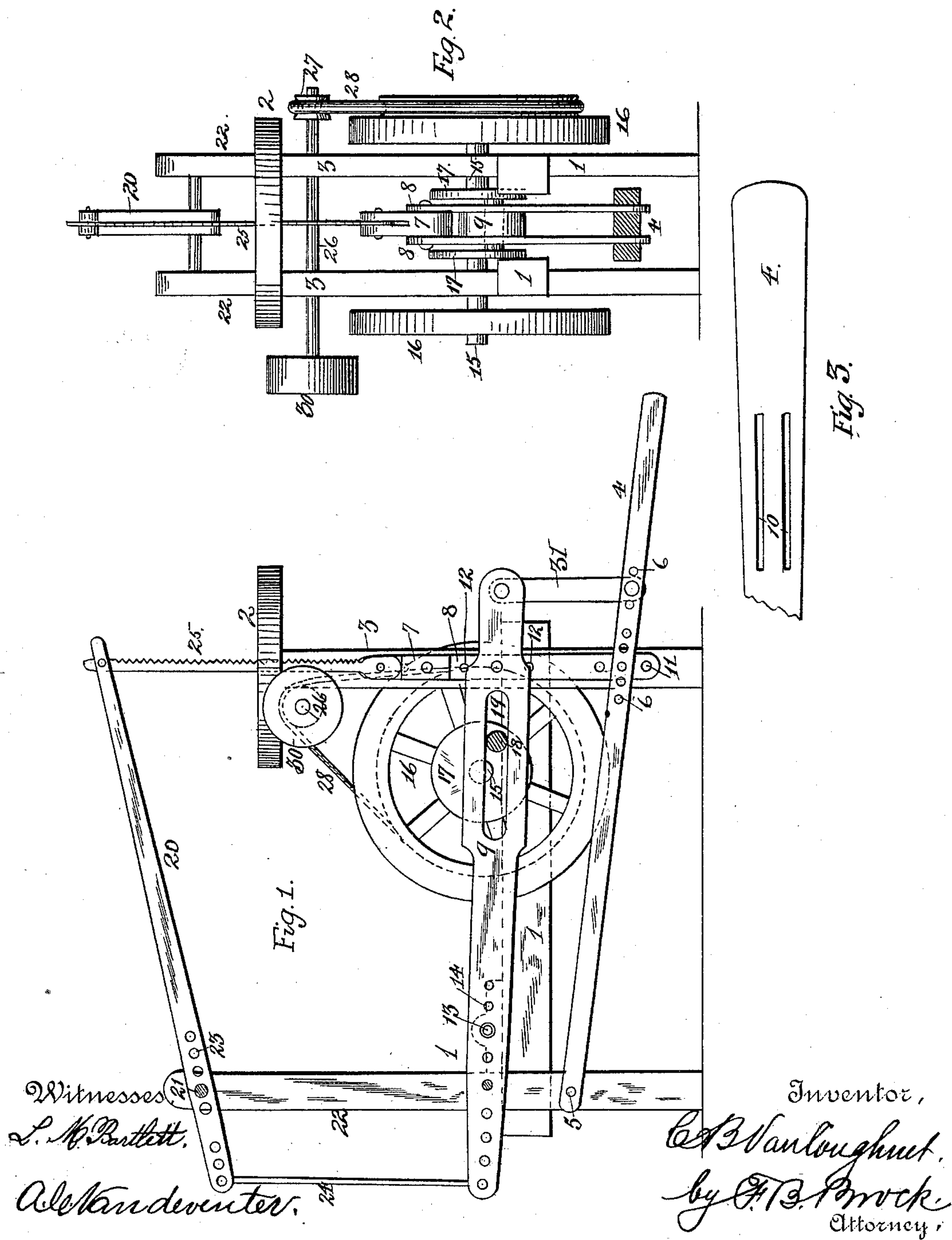


(No Model.)

C. B. VAN COUGHNET.  
SCROLL SAWING MACHINE.

No. 392,083.

Patented Oct. 30, 1888.



