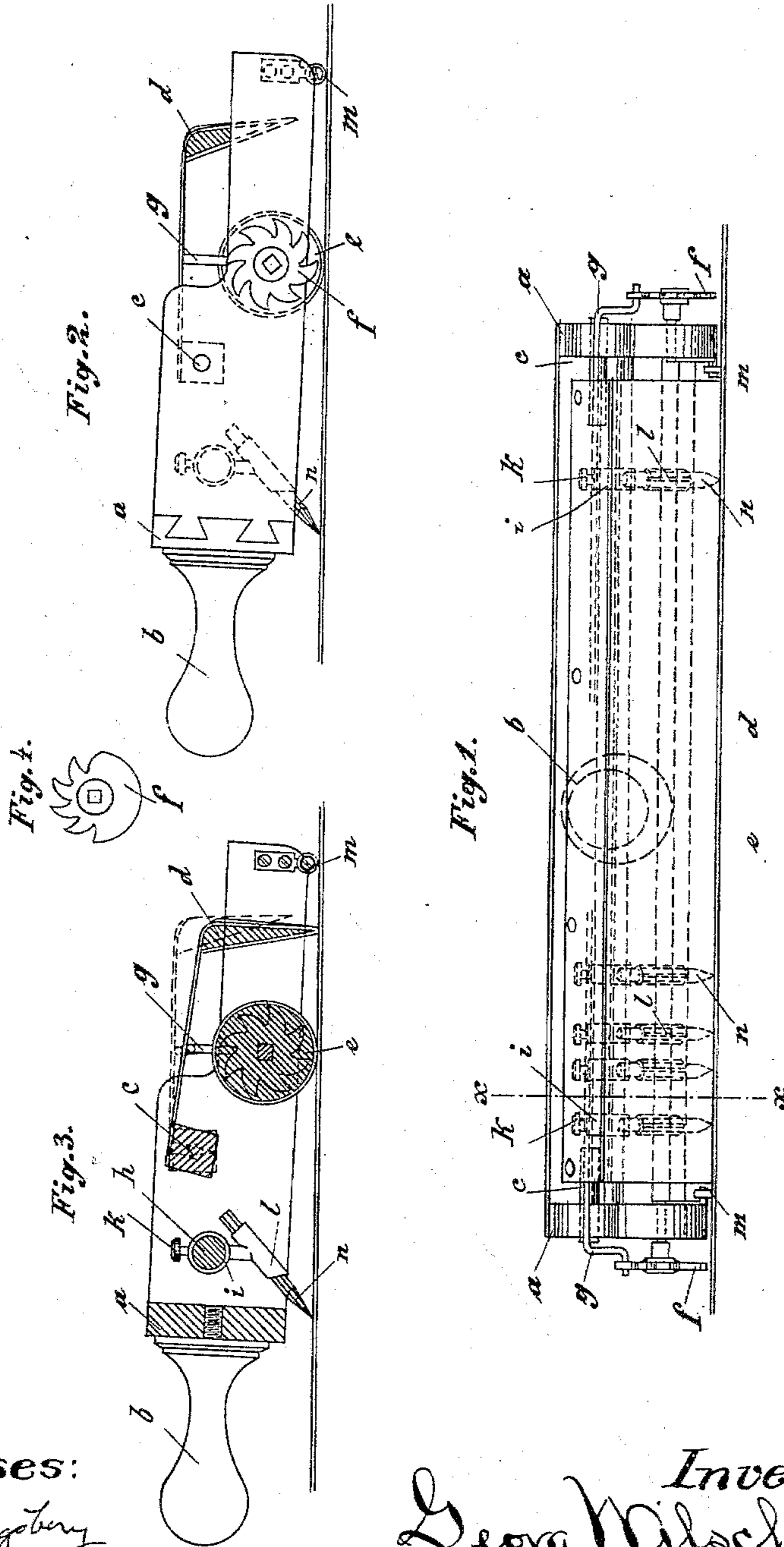


(No Model.)

G. WILSCHECK.  
HAND RULING APPARATUS.

No. 597,870.

Patented Jan. 25, 1898.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

GEORG WILSCHECK, OF FRÖNDENBERG, GERMANY.

## HAND RULING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 597,870, dated January 25, 1898.

Application filed December 28, 1896. Serial No. 617,278. (No model.)

*To all whom it may concern:*

Be it known that I, GEORG WILSCHECK, of Fröndenberg, in the Kingdom of Prussia and German Empire, have invented a new and useful Hand Ruling Apparatus, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention consists of a ruling apparatus designed to rule parallel lines any distance or distances apart for accounts, music, and other purposes on paper or in books by simply moving the apparatus along an edge or flat ruler.

In order that my invention may be the better understood, I now proceed to describe the same, reference being had to the accompanying drawings and to the letters marked thereon.

Like letters refer to like parts in the various figures.

Figure 1 is a front view of this apparatus. Fig. 2 is a side view. Fig. 3 is a section on the line *xx*, Fig. 1; and Fig. 4 is a toothed wheel *f* for music-sheets or books.

