B. Oldfield.

Narrow Ware.

No. 58,464. Patented Oct. 2, 1866.

Fig. 1

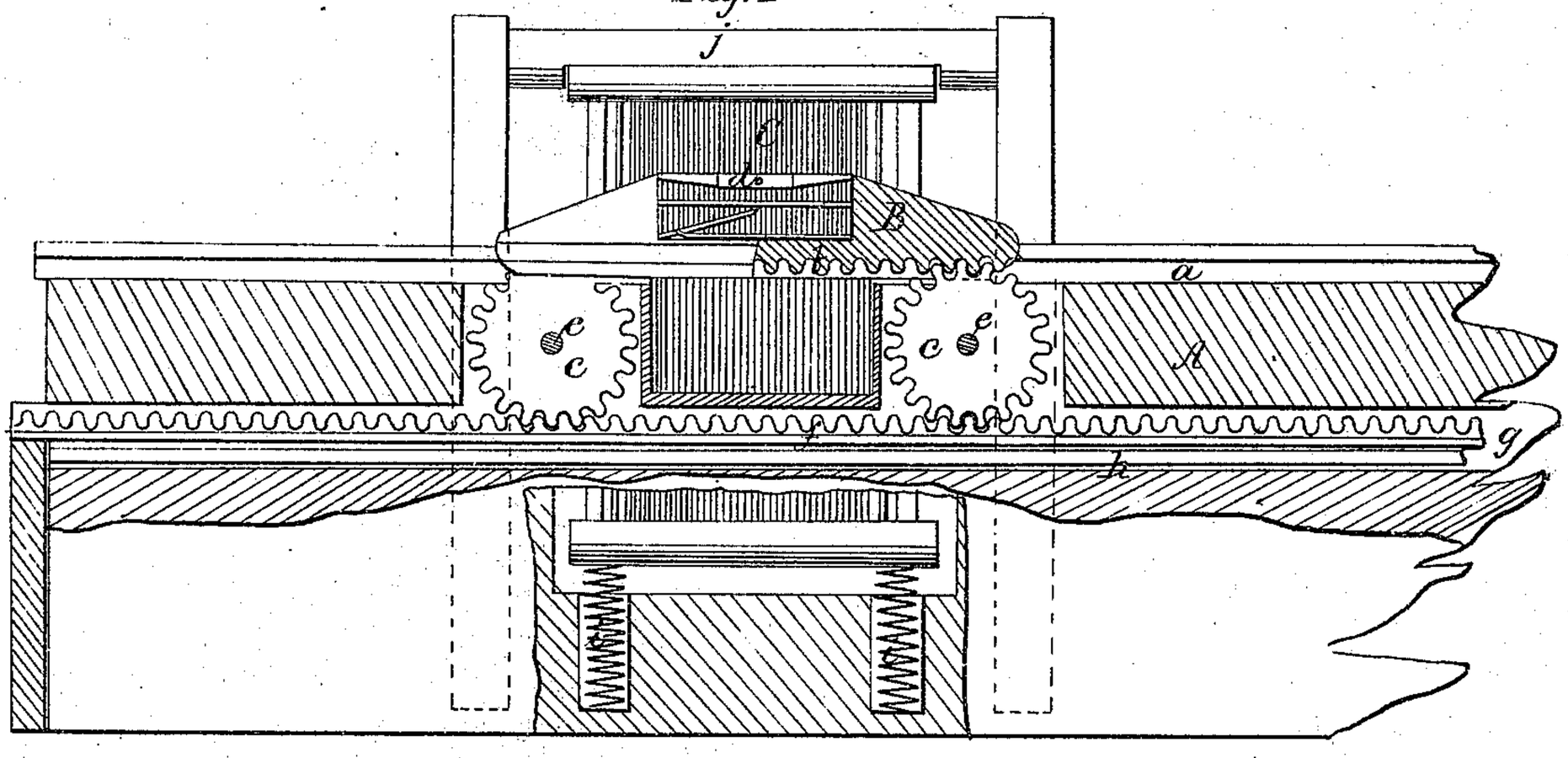


