(No Model.)

G. SEGSCHNEIDER.

PILE WIRE FOR LOOMS.

No. 545,737. Patented Sept. 3, 1895.

Fig: 1.

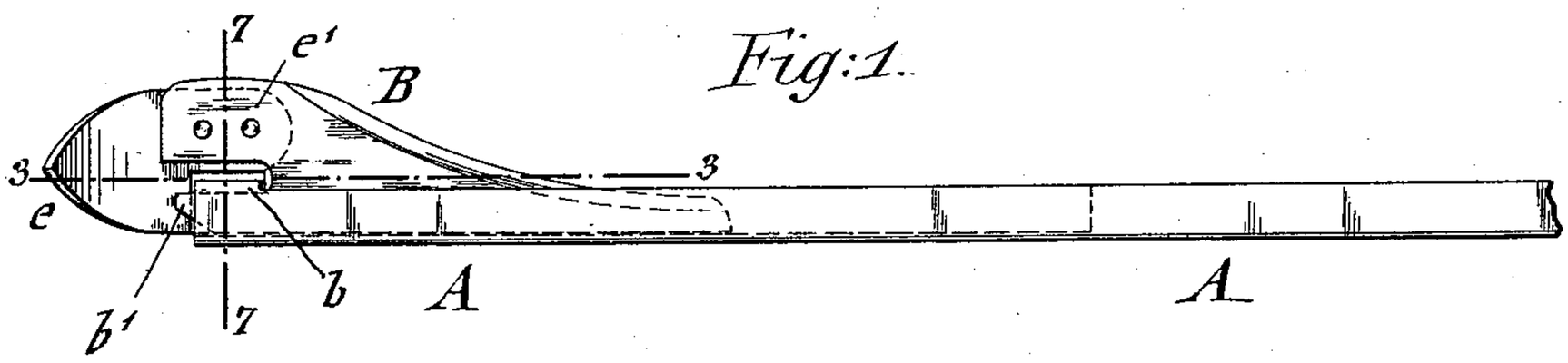


Fig: 2.

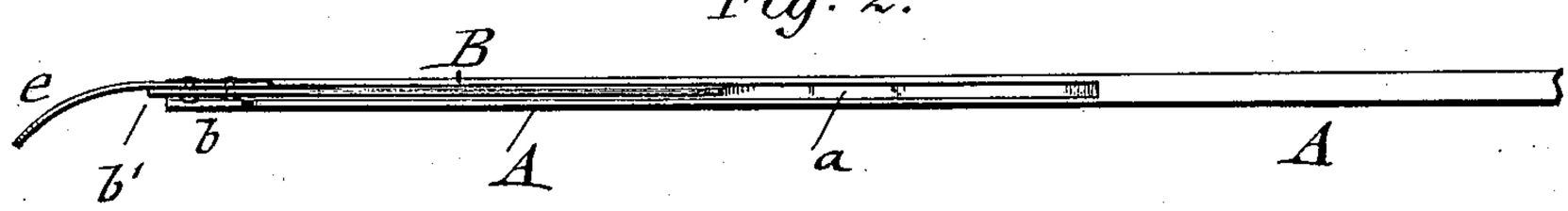


Fig: 3.

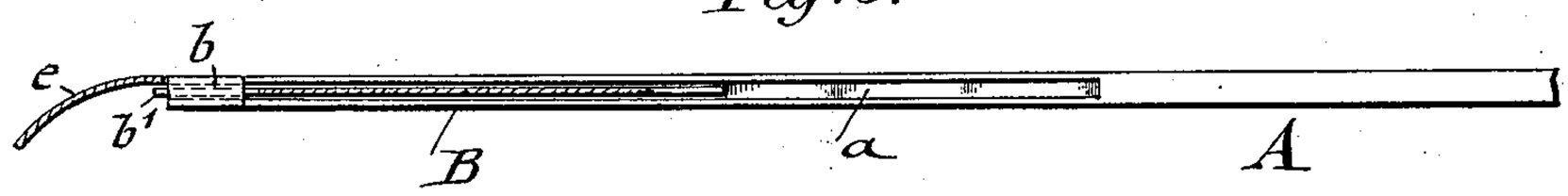


Fig: 4.

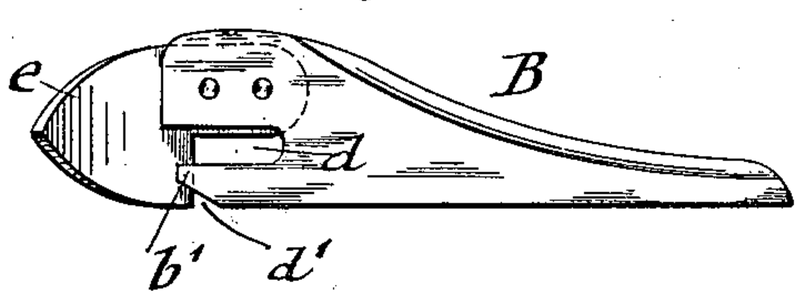


Fig: 5.

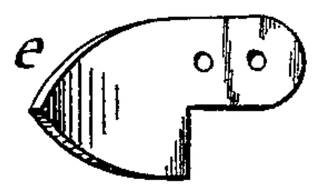
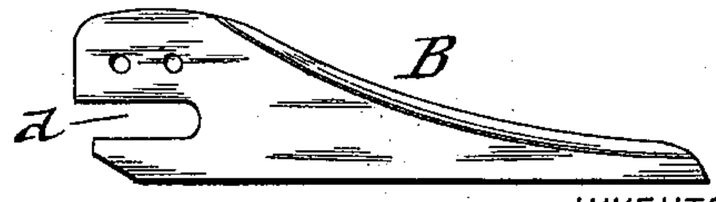
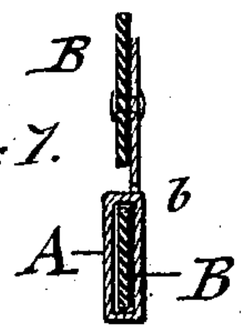


Fig: 6.



