

PATENT SPECIFICATION



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156,311

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PROVISIONAL SPECIFICATION.

Improvements in and relating to Calculating Machines.

I, FRANK EDWARD GUY, of 32, Queen Victoria Street, London, E.C. 4, Calculating Machine Specialist, do hereby declare the nature of this invention to be as follows:—

This invention relates to calculating machines of the pin wheel and cam disc type, and more particularly to the mounting and arrangement of the pivoted transfer pin-tooth upon the pin-wheel. This transfer pin-tooth is employed to effect the carry over from a unit or other denomination to a higher value and engages directly or indirectly with the counting wheel or counting mechanism.

The present invention has for object to facilitate the assembly of the pivoted transfer pin-tooth and its attachment to or removal from the pin-wheel, and to afford a stronger and more lasting construction.

According to the present invention, the transfer pin-tooth is formed as a lever pivoted diametrically across a tower or collar secured upon a plate. The ends of the lever extend from the tower in opposite directions and through slots in the tower one end being shorter than the other. The shorter end is adapted to bear upon a spring such as a coil spring

arranged between the lever and the aforesaid plate, and the arms of the lever are preferably cranked or out of alignment to allow the longer arm to stand obliquely to the plane of the pin-wheel.

The plate and tower are sunk in a suitably shaped recess in the side face of the pin-wheel, and the plate may be secured therein, flush with the face of the pin-wheel, by locking screws or otherwise. When so inserted, the longer arm of the pivoted lever passes through a radial slot in the pin-wheel and owing to its oblique arrangement its extremity extends beyond the side face of the pin-wheel and the plate which is flush with the said face.

This method of mounting the pivoted transfer pin-tooth affords a strong construction which moreover is quickly assembled and inserted in or removed from its operative position upon the pin-wheel.

Dated this 27th day of September, 1919.

For the Applicant,
FEENY & FEENY,
Chartered Patent Agents,
60, Queen Victoria Street, London,
E.C. 4.

COMPLETE SPECIFICATION.

Improvements in and relating to Calculating Machines.

I, FRANK EDWARD GUY, of 32, Queen Victoria Street, London, E.C. 4, a British subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to calculating machines of the pin wheel and cam disc

type, and more particularly to the mounting and arrangement of the pivoted transfer pin-tooth upon the pin-wheel. This transfer pin-tooth is employed to effect the carry over from a unit or other denomination to a higher value and engages directly or indirectly with the counting wheel or counting mechanism.

The present invention has for object to

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facilitate the assembly of the pivoted transfer pin-tooth and its attachment to or removal from the pin-wheel, and to afford a stronger and more lasting construction.

According to the present invention, the transfer-pin tooth is formed as a lever pivoted diametrically across a boss, tower or post secured upon a plate, which is sunk in the side-face of the pin-wheel. The ends of the lever extend from the boss in opposite directions and through slots in the same, one end being shorter than the other. The shorter end is adapted to bear upon a spring such as a coil spring arranged between the lever and the aforesaid plate, and the arms of the lever may be cranked or out of alignment to provide more room for the spring, while bringing the longer arm to a convenient position for its movements obliquely to the plane of the pin-wheel.

The accompanying drawings illustrate the improved construction as applied to one of the pin-wheels of a calculating machine of the type mentioned:

Figure 1 is a face view of the wheel.

Figure 2 is a transverse section.

Figure 3 is a detail on a larger scale.

Figure 4 is an elevation of the wheel from the opposite side to Figure 1.

The pin-wheel *a* which is of the usual form and substantially the same as the wheel *h* in the prior Specification 13,700 of 1890, is provided with two transfer pin-teeth *b*, which replace the teeth *i*¹ in the prior construction, their operation for carrying tens being similar to that of the known devices.

These transfer pin-teeth are, however, formed each as a lever pivoted at *b*¹ diametrically across a boss or post *c* secured in the face of the pin-wheel by means of a plate *d* which is preferably integral with the boss and fits in a counterbored

recess in the side-face of the pin-wheel; the plate *d* may be secured therein, flush with the face of the pin-wheel, by locking screws *e* or otherwise. When so inserted, the longer arm of the pivoted lever *b* passes through a radial slot *a*¹ in the pin-wheel and owing to its oblique arrangement (see Figure 2) its extremity extends beyond the side-face of the pin-wheel and the plate *d* which is flush with the said face. The shorter end of the lever is acted upon by a coiled spring *f* bearing against the plate *d* and seated in a recess *a*² communicating with the counterbored recess in which the boss or post is sunk.

This method of mounting the pivoted transfer pin-tooth affords a strong construction which moreover is quickly assembled and inserted in or removed from its operative position upon the pin-wheel.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In calculating machines of the type set forth, an improved arrangement of the transfer pin-tooth, said tooth being formed as a lever pivoted diametrically across a boss, tower or post secured upon a plate which is sunk in the side-face of the pin-wheel.

2. An improved pin-wheel for calculating machines of the type set forth, substantially as described with reference to the accompanying drawings.

Dated the 27th day of July, 1920.

For the Applicant,

FEENY & FEENY,
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60, Queen Victoria Street, London,
E.C. 4.

Fig.1.

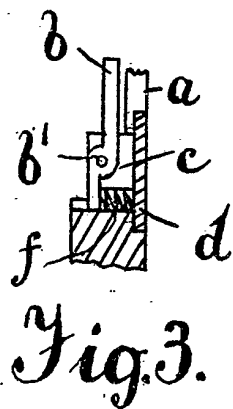
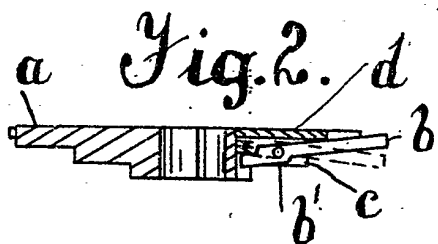
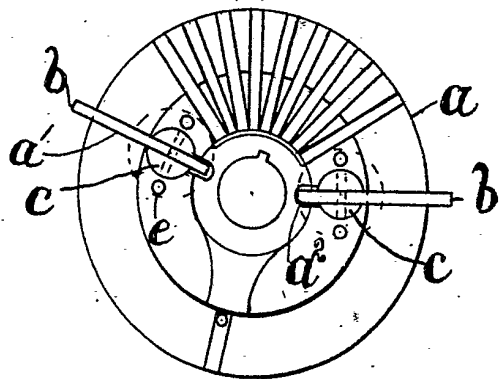


Fig.3.

Fig.4

