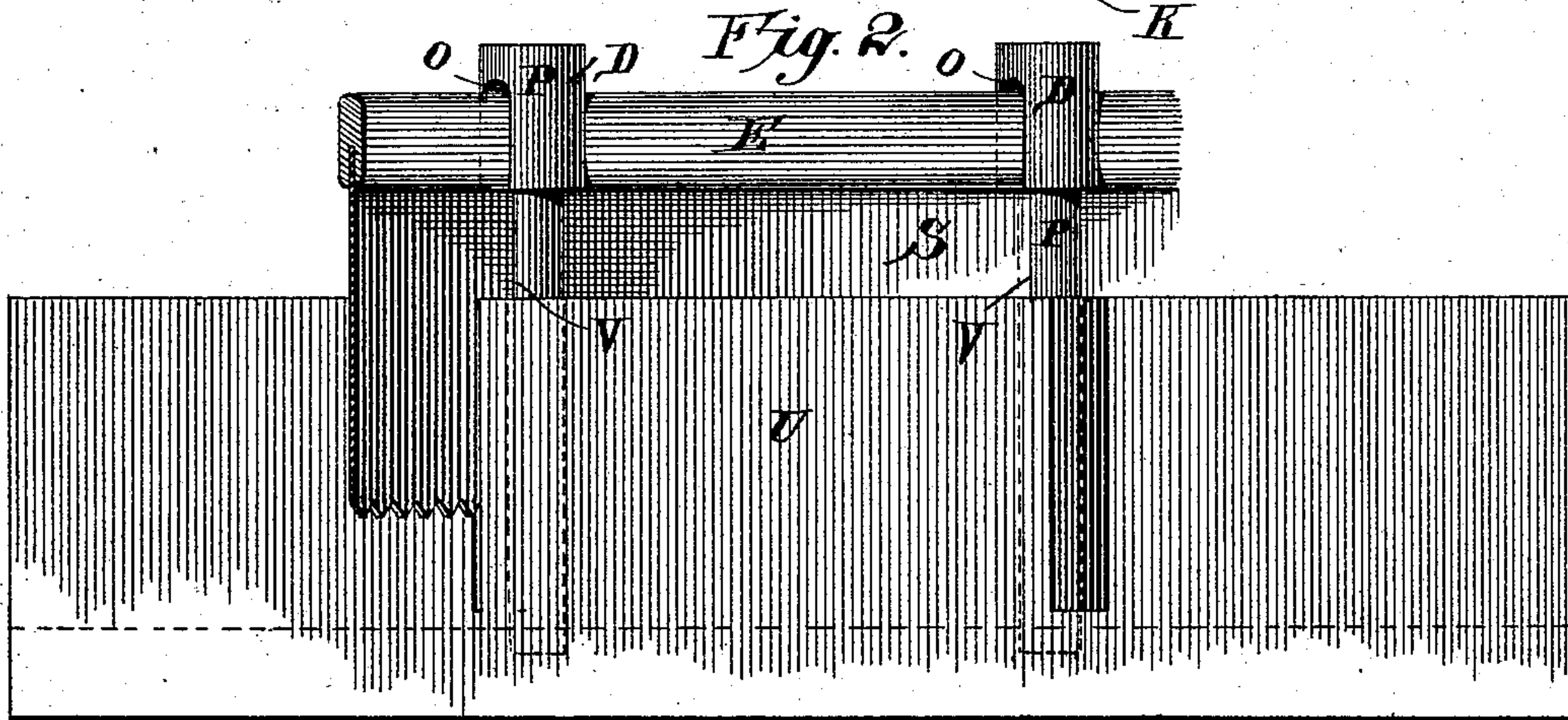
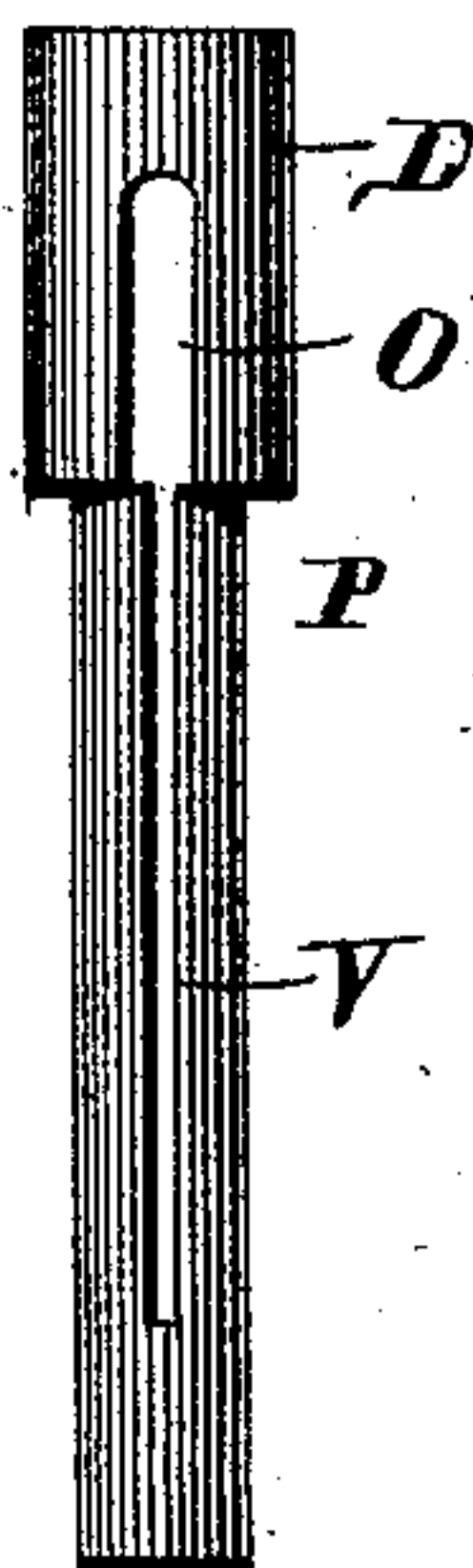


