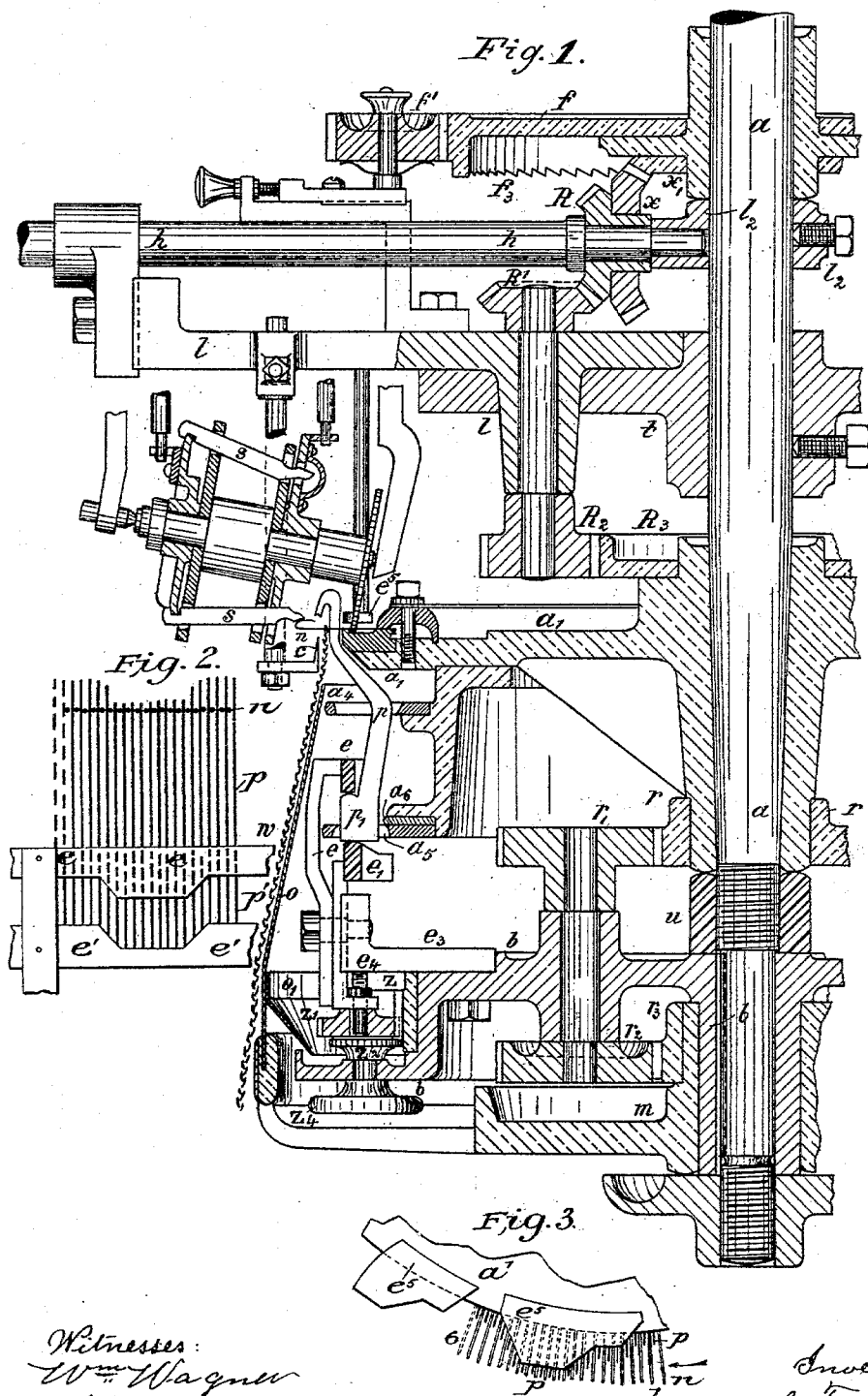


(No Model.)

C. TERROT.
KNITTING FRAME.

No. 562,677.

Patented June 23, 1896.



Witnesses:
W. Wagner
A. Gouglmann.

Inventor:
C. Terrot
by his attorneys
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UNITED STATES PATENT OFFICE.

CHARLES TERROT, OF CANNSTADT, GERMANY.

KNITTING-FRAME.

SPECIFICATION forming part of Letters Patent No. 562,677, dated June 23, 1896.

Application filed September 10, 1890. Serial No. 364,514. (No model.)

To all whom it may concern:

Be it known that I, CHARLES TERROT, a citizen of the Republic of France, residing at Cannstadt, in the Kingdom of Württemberg, German Empire, have invented new and useful Improvements in Round Knitting-Frames, of which the following is a specification.

This invention relates to an improved knitting-frame; and it consists in the improvement more fully pointed out in the claim.

In the accompanying drawings, Figure 1 is a sectional elevation of my improved knitting-frame. Fig. 2 is a face view of cam-rings e e' , and Fig. 3 a face view of cam e^5 .

The loom carries on the stationary shaft a the needle-crown or the needle-disk a' , rotated by the wheels $R^3 R^2 R' R$ from the driving-shaft h , supported in journals $l l^2$. The sinkers p are not divided into those that sink the loops and those that back them off, but they are united so as to form one single piece, which is held between the needles n and within slots of the guide-rings $a^4 a^5$, and uniformly drawn along with the needles n . They rest on the cam-ring e' . Above the lower broad base p' of sinkers p is arranged the cam-ring e , connected with the cam-ring e' . The two rings are provided with recesses and projections, as illustrated in Fig. 2, between which the sinkers are lowered and raised. As this movement takes place closely above and below the guide a^5 , the cams on the rings $e e'$, Fig. 2, may be rendered very steep, so that the movements are very rapid. By the cams e^5 the sinkers are moved forward, and by the scraping-iron c they are moved backward. These cams are also steep and move the sinkers rapidly. One system extends, therefore, only from the points marked 1 to 6 in Fig. 3. Below the needles the sinkers are bent toward the center of the frame, Fig. 1. Their lower parts do, therefore, not extend far outward when backed off. The whole lower part of the frame may be surrounded by a casing of sheet-iron o , which is supported by the base m , and revolved uniformly with the needle-crown or needle-disk a' , through the wheels $r r' r^2 r^3$, but in such a manner that the goods w are protected against any contact with the oiled parts of the frame.

Any oil which may drop down is led by

funnel o' into the channel of the stationary disk b . This disk b carries, moreover, a gear-wheel z , loosely mounted on the disk b , which can be revolved through wheel z^2 , by means of the small hand-wheel z^4 . A number of wheels z' gear at different points into the circumference of the gear-wheel z , each of these wheels being provided with the screw-shafts e^4 . These shafts engage the tapped openings of fixed brackets e^3 . To the screw-shaft e^4 there are secured by downwardly-extending arms the cam-rings $e e'$, such arms having bent and perforated lower ends that embrace the screw-shaft between the wheel z' and a superposed collar, as shown.

Thus it will be seen that upon revolving wheel z the wheels z' , with their screw-shafts e^4 , will be raised and lowered to correspondingly raise and lower the cam-rings $e e'$ of all the systems simultaneously. Such motion of the cams takes place, of course, above the upper edge of the fixed bracket e^3 .

A steel ring a^6 , arranged in the guide-ring a^5 , protects the ring a^5 against wear, ring a^5 being worn out by friction against the sinkers p .

For pressing the needles n I use several press-levers s , as shown in Fig. 1.

The thread is advantageously conducted to the needles by a so-called "regulator"—i. e., by the teeth of two pinions $f' f$, which are disposed close to one another. The wheel f is revolved from the driving-shaft h by the wheels $x x'$, while the wheel f' can be adjusted with respect to wheel f by means of an adjusting-screw, as shown.

What I claim is—

The combination of a series of needles with movable pressers and sinkers, a wheel z^2 , gear-wheel z , revolved thereby, gear-wheels z' , revolved by gear-wheel z , screw-shafts e^4 , operated by gear-wheels z' , and cam-rings e, e' , engaged by the screw-shafts, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES TERROT.

Witnesses:

HERMANN BAUDER,
ALBERT HIRTH.