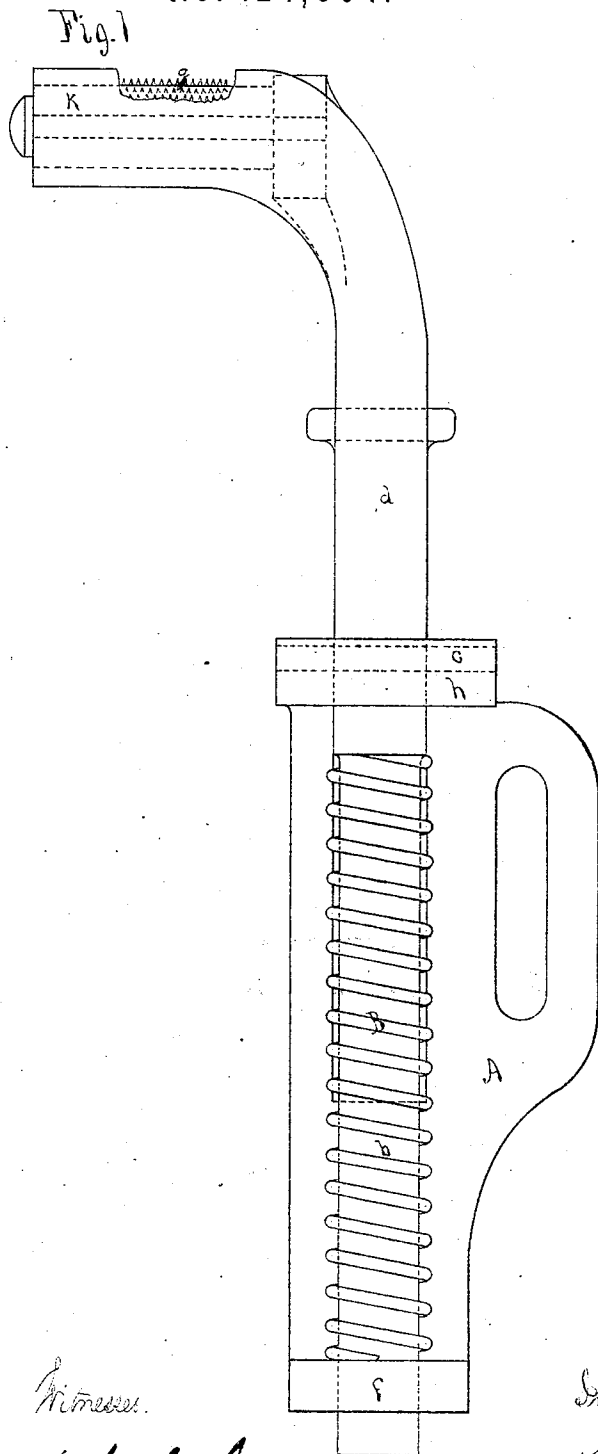
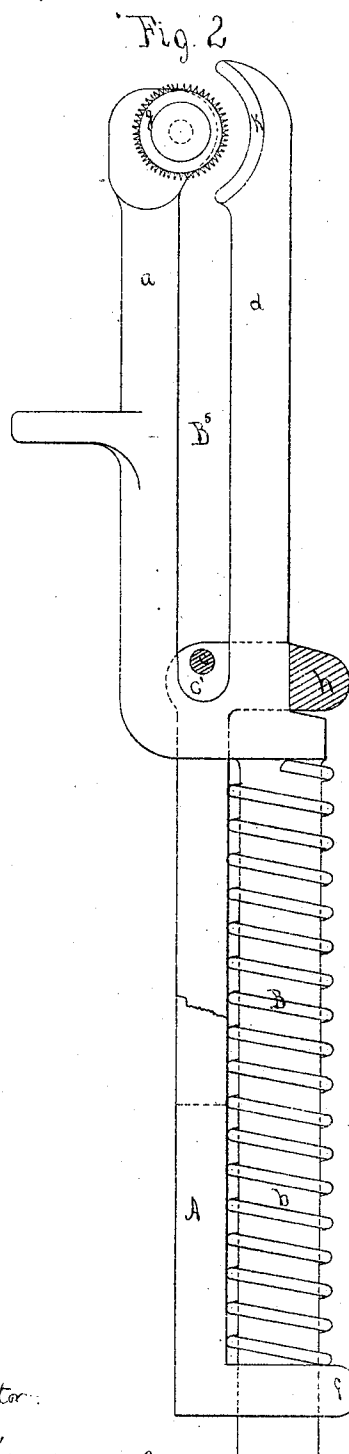


WILLIAM MURKLAND & JOHN W. MURKLAND.
 Improvement in Loom Temples.
 No. 124,004. Patented Feb. 27, 1872.



Witness.

John E. Lerone
 & Edwin Laurence.



Inventor.

William Murkland
 John W. Murkland

UNITED STATES PATENT OFFICE.

WILLIAM MURKLAND AND JOHN W. MURKLAND, OF LOWELL, MASSACHUSETTS, ASSIGNORS TO WILLIAM MURKLAND AND JOSIAH GATES, OF SAME PLACE.

IMPROVEMENT IN LOOM-TEMPLES.

Specification forming part of Letters Patent No. 124,004, dated February 27, 1872.

To all whom it may concern:

Be it known that we, WILLIAM MURKLAND and JOHN W. MURKLAND, both of Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Burr-Temples for Looms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 represents a plan or top view, and Fig. 2 an inner-side elevation.

This invention relates to burr-templates, which have two arms or bars, one arm carrying the burr or roll, and the other arm carrying the cover or cap, and with a clear open passage between the roll and the cover, and a long open slot between the two arms, to allow suspended filling-threads, or those not in immediate use, when there are several shuttles, to pass down the side of the web and out of the way of the filling-forks and the filling-in action, to prevent enlargement.

In the said drawing, A represents the slotted plate by which the temple is fastened to the breast-beam of the loom. Ears *h* and *f* rise from opposite ends of the plate A, and these form supports for the sliding shank of the forked stem, provided with the usual spiral spring B, operating to press the stem or arms forward. The two arms *a* and *d*, which constitute the fork, extend forward from the shank *b*, as shown, and these are applied to the forward ear *h*, and held in position with the shank by a glut, *c*, fitted between the two sides of the ear and fastened by a rivet, *e*. One arm, *a*, carries the roll or burr *g* at its forward extremity and in a horizontal position, while the other arm, *d*, carries the cover *k* of the roll, suitably arranged to press and hold the passing fabric in working contact with the toothed roll. Between the two arms *a* and *d* there is a long open slot, *B*⁵, and between the roll and the cover a clear open passage leading to the long open slot.

When this burr-temple is used on a loom which carries two or more shuttles, certain of the shut-

tles, with their filling, are at times suspended or out of action, at which times these suspended filling-threads, or any loose ends, pass readily between the roll and the cover and back into the long open slot, where they remain until the shuttle or shuttles carrying such suspended filling are again brought into action. By this means each suspended filling-thread is immediately carried by the web out of the range of the filling-forks and of the filling from the operating shuttle or shuttles; and this prevents entanglement of the filling by the beat of the lay, and it also prevents such suspended filling-threads or loose ends being carried into the warp by the filling-in action, thereby producing more perfect goods, and preventing the necessity of stopping the loom to withdraw or pick out the loops or ends of entangled filling, or that which should not have been inserted.

This peculiar burr-temple is of great importance in looms which carry several shuttles, whether these shuttles are changed by hand or by power, as it is necessary, or at least very important, that the filling-threads out of action should pass down unobstructed in direct connection with the selvage of the woven fabric, and ready to be brought into action without liability of entanglement.

We claim as our invention—

1. The two-armed burr-temple, constructed as described, having a long open slot, *B*⁵, between the arms, said slot communicating by an unobstructed passage with the opening between the roll *g* and the cover *k*.

2. A divided or two-armed burr-temple, as described, one arm carrying the burr or roll *g*, and the other arm carrying the cover, and having a clear passage for suspended filling-threads from the opening between the roll and cover to the opening between the arms.

WILLIAM MURKLAND.
JOHN W. MURKLAND.

Witnesses:

JOHN E. CRANE,
ALVIN LAWRENCE.