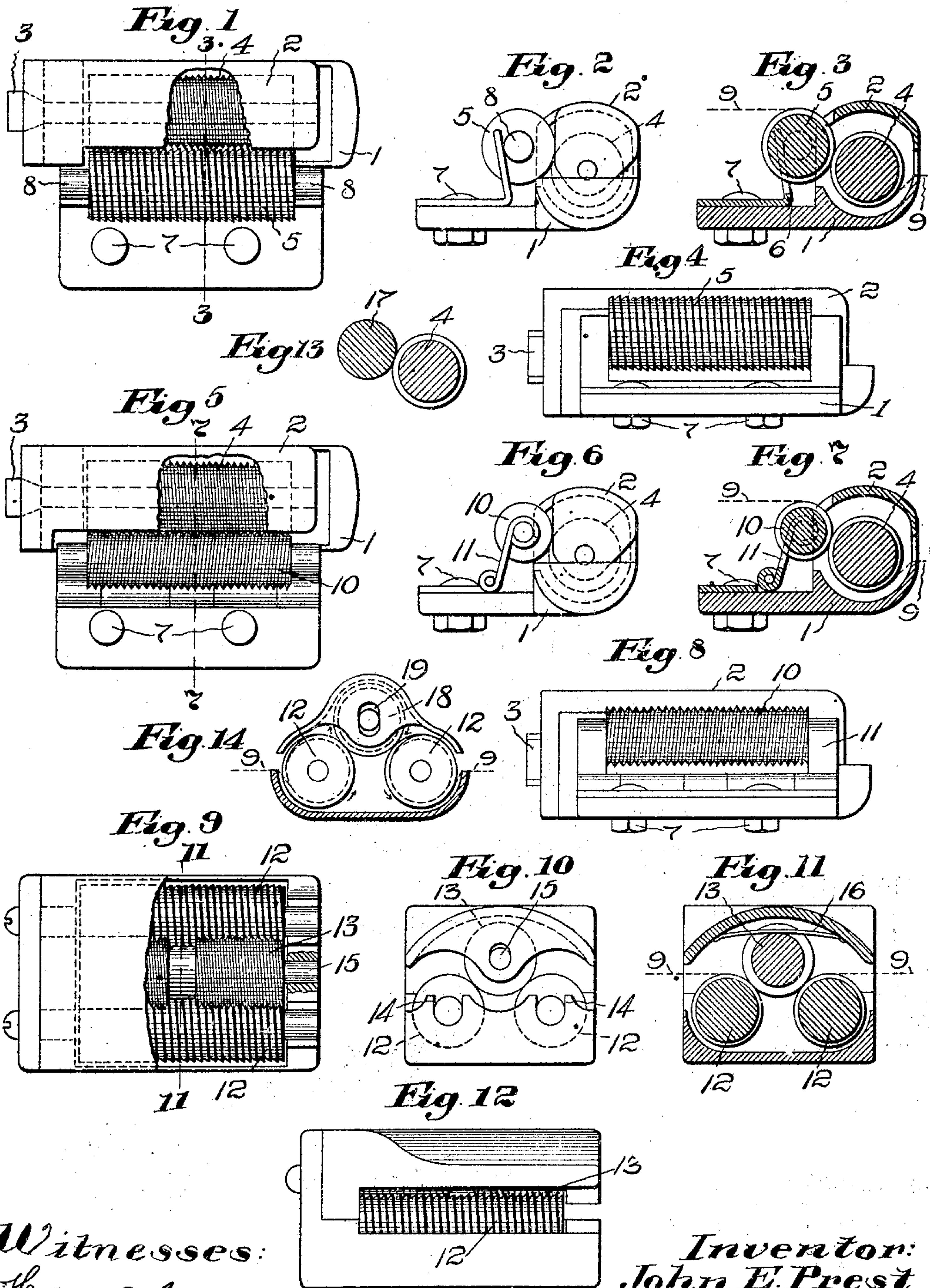


914,509.

Patented Mar. 9, 1909.



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 by Emery and Booth, Attys

UNITED STATES PATENT OFFICE.

JOHN E. PREST, OF MELROSE, MASSACHUSETTS.

LOOM-TEMPLE.

No. 914,509.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed June 27, 1908. Serial No. 440,649.

To all whom it may concern:

Be it known that I, JOHN E. PREST, a citizen of the United States, and a resident of Melrose, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Loom-Temples; of which the following description, in connection with the accompanying drawings, is a specification, like numerals on the drawings representing like parts.

This invention relates to loom temples, the object thereof being to secure an effective engagement with the cloth without penetrating the same or creasing or otherwise impairing the appearance thereof.

In order that the principles of the invention may be readily understood, I have disclosed certain embodiments thereof in the accompanying drawings, wherein—

Figure 1 is a plan view, partially broken away, of a loom temple embodying one form of my invention; Fig. 2 is an end elevation thereof; Fig. 3 is a transverse cross section thereof indicating the path of the fabric therethrough; Fig. 4 is a side elevation looking from the left in Fig. 3; Figs. 5, 6, 7 and 8 are views similar to Figs. 1, 2, 3 and 4 respectively of a slightly modified form of the invention; Figs. 9, 10, 11 and 12 are similar views of a further form of my invention; Fig. 13 is a cross section of another form of my invention; and Fig. 14 is a cross section of still another form of my invention.

Referring first to that form of the invention disclosed in Figs. 1, 2, 3 and 4, the temple casing is composed of a pod 1 and cap 2 of any suitable material and construction, said parts being connected in any suitable manner, as, for example, by a bolt 3 whereon is rotatably mounted one of the temple rolls 4. It is apparent that the members of the casing may be connected in any suitable manner, as, for example, by hinging the same.

I contemplate the employment of a plurality of rolls having provisions whereby they may effectively engage the cloth and maintain the proper tension thereon without, however, penetrating the same or creasing or otherwise impairing the appearance thereof. This result is, in the present embodiment of the invention, accomplished by providing said rolls with screw threads, corrugations or formation which are differentiated or contrasted in any suitable manner, as, for example, by oppositely screw thread-

ing said rolls or by forming the threads of different degrees of fineness or both, so that while the screw threads of said rolls do not intermesh, although contacting with the opposite faces of the cloth at the same point, they effectively engage the same for the purpose desired, or one of the rolls may be plain and the other or others may be screw threaded or provided with other suitable formation. Any suitable number of rolls may be provided.

In the construction shown in Figs. 1, 2, 3 and 4, I provide a roll 5 screw threaded as represented and preferably so mounted that the tension of the cloth draws the same into effective engagement with the cloth of the other roll. While this may be accomplished in this manner, I have in Figs. 2 and 3 represented an inclined bearing 6 secured in any suitable manner, as by bolts 7 to the casing. The reduced ends 8 of said roll are received in said inclined bearings, and the cloth 9, as represented in Fig. 3, passes in operation beneath the roll 4 and over the roll 5, so that the tension thereof draws the roll 5 into effective relation with the roll 4.

In the form of the invention represented in Figs. 1 to 4 inclusive, the roll 5 is represented as more coarsely screw threaded than the roll 4, whereby said rolls maintain a non-meshing relation. If desired, said rolls may be screw threaded in the same direction or in opposite directions.

In the form of the invention represented in Figs. 5 to 8 inclusive, the rolls 4 and 10 are represented as oppositely screw threaded, the roll 10 being mounted in pivoted bearings 11 whereby the tension of the cloth 9, as indicated in Fig. 7, draws the roll 10 into effective relation with the roll 4. It is apparent that the screw threads of the rolls 4 and 5 may not only be respectively right and left or the reverse, but may be of different degrees of fineness.

In both forms of the invention thus far described, the rolls 5 and 10 are so mounted as to be freely rotatable.

In the form of the invention represented in Figs. 9 to 12 inclusive, I have indicated two lower rolls 12—12 screw threaded in the same direction and an upper roll 13 herein represented as more finely screw threaded in the same direction, it being apparent, however, that said roll may be oppositely screw threaded with respect to the rolls 12—12 and of the same or differing degree

of fineness. The said rolls may be mounted in any suitable manner, but preferably the lower rolls 12—12 are mounted in partial bearings 14, shown most clearly in Fig. 10, while the upper roll 13 is mounted in bearings 15 of sufficient size to permit movement of said roll 13 toward and from the rolls 12. One or more of said rolls, and preferably the roll 13, is spring pressed, as by the spring 16, toward the roll 12. In operation the cloth passes over the rolls 12 and beneath the roll 13. It is apparent that instead of screw threading the rolls, they may be corrugated or otherwise formed in such manner as effectively to engage without penetrating the cloth, the formations of said rolls being contrasted for the purpose stated. If desired and in accordance with my invention, I may provide at least one of a plurality of rolls as a smooth roll, the other roll or rolls coöperating therewith being provided with screw threads, corrugations or other formation permitting effective engagement thereof with the cloth. It is apparent that any suitable number of rolls may be employed.

In Fig. 13 I have represented the roll 4 as screw threaded and the roll 17 as plain, the fabric passing in operation beneath the roll 4 and over the roll 17. It is apparent that the roll 4 may be screw threaded in either direction, the screw thread being of any proper degree of fineness or that any suitable formation may be employed. It is likewise apparent that the roll 4 may be plain and the roll 17 provided with a suitable formation, such as screw thread. In the form of the invention illustrated in Fig. 14, the rolls 12—12 are suitably mounted in the lower portion of the casing in any proper manner, and the roll 18 being mounted above and preferably between said rolls in slotted bearings 19. In operation the cloth passes beneath the rolls 12 and over the roll 18, the tension of the cloth thereby pressing said upper roll 18 in effective binding relation with the lower rolls 12. Said

rolls 12 and 18 may be provided with differential formations in the manner previously described.

Having thus described one type or embodiment of my invention, I desire it to be understood that although specific terms are employed, they are used in a generic and descriptive sense and not for purposes of limitation, the scope of the invention being set forth in the following claims.

Claim:—

1. A loom temple comprising a plurality of rolls adapted to grip opposite faces of the cloth between them, adjacent parts of said rolls being differently threaded with respect to each other.

2. A loom temple comprising a plurality of rolls, one at least of said rolls being movably mounted and adapted to be drawn by tension of the cloth into effective relation with another of said rolls.

3. A loom temple comprising a plurality of rolls differently screw threaded and adapted to engage opposite faces of the cloth, one of said rolls being movably mounted to move toward and from one another, the cloth passing in operation under one and over another of said rolls.

4. A loom temple comprising a plurality of rolls having screw threads of differing degrees of fineness.

5. A loom temple comprising a plurality of rolls adapted to grip opposite faces of the cloth, said rolls being differently screw threaded, one of said rolls being bodily fixed and another bodily movable, the cloth passing in operation about said rolls and drawing the bodily movable roll into effective gripping relation with the bodily fixed roll.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JOHN E. PREST.

Witnesses:

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EVERETT S. EMERY.