S. KUH.

Loom for Weaving Matting.

No. 167,545. Patented Sept. 7, 1875.

Fig 1

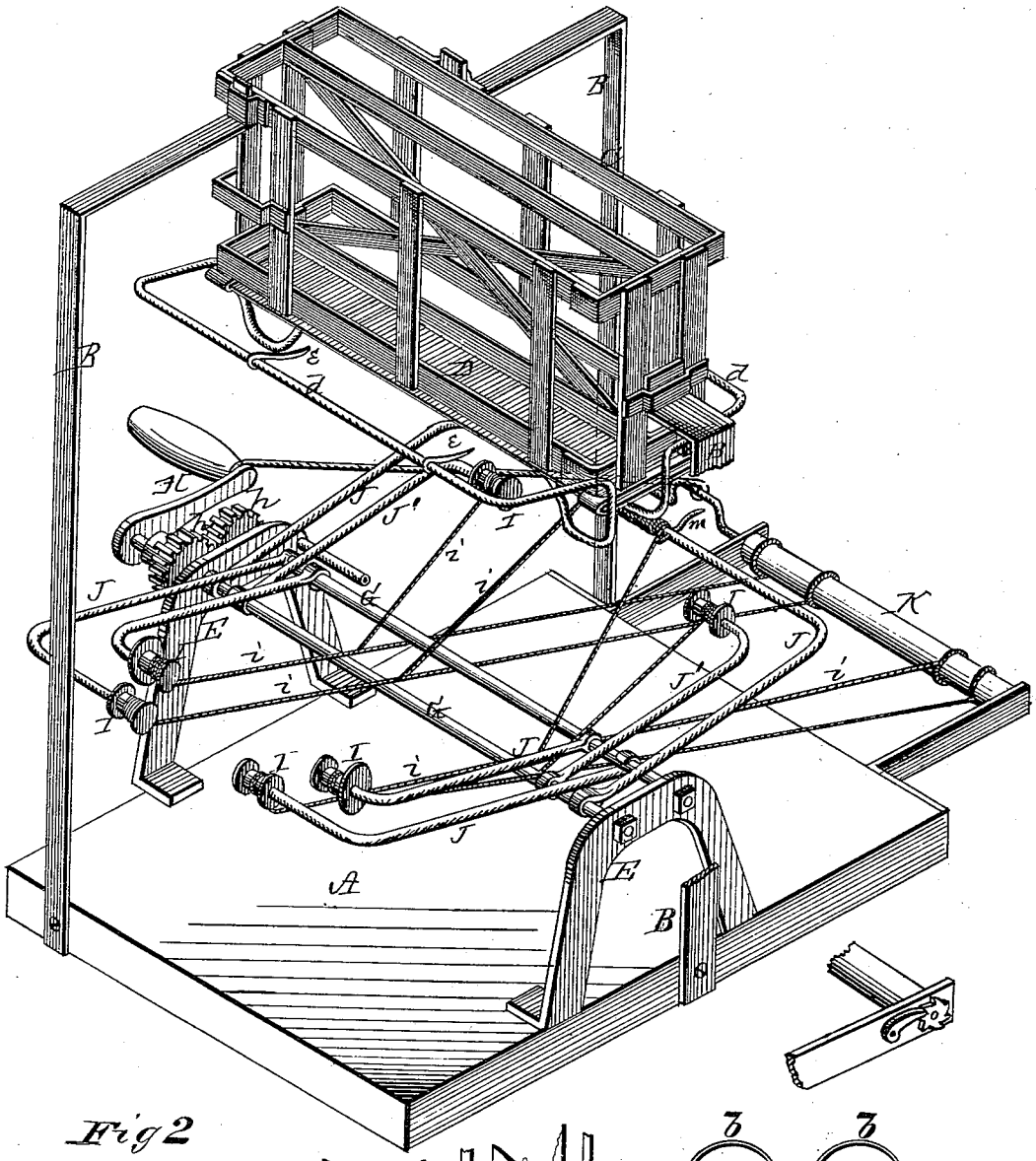
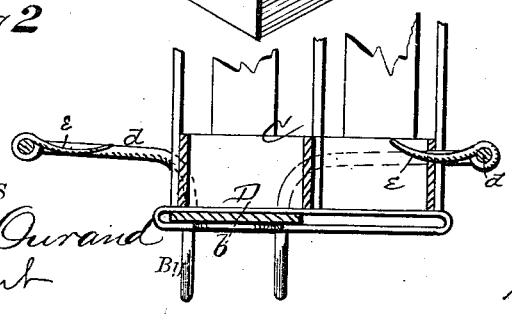
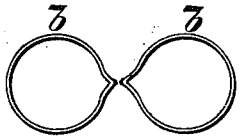


Fig 2





WITNESSES

Franck L. Durand

C. L. Ernst

INVENTOR

Sol Kuh,

Alexander & Mason

Attorneys

UNITED STATES PATENT OFFICE.

SOL KUH, OF GRAND JUNCTION, IOWA.

IMPROVEMENT IN LOOMS FOR WEAVING MATTING.

Specification forming part of Letters Patent No. **167,545**, dated September 7, 1875; application filed August 11, 1875.

To all whom it may concern:

Be it known that I, SOL KUH, of Grand Junction, in the county of Greene and in the State of Iowa, have invented certain new and useful Improvements in Looms for Weaving Matting and other coarse fabrics; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a loom for weaving matting, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a perspective view of my machine. Fig. 2 is a transverse vertical section of the basket containing the splints.

A represents the base or bed of my machine, on which are suitable standards B B B, bent inward, as shown. On the inner ends of these standards is suspended a basket, C, divided by a longitudinal center division into two compartments, for containing the sticks or bundles of splints from which the matting is to be made. The basket C is provided with a sliding bottom, D, moving back and forth sidewise in guides *a a*, and is made sufficiently wide to close one of the compartments only. This bottom is on its under side provided with projecting spring-flanges *b*, which are struck by devices, hereinafter described, to move the bottom alternately from side to side, and cause one stick or bundle of splints to be dropped alternately from either compartment, the remaining bundles, &c., being held up by means of fingers *e e* attached to rods *d d* connected to the sliding bottom. In suitable bearings E, attached to the base A, are placed two parallel shafts, G G, which are at one end geared together by pinions *h h*, and one of said shafts provided with a crank, H, for turning the same. On each shaft G, near each end, is secured an L-shaped arm, J, carrying on the outer end a spool, I, parallel with the shaft. Outside of the arms J, on one shaft, are two similar arms, J′, with spools, extending beyond the inner arms. On the other shaft are similar outside arms formed in one continuous piece, and provided with center spools. Any number of these arms and spools may be used. The various arms and spools of the two shafts are so arranged that they will pass each other when the shafts are rotated. On the various spools are wound cords *i i*, or other suitable material. The cords from the corresponding spools of the two sets are united together, passed between the shafts G G, and to a roller, K, arranged at one side of the machine.

The operation of my machine is as follows: The basket C being filled with suitable sticks or bundles of splints, corn-stalks, or similar material, and the cords arranged as described, the crank H is turned, say, about one-half of a revolution, which throws the sets of arms and spools to opposite sides. At the same time certain projections *m*, on the continuous arms, strike the spring-flanges *b* on the bottom D of the basket C, and move said bottom from under one compartment of the basket to the other, allowing one bundle to drop down from the former onto the cords. The crank H is then turned back one-half of a revolution, throwing the arms, with their spools, to opposite sides again, so that the cords will cross each other over the bundle. At the same time the bottom D is moved again to drop a bundle from the other compartment of the basket, and so on, alternately dropping a bundle from each compartment, the cords being crossed between the bundles. The material as it is woven passes down between the shafts G G, and is wound upon the roller K, said roller being provided with an ordinary pawl and ratchet to prevent it from turning backward, and is operated by a connecting-rod from the crank H catching in a toothed wheel on the end of the roller, or, if desired, separately by hand.

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

1. In a machine for weaving matting, the basket C, divided into two compartments, and

provided with the sliding bottom D, having rods *d*, with fingers *e*, subtantially as and for the purposes herein set forth.

2. The combination of the horizontal shafts G, geared together as described, and each provided with one or more sets of L-shaped arms, J, with spools I, constructed and arranged to operate substantially as and for the purposes herein set forth.

3. The combination of the horizontal shafts G, with their sets of L-shaped arms and spools, and winding-roller K, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of August, 1875.

SOL KUH.

Witnesses:
H. A. HALL,
J. M. MASON.