Fig. 2

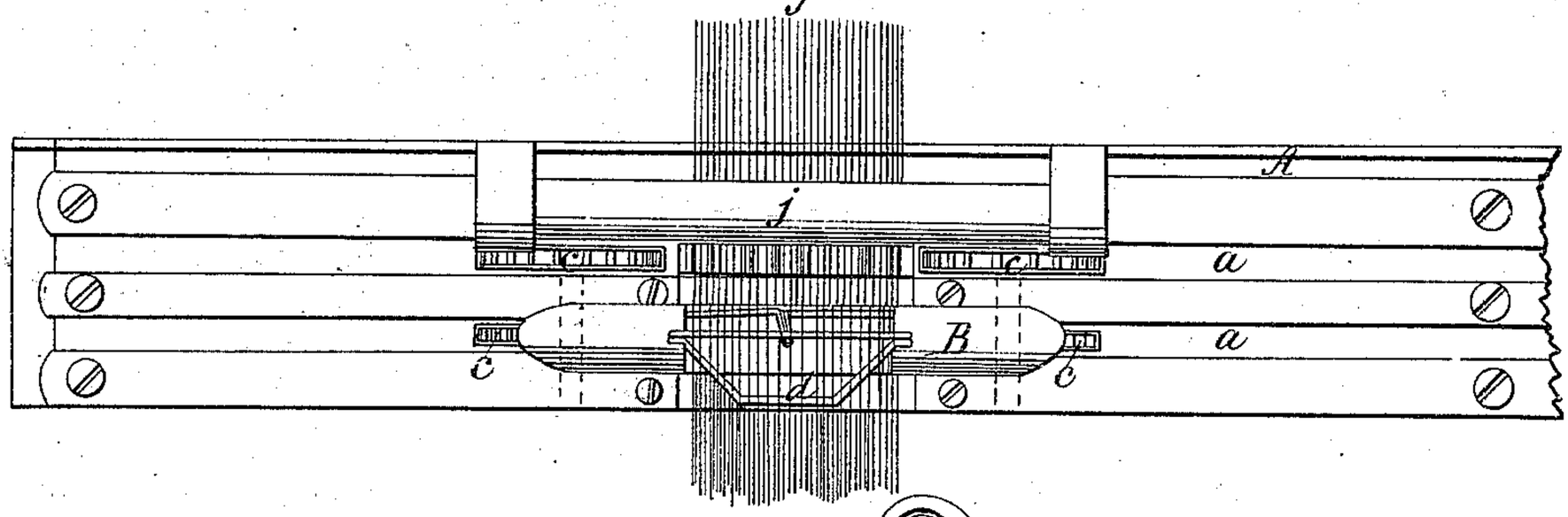
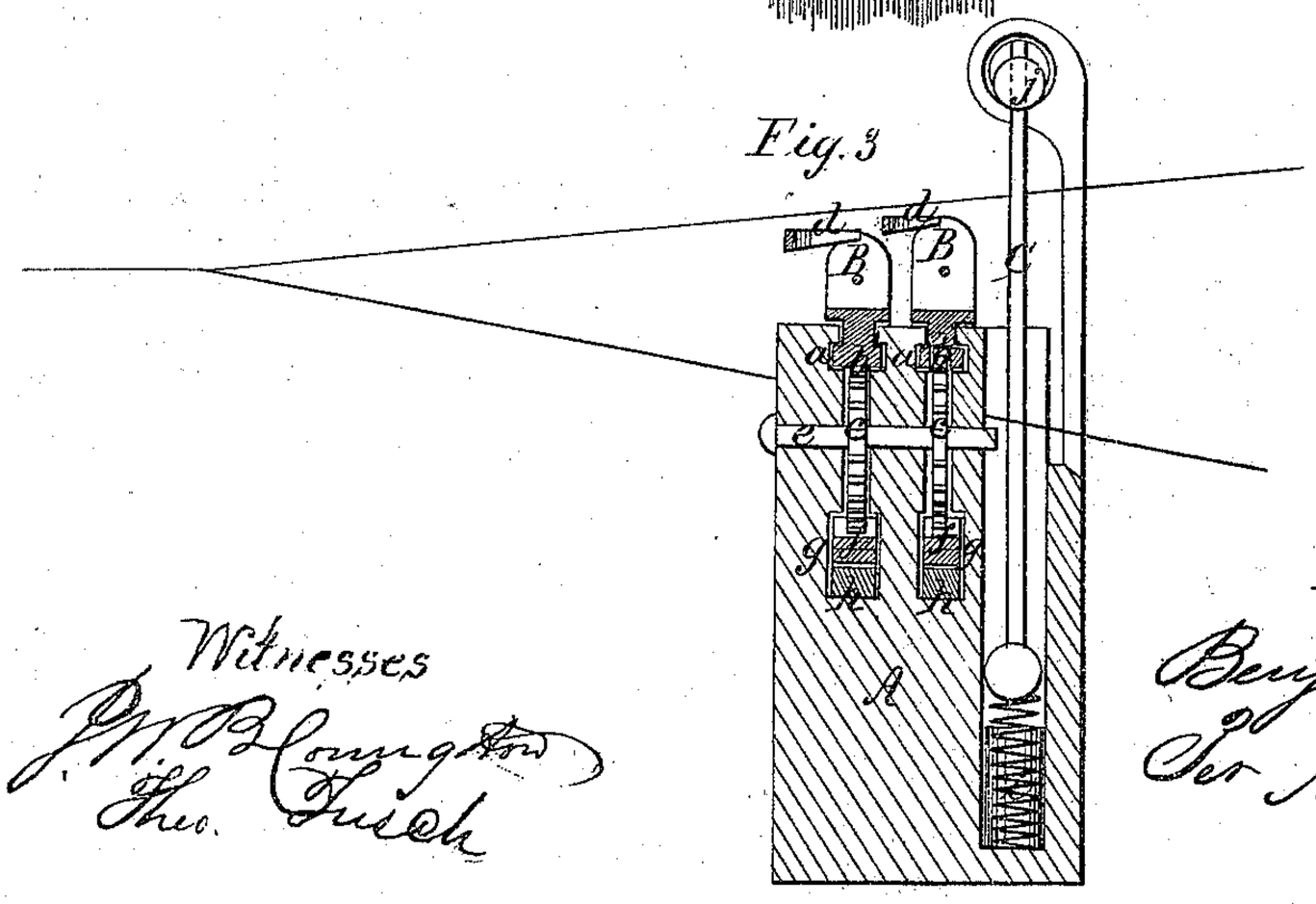


Fig. 3



Witnesses
P. W. Longstreth
Theo. Leich

Inventor
Benj. Oldfield
per Munn & Co
Attorneys

UNITED STATES PATENT OFFICE.

BENJ. OLDFIELD, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN LOOMS FOR WEAVING NARROW WARES.

Specification forming part of Letters Patent No. **58,464**, dated October 2, 1866.

To all whom it may concern:

Be it known that I, BENJAMIN OLDFIELD, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Looms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of this invention. Fig. 2 is a plan or top view of the same. Fig. 3 is a transverse vertical section of the same.

Similar letters of reference indicate like parts.

This invention relates to certain improvements in the batten, the shuttles, and the sleys or reeds; and it consists in the arrangement of movable strips under the rack or racks, which serve to transmit motion to the shuttles in such a manner that by removing said strips the racks can be thrown out of gear with the pinions and removed, if desired, and the shuttles can be readily moved in the shuttle-races, one independent of the others, and each shuttle can be removed with comparative ease and facility; also in the arrangement of springs under the sleys or reeds, in combination with suitable caps fitting over the top bars of the sley or reed-frames in such a manner that the operation of disengaging the sleys or reeds is facilitated.

A represents the batten or lay of a loom intended for weaving ribbons or other narrow goods. This batten is provided with two or more shuttle-races, *a*, in its upper surfaces, said shuttle-races being situated one behind the other, as clearly shown in Figs. 2 and 3 of the drawings. The shuttle B is fitted into these shuttle-races in an upright position, as clearly shown in Figs. 1 and 3, and they are provided with cogs *b* on their lower edges, which gear in pinions *c*. The top parts of the shuttles are cut away, and a metal bow, *d*, is inserted in each shuttle, which carries the eye and prevents the quill from catching in the ways. By substituting the metal bows for wood in the shuttles, the height of said shuttles is reduced and the shed does not require to be opened as far as it would be if the whole shuttle were made of wood; and, furthermore, the cost of making the shuttles is reduced, and easy access can be had to the quills, which are inserted and taken out in the usual manner. If desired, however, the shuttles may be made in two parts, so that the quill can be readily removed and replaced by one with another color.

The pinions *c*, which impart motion to the several shuttles, are mounted on pins *e*, which pass transversely through the batten, one on either side of each opening, and motion is imparted to said pinions by means of toothed racks *f*, which are fitted into suitable recesses *g* under the shuttle-races, a reciprocating motion being imparted to them at the proper intervals by a picker motion of any desired description. The recesses *g*, which form the guideways for the racks, are cut sufficiently deep to admit strips *h* under said racks, as shown particularly in Fig. 3. By removing these strips from under the racks, said racks are permitted to drop down out of gear with the pinions, so that the shuttles and also the racks can be taken out without unscrewing or releasing the shuttle-planks.

The reeds or sleys C are secured to the inside of the batten, and they rest on spiral springs *i*, which force the upper cross-bar of the sley-frame up into a cap, *j*, as clearly shown in Figs. 1 and 3 of the drawings. By this arrangement I am enabled to remove the sleys from the loom simply by depressing them against the springs, and without removing any part from the batten.

What I claim as new, and desire to secure by Letters Patent, is—

1. Making the racks *f* adjustable by means of movable strips, or any other equivalent means which will produce the same effect, for the purpose of throwing them out of gear with the pinions *c*, as set forth.

2. Supporting the sleys or reeds C by springs, which will allow of depressing said reeds, for the purpose of removing them as desired, substantially as described.

The above specification of my invention signed by me this 3d day of April, 1866.

BENJAMIN OLDFIELD.

Witnesses:

WM. F. MCNAMARA,

ALEX. F. ROBERTS.