Fig. 3.



Witnesses

H. G. Dietrich

Inventor

Thos. C. Oakman.

By *his* Attorneys,

A. J. Gollamer.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

THOMAS C. OAKMAN, OF KNOXVILLE, TENNESSEE.

MITER-BOX.

SPECIFICATION forming part of Letters Patent No. 455,351, dated July 7, 1891.

Application filed December 6, 1890. Serial No. 373,796. (No model.)

To all whom it may concern:

Be it known that I, THOMAS C. OAKMAN, a citizen of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented a new and useful Miter-Box, of which the following is a specification.

This invention relates to miter-boxes used by joiners and cabinet-makers; and the object of the same is to effect certain improvements therein.

To this end the invention consists of the specific details of construction hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a plan view, and Fig. 2 is a side elevation, of my improved miter-box, the latter showing a saw in use therein. Fig. 3 is a detailed elevation of one of the guide-pins.

Referring to the said drawings, the letter B designates the bottom, and U U are the upright sides of the box proper, and in said sides are bored vertical holes H, through which pass kerfs K, transversely and obliquely across the box and crossing at the centers of said holes. There may be four of these holes, or there may be more, as shown in dotted lines in Fig. 1, but never less than four. The holes are so arranged that the oblique kerfs stand at the desired angle to the longitudinal line of the box in order that the proper miter can be given to the stock being sawed.

Seated in the holes H are pins P, whose bodies turn in the holes, and at its upper end each pin has an enlarged head D. Through the body of the pin is a vertical slot V, adapted to receive the saw-blade S, and through the head is an opening O, which receives the enlargement or back E of the saw.

In operation, the saw is passed into the kerf K at one side of the box through the pin and its head which stands in the hole H at that point across the box at the desired angle, and into another kerf and through another pin in the opposite side of the box. The saw can be raised vertically, whereby the pins are lifted in the holes so that the wood to be sawed may be passed along the box and beneath the teeth of the saw. The latter is then lowered

onto the wood and reciprocated longitudinally thereover, sliding through the slots and openings in the pins, as will be readily understood.

The device can be manufactured at a very reasonable cost, and will be accurate and durable in use.

Heretofore miter-boxes have been constructed with a single hole H in one side and a number of others in the opposite side and at both sides of the single hole longitudinally of the box; but in such a case a box twice the length of mine is necessary in order to secure both oblique angles across the stock—that is to say, (referring to Fig. 1,) a right angle can be sawed by putting the pins in the two right holes H, one forty-five-degree angle by using the upper left and lower right holes, the other forty-five degrees by using the upper right and lower left, and any angle between in the manner described above, whereas, if there were but one lower hole H, there must needs be twice as many upper. In the latter case, too, the kerf of the single hole must be at least ninety degrees in order to be operative with both forty-five-degree angles, whereas in my device no kerf is larger than forty-five degrees.

What is claimed as new is—

In a miter-box, the combination, with the box proper having vertical holes in its upright sides opposite each other and having kerfs extending through said holes, those in one side toward the center of one end hole in the other side, and the kerfs in such end holes being open for forty-five degrees inwardly from a line at right angles to the length of the box, of pins in said holes moving longitudinally and axially therein, the bodies of said pins being provided with vertical slots, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOS. C. OAKMAN.

Witnesses:

E. P. KING,
C. C. SULLINS.