

(No Model.)

H. M. REFSUM.

APPARATUS FOR MARKING DIVISIONS ON BOOK BACKS.

No. 516,978.

Patented Mar. 20, 1894.

Fig. 1.

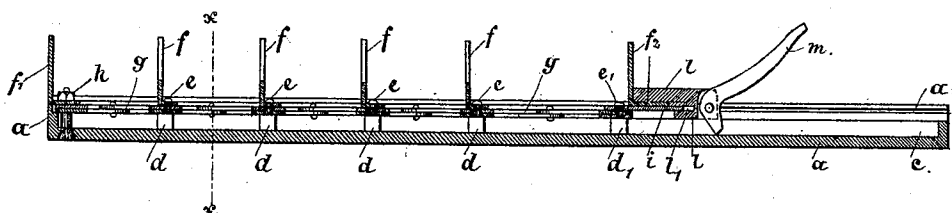


Fig. 2.

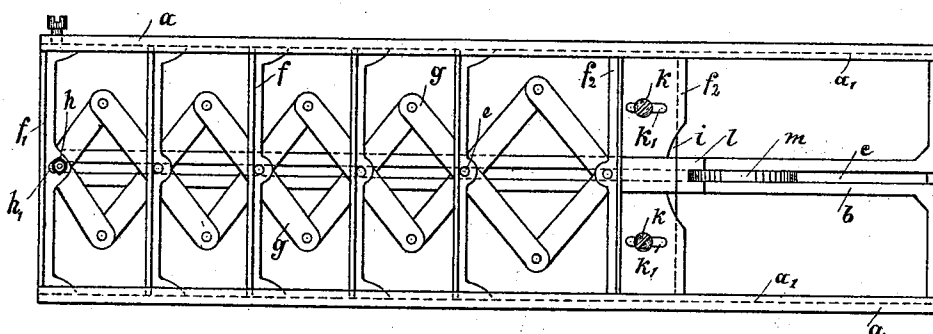
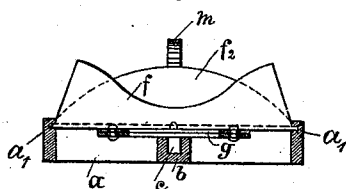


Fig. 3.



Witnesses

E. B. Bolton

A. J. Dummel

Inventor

H. M. Refsum

By *Richardson & Co.*

Attorneys.

UNITED STATES PATENT OFFICE.

HANS MATHEUS REFSUM, OF CHRISTIANIA, NORWAY.

APPARATUS FOR MARKING DIVISIONS ON BOOK-BACKS.

SPECIFICATION forming part of Letters Patent No. 516,978, dated March 20, 1894.

Application filed October 7, 1893. Serial No. 487,484. (No model.) Patented in Germany December 17, 1892, No. 69,486.

To all whom it may concern:

Be it known that I, HANS MATHEUS REFSUM, a subject of the King of Sweden and Norway, and a resident of Langes Gade, 7, Christiania, Norway, have invented certain new and useful Improvements in Apparatus for Marking Divisions on Book-Backs, of which the following is a specification.

The invention has been patented in Germany, dated December 17, 1892, No. 69,486.

My invention relates to an apparatus, by which the bookbinder in a quick manner without time-wasting measurings might be able to provide the book-backs with fixed spaces and marks, with which book-backs, covers, &c., are decorated, not only for the production in mass but also for single exemplars.

In the accompanying drawings Figure 1 shows the apparatus in section, Fig. 2 the same in plan-view and Fig. 3 is a section at the line $x-x$ in Fig. 1.

a is a frame having along the middle a bar b with a guide-groove c ; in this groove guide a number of guide-blocks d , having pins e which pass through the crossing of a parallelogram-system g and the marking-plates f . This parallelogram-system is in its one end by a screw h fixed to the frame a and the plate f' , and the other end of said system is by the pin e' connected with the block d' and the plate i . By screws k another angular plate f^2 is connected with the lower plate i and by grooves h' and k' now the spaces between the plates f' and f and between the plates f^2 and f may be varied. A piece of metal l is fixed to the plate f^2 , said piece with its groove l' surrounding the plate i ; this piece of metal is provided with a lever m , which works in the groove c . The plates f , with their lower edges bent in an angle, and the plate i guide also in the side-grooves a' of the frame a , so that the plates f' and f^2 always are held in reciprocal distance to each other, when the parallelogram-system is drawn out more or less. The plates f have a semi-circular shape, which serves as a bearing for the book-backs, while the plates f' and f^2 may have any shape (Fig. 3).

The distance between the plates f' and f^2 is indicated by the length of the book-backs;

it may be varied after the length of different book-backs by drawing out or in the parallelogram-system. The lever m is pressed down in the groove c to secure the parallelogram-system in the desired position. When the book-back is pressed against the marking-plates and rubbed against the same round about its longitudinal axis the desired marks will then be marked on the book-back corresponding to the plates f and may afterward then be covered with gold or color, as usual.

Such an apparatus after the size of the books, of the covers, &c., is, especially by book-production in mass, of a very great advantage not only by its simple construction but also by its cheapness.

What I claim is—

1. In combination in a device for marking book backs, the series of marking plates f and the parallelogram system of levers for adjusting the same simultaneously, substantially as described.

2. In combination in a device for marking book backs, the plate a having the guide way, the marking plates guided thereby, and the means for adjusting the said plates simultaneously in said guide way, substantially as described.

3. In a device for marking book backs, the combination of the base plate a having a guide way, the marking plates guided by said way and the parallelogram system of levers connected to the plates for operating them, substantially as described.

4. In a device for marking book backs, the combination of the base plate having a central guide way, the marking plates guided therein, the system of parallelogram levers, connected to the plates, the block at the end of the system of levers guided by the said way and the means for fixing said block along the way, substantially as described.

5. In a device for marking book backs, the combination of the series of marking plates, comprising the end plates f' f^2 , the movable end block, the system of parallelogram levers connected to the end plates and the slotted connections h h' — k k' for said end plates to permit the same to be adjusted, substantially as described.

6. In combination, the base plate, the end
plates f' f^2 arranged to bear on the top and
bottom of the books, and the series of mark-
ing plates intermediate of the plates f' f^2 hav-
5 ing curved edges to receive the backs, sub-
stantially as described.

In testimony that I claim the foregoing as

my invention I have signed my name, in pres-
ence of two witnesses, this 22d day of July,
1893.

HANS MATHEUS REFSUM.

Witnesses:

RICHARD EMANUEL STOKKE,
AXEL GOTTFRED GROUND LAHN.