Witnesses  
L. M. Bartlett.

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# UNITED STATES PATENT OFFICE.

CHARLES B. VAN COUGHNET, OF PAMELIA, NEW YORK.

## SCROLL-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 392,083, dated October 30, 1888.

Application filed April 20, 1888. Serial No. 271,303. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES B. VAN COUGHNET, a citizen of the United States, residing at Pamela, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Scroll-Sawing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to reciprocating saws. The object of my invention is to produce a reciprocating fret-saw with which I may also combine a rotating drill.

For the above purposes my invention consists in the following construction and combination of parts, which will first be fully set forth and described, and the features of novelty therein then pointed out in the claim.

Figure 1 is a central section and elevation of a device embodying my improvements, and Fig. 2 represents an end elevation of the fret-saw. Fig. 3 is a detail view of the treadle.

1 represents the standards or frame of the machine.

2 is the saw-table supported upon the front posts, 3.

4 is the foot-treadle pivoted at the rear of the machine at 5 and to the saw-head at its front end.

6 is a series of holes in the treadle 4, for adjustably pivoting the saw-head.

7 is the saw-head.

8 8 are two bars rigidly fastened to the head and embracing the main lever 9, and their lower ends projecting through slots 10 in treadle 4.

11 is a series of holes in which the treadle 4 is pivoted, and 12 a series of holes in which the main lever 9 is pivoted.

9 is the main oscillating lever pivoted to the arbor 13.

14 is a series of holes in lever 9, whereby it may be adjustably pivoted.

15 is a double shaft having an eccentric connection between the parts.

16 are balance-wheels mounted upon shaft 15.

17 are disks mounted on shaft 15, and 18 is an eccentric-pin joining the two disks and playing within the slot 19 in lever 9.

20 is the vibrating lever which carries the upper end of the saw.

21 is the arbor to which it is pivoted, mounted in the rear posts, 22.

23 is a series of holes in which lever 20 is adjustably hung.

24 is a connecting-rod uniting the rear ends of levers 9 and 20. It is adjustably hung in one of a series of holes in the said levers.

25 is the fret-saw connected to levers 9 and 20 at their front ends and passing down through a slot in the table 2 through the medium of the saw-head 7.

26 is a rotating spindle hung in bearings on the front posts, 3. It has a driving-pinion, 27, from or over which a driving-belt, 28, may pass, and over the balance-wheels 16 or pulley-faces 29, rigidly attached thereto upon the sides of said wheels.

The rotating spindle 26 may carry any suitable rotating tool—such as an emery-wheel, 30, as shown.

The machine may be used either as a drilling, grinding, or a fret-sawing machine.

Instead of extending the bars 8 downwardly to the treadle 4, I may provide a separate link-connection, 31, uniting the main lever 9 and the treadle. In fact, I prefer the latter construction.

It will be understood that when the link 31 is used the bars 8 have no connection with the treadle 4.

In my improved machine, which is operated by foot-power, and in which the motion of the fly-wheels is communicated through the main or slotted lever and treadle connected thereto, it is highly desirable, if not essential, that there should be two fly-wheels—one on each side of the main lever—in order to provide a continuous and uniform motion. In machines where the power is applied to the fly-wheel shaft and motion imparted to the main or slotted lever thereby such construction is not requisite or especially desirable.

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

The combination of the reciprocating saw,



the main frame, a slotted lever pivoted therein  
and carrying one end of the saw, the double or  
twin driving shafts, rotary disks carried upon  
the inner or adjacent ends of the shafts, an ec-  
5 centric-pin passing through the slotted lever  
and secured to and uniting said disks, a piv-  
oted arm carrying the other end of the saw,  
and a link connecting the main lever and piv-  
oted arm, a pivoted treadle, and a link con-

necting the main lever and pivoted treadle, all so  
substantially as set forth.

In testimony whereof I affix my signature in  
presence of two witnesses.

CHARLES B. VAN COUGHNET.

Witnesses:

JOSEPH A. McCONNELL,  
FRED S. WATTS.