The apparatus consists of a frame *a* with handle *b*, in which rests a bar *d*, which marks the lines and which is pivoted around an axle *c*. Toothed wheels *f*, Fig. 1, are situated on the axle of a blotting-roller *e*, in front of the bar *d*, outside the frame and on both sides thereof, and engage with projections *g* of the bar *d*. The toothed wheels *f* are conveniently cast or stamped, so as to insure exactness and faultless ruling. Differently-formed toothed wheels *f* are used for the various kinds of ruling, so that the apparatus may be used for any kind of ruling. Such a toothed wheel *f* for music is shown in Fig. 4 of the drawings as an example.

The striking-bar *d* tapers in front to an edge of about one-half millimeter and is covered with an inking-cloth, so that a sharp line is marked on the paper when the striking-bar descends. For ruling account-lines a round rod *h*, of wood or metal, is provided in the frame *a*, on which fit a suitable number of rings *i*, which can be moved to and fro on the scale in order to facilitate their quick and even distribution. The rings *i* are provided above with an adjusting-screw *k*, by which they can be fixed at any desired part of the rod *h*, and at their lower parts they carry a

sleeve *l* to receive the lead or color pencils, which is inclined so that the pencils are not directed against the line of movement and cannot injure the paper by the breaking of the points *n*.

In order to facilitate the movement of the apparatus and for the better guidance of the latter, the free ends *a'* of the frame are provided with running wheels *m*.

The action of the apparatus is as follows: The apparatus is led over the paper along a ruler, the motion of the blotting-roller *e* effecting the rotation of the two toothed wheels *f*. In consequence the two projections *g* of the striking-bar *d* are lifted. Afterward the striking-bar falls again by its gravity. At the same time the pencils *n*, which can be adjusted according to account-lining, draw the lines which are to be ruled perpendicularly to the first system of lines and by differently-formed toothed wheels *f*, and by suitable adjustment of the pencils *n* any desired system of lines can be ruled in any direction. It will be obvious that drawing-pens, coloring or inking wheels, or similar devices may be used instead of the pencils *n*. The blotting-roller, arranged immediately behind the striking-bar, prevents the smudging of the lines marked by the former when the pencils *n* cross them.

The operator must apply some color or ink from time to time, but the color or ink must not be applied too thick to the striking-bar.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A hand ruling apparatus comprising among its members, a sliding frame, a striking-bar disposed perpendicularly to the line of travel of said frame, and means for raising and depressing said bar, substantially as described.

2. A hand ruling apparatus comprising among its members, a sliding frame, a striking-bar disposed perpendicularly to the line of travel of said frame, and serrated disks engaging parts connected with said striking-bar for depressing and elevating said bar, substantially as described.

3. A hand ruling apparatus comprising among its members, a sliding frame, a striking-bar disposed perpendicularly to the line of travel of said frame, and pivotally con-

connected with said frame, and the serrated disks for raising and lowering said bar, substantially as described.

4. A hand ruling apparatus comprising among its members, a frame, rotary supporting devices mounted therein and provided with a removable serrated disk, a striking-bar pivotally supported in said frame disposed perpendicularly to the line of movement of said frame, and provided with a part for engaging said serrated disk, substantially as described.

5. A hand ruling apparatus comprising among its members a frame, an absorbent supporting-roller mounted in said frame provided with removable serrated disks, a striking-bar pivotally mounted in said frame disposed perpendicularly to the line of movement of said frame and having a part for engaging said serrated disks and an inking device for said striking-bar, substantially as described.

6. A hand ruling apparatus comprising among its members, a frame adapted to be moved over the surface to be ruled, a striking-bar movably supported in said frame, and disposed perpendicularly to the line of travel of said frame, means for moving said bar into and out of contact with the surface to be ruled, and a series of adjustable ruling devices mounted in said frame and disposed transversely of the same whereby said ruling devices will rule lines perpendicular to the lines formed by the striking-bar, substantially as described.

7. A hand ruling apparatus comprising among its members a frame, rotary support-

ing devices therefor provided with detachable rotary serrated disks, the striking-bar pivotally mounted in said frame disposed perpendicularly to the line of travel of said frame and having a part operatively engaging said disks and a plurality of ruling devices mounted in said frame, and adjustable perpendicularly to the line of travel of said frame, substantially as described.

8. A hand ruling apparatus comprising among its members, a frame, rotary supporting devices therefor, provided with serrated disks, the striking-bar pivotally mounted in said frame and extending perpendicularly to the line of movement of the frame and having a part engaging said disks, an adjusting-bar secured to said frame, parallel to said striking-bar, and a plurality of ruling devices, adjustably mounted on said bar, substantially as described.

9. A hand ruling device comprising among its members, a frame, a supporting absorbent roller mounted therein and provided with a serrated disk, a striking-bar pivotally arranged in said frame forward of and parallel to said roller, and having a part engaging the said disk, an adjusting-bar in rear of said roller, and a plurality of ruling devices adjustably secured to said bar, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

GEORG WILSCHECK.

Witnesses:

JH. WALDAPFEL,  
AUGUST EICKHOF.