WITNESSES:
George W. Jarvel.
H. Willard Griffiths.

Fig: 7.



INVENTOR
Gustave Segschneider
BY
Howson & Sheppard
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UNITED STATES PATENT OFFICE.

GUSTAVE SEGSCHNEIDER, OF YONKERS, NEW YORK, ASSIGNOR TO JOHN T. WARING, OF SAME PLACE.

PILE-WIRE FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 545,737, dated September 3, 1895.

Application filed April 3, 1895. Serial No. 544,247. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVE SEGSCHNEIDER, a citizen of the United States, residing at Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Pile-Wires for Looms, of which the following is a specification.

This invention relates to certain improvements in pile-wires for looms, for which Letters Patent were granted to me on January 2, 1894, No. 512,063, and more especially of the modifications shown in Figs. 7 to 13 in said patent; and the invention consists in a pile-wire for looms, in which the end of the pile-wire is provided with a longitudinal groove, and a detachable cutting-blade inserted in said groove and provided with a slot in the body of the blade, which slot receives a stationary bridge at the outer grooved end of the pile-wire, and is connected by a slit to to the lower edge of the same, so as to permit the insertion of the blade into the groove of the pile-wire and the curved end portion or guard of the blade being retained by a suitable abutment on the blade, as will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of my improved pile-wire for looms. Fig. 2 is a top view of the same. Fig. 3 is also a top view, partly in horizontal section, on line 3 3, Fig. 1. Fig. 4 is a side elevation of the cutting-blade, shown as detached from the pile-wire. Figs. 5 and 6 are side elevations of two portions of which the cutting-blade is composed, showing one portion detached from the other; and Fig. 7 is an enlarged transverse section on line 7 7, Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a pile-wire, which is provided at its outer end with a longitudinal groove *a*, into which a cutting-blade is inserted. The longitudinal groove *a* is cut into the end of the pile-wire in any suitable manner, so as to provide the required space for the insertion of the cutting-blade. To the outer end of the grooved pile-wire is brazed a stationary bridge *b*, which is preferably formed by winding wire around the outer end of the pile-wire, then brazing this wire to the end of the pile-wire, and finally filing off the surplus stock in line with the pile-wire, so that thereby the stationary bridge *b* is obtained. The blade B is provided with a blunt lower edge and with a sharpened and downwardly-tapering inner edge. The body of the blade is provided with a slot *d*, into which extends a slit *d'* from the lower edge of the blade, as shown in Fig. 4. The outer end of the blade B is made in the shape of a blunt and tapering lug *e*, which is bent or curved at a suitable inclination to the plane of the blade, as shown in Figs. 2, 3, and 4, so as to form a guard by which the end of the pile-wire is prevented from interfering with the reeds during the ingoing motion of the pile-wire. The slight curve which is imparted to the guard *e* of the blade B produces the ready glancing off of the end of the pile-wire from the reeds in case it should catch or abut against the same, and secures thereby the reliable working of the pile-wire during its ingoing motion. The blade is inserted into the pile-wire by placing the blunt edge of the blade into the grooved end of the wire with the lower part of the guard bent outward, so that it presses on the side of the pile-wire. The blade is then pushed in outward direction until the horizontal slot *d* of the blade engages the bridge and the guard *e* snaps against the abutment *b'*, arranged at the lower part of the blade. The bridge *b* holds the blade firmly in the grooved end of the pile-wire, in connection with the slot in the body of the blade and with the abutment for the guard, without requiring a special retaining-spring for the inner tapering end of the blade. When it is desired to remove the blade from the pile-wire, the same is readily accomplished by first pressing the lower part of the guard sidewise far enough to clear the side wall of the pile-wire, then pushing the blade inwardly in the groove until the slot in the body of the blade clears the bridge, and then removing the blade from the groove of the pile-wire. The blade is then sharpened and reinserted or a new blade is reinserted into the grooved end of the pile-wire in the manner before described until

the blade is locked again by the bridge and guard and retained firmly and reliably in position in the pile-wire.

The advantages of my improved pile-wire for looms are, first, that the ordinary pile-wires can be readily changed to pile-wires with detachable blades, so that the old stock for pile-wires can be readily adapted for the improved system; second, that the blade can be readily removed for sharpening and then reinserted again; third, that the blade is provided with a guard which forms a part of the detachable blade. My improved pile-wire has all the advantages of the old style of pile-wires together with the advantages of pile-wires with guards and detachable blades.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a pile-wire provided with a longitudinal groove in its outer end and a stationary bridge at the outer end of the grooved portion, of a detachable cutting-blade provided with a curved guard, with a slot in the body of the blade and with a slit extending from the lower edge of the blade into the slot, and an abutment on the cutting-blade by which the guard of the blade is locked to the pile-wire, substantially as set forth.

2. The combination, with a pile-wire provided with a longitudinal groove in its outer end and a stationary bridge across the grooved portion, of a detachable cutting-blade provided with a curved end-portion or guard, with a slot in the body of the same and with a slit extending from the lower edge of the blade into the slot, and an abutment on the cutting-blade for the curved end-portion or guard of the blade, said abutment projecting beyond the bridge of the pile-wire, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAVE SEGSCHNEIDER.

Witnesses:
PAUL GOEPEL,
GEORGE W. JAEKEL.