Sept. 30, 1947. V. B. SPLAWN 2,428,101

TIGHT-GRIP TEMPLE ROLL

Filed Sept. 23, 1946

Fig. 1.

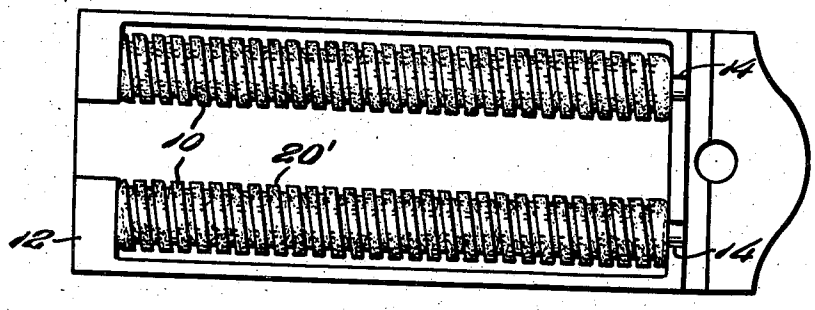


Fig. 2.

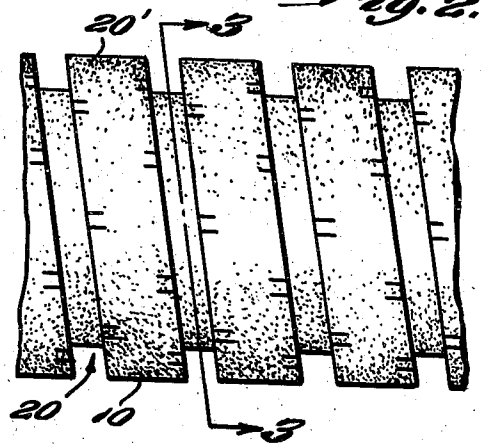


Fig. 3.

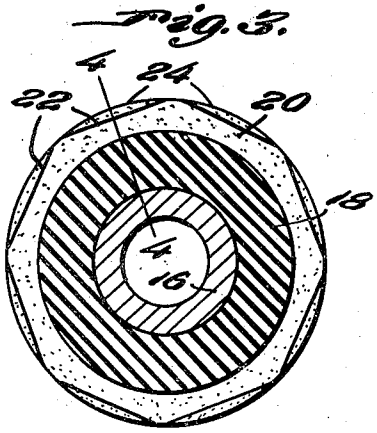
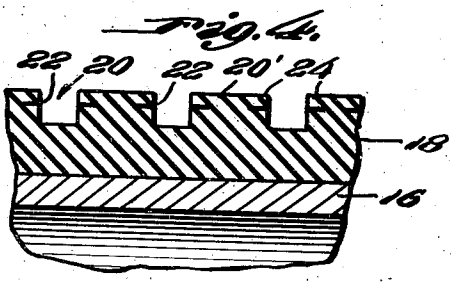


Fig. 4.



Inventor

Virgil B. Splawn

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Patented Sept. 30, 1947

2,428,101

UNITED STATES PATENT OFFICE

2,428,101

TIGHT-GRIP TEMPLE ROLL

Virgil B. Splawn, Burlington, N. C.

Application September 23, 1946, Serial No. 698,775

4 Claims. (Cl. 139—296)

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This invention relates to improvements in temple rolls for use in textile weaving looms.

An object of this invention is to provide an improved, more efficient temple roll.

A further object of this invention is to provide a temple roll which decreases the slippage between the fabric and said roll.

Further objects of this invention shall become apparent following the specification and the appended drawings.

In the drawings—

Figure 1 shows in plan view a pair of improved temple rolls in operative relation with a portion of the loom.

Figure 2 is a fragmentary elevational view of one of the rolls shown in Figure 1 in enlarged scale.

Figure 3 is a section taken on the line 3—3 of Figure 2 showing particularly the chordal cuts in the threads.

Figure 4 is a fragmentary section taken on the line 4—4 of Figure 3 showing particularly a side view of the chordal cuts.

Temple rolls are devices used in loom machines for engaging and pulling the fabric taut between the selvages without injury to the fabric. The rolls in the instant invention may be used in looms handling various types of cloth, for example silks, wool, rayon or cotton.

The improved temple rolls generally designated by the reference numeral 10 are shown in Figure 1 operatively connected to loom portion 12 in a conventional way by means of shafts 14.

A hollow cylindrical center portion preferably made of wood and indicated by 16 is covered by a member 18 made of natural or synthetic rubber or other similar materials. A helical groove 20 is cut into the cover portion 18 beginning at one end and ending at the other thus defining a thread portion 20'. Along each side of the groove 20 the thread portion 20' is cut chordally. As shown in Figure 3 eight cuts 22 are taken per thread. However, any number may be made in accordance with the dictates of good design.

In operation the advantage of this improved type temple roll over old and original types in general use today, is the increase of friction as the fabric passes over the roll thus raising the cut portions or lips on the outer periphery of the roll thereby tightening the pressure of the fabric against the roll. This increased friction holds the fabric more taut in the weaving process thus resulting in increased performance and efficiency of the loom in the weaving process.

