

E. Voegtl,

Domestic Spinner.

No. 111,991.

Patented Feb. 21. 1871.

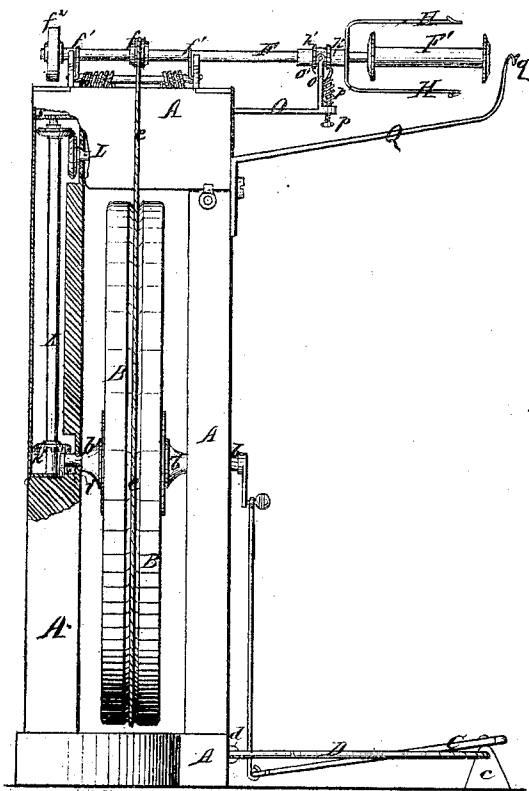


Figure 1.

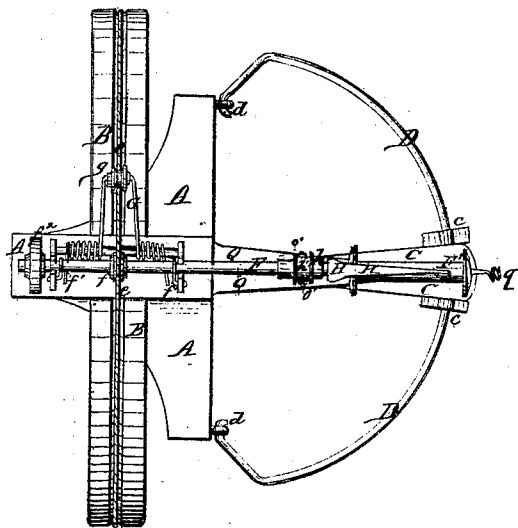


Figure 2.

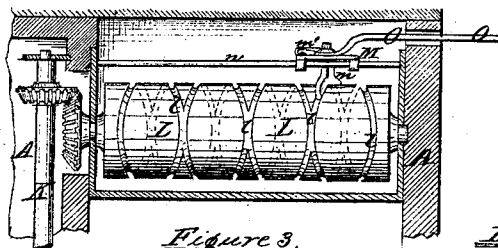


Figure 3.

Witnesses:

William H. Herthel

Robert Burns

Inventor:

Ernst Voegtl
By his attys
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United States Patent Office.

FRANZ VOEGTLI, OF MONTGOMERY CITY, MISSOURI.

Letters Patent No. 111,991, dated February 21, 1871.

IMPROVEMENT IN SPINNING-WHEELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FRANZ VOEGTLI, of Montgomery City, in the county of Montgomery and State of Missouri, have invented a new and useful Improvement in Spinning-Wheels; and I do hereby declare the following to be a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to the treadle and to the means for traversing the flyer; and

It consists in the construction, arrangement, and combination of parts, as hereinafter described and specially mentioned.

Figure 1 is a side elevation;

Figure 2, a plan; and

Figure 3, a detail elevation of the flier movement.

I construct the frame A of such a form as to bring the spool-shaft within easy reach of the operator and still obtain a large main wheel, generally as shown in fig. 1.

The frame A supports the main shaft *b* and main wheel B.

The shaft *b* has the usual crank, connecting by a pitman with a treadle, C. The latter has its fulcrum on the curved wire D, which is hinged to the base of the machine at *d*. The wire D allows the treadle C to be moved in an arc of about one hundred and eighty degrees, thus allowing an adjustment for either right or left foot.

The supports *c* will give the required firmness to the fulcrum of the treadle.

When the spinning-wheel is to be packed up for transportation the treadle and its wire D will be raised to a vertical position alongside the uprights of the frame A.

From the main wheel B the belt-cord *e* transmits motion to the pulley *f* on the spool-shaft F, resting in suitable bearings on the top of the frame A.

Hooks *f'*, hinged to the bearing-blocks, keep the shaft F down on its bearings.

To give the requisite tension to the cord *e* without applying an inflexible device thereto, I arrange a pulley, *g*, turning freely on the spring shaft G. This shaft has arms extending back to and suitably connected with the frame A, generally as shown in fig. 2.

The spool-shaft F carries the spool F' in the usual manner at its outer end, and at its other end is a balance-wheel, *f*², to balance the overhanging end of the shaft. Said shaft also carries the flier *h* by its sleeve *h*.

The flier receives its motion as follows:

On the outer end of the main shaft *b* is a collar, with a single tooth, *i*, gearing into the bevel-gear

wheel *k* on the vertical shaft K, indicated in fig. 1. At its upper end said shaft connects by bevel-gearing with the horizontal shaft L, which has upon its surface an endless screw-line groove, *l*, running right and left, into which groove fits the pin *m*, secured to the slide M moving on the bars *n*. A spring *m'*, secured to the slide M, presses on the pin *m*, holding it to its engagement in the groove *l*.

A connecting-bar, O, also connects with the pin *m*, being immediately under the spring *m'*.

The rod O extends out under the shaft F, and a vertical arm, *o*, goes up to a collar, *o'*, between the shoulders *h'* of the flier-sleeve *h*, thus allowing the flier to revolve, but acting to produce the required reciprocating motion:

To regulate the rotation of the flier a screw, *p*, is arranged in the end of the rod O, and presses a spring, *p'*, against the sleeve *h* of the flier, thus producing more or less friction and speed, as may be required.

The flier H has the usual hook-arms, but is otherwise constructed in the simplest form.

For transportation the shaft F and rod O are disconnected, as follows:

The hooks *f'* being turned back, the shaft F may be lifted out of its bearings, the belt *e* being off; then, by raising the spring *m'*, the end of the bar O will be readily unhooked from the pin *m*, and the parts may be drawn out of connection with their motors.

As the thread is not carried through the spool-shaft F it becomes necessary to find another guide for it. This I provide in the arm Q, fastened to the frame A. Said arm extends back some distance, and in its end is formed a hook, *q*, in the axial line of the shaft F, so that the thread being spun is guided by the hook *q*, and will be distributed upon the spool by the flier in the manner usual.

Having thus fully described my invention,

What I claim is—

1. The treadle C, combined with the wire D, hinged to the frame A, and provided with the supports *c*, substantially as and for the purposes set forth.

2. The slide M, its spring *m'* and pin *m*, combined with the rods *n*, the bar O, the shaft L, having the screw-groove *l*, and the flier H, substantially as set forth.

In testimony of said invention I have hereunto set my hand in presence of—

FRANZ VOEGTLI.

Witnesses:

WILLIAM W. HERTHEL,
ROBERT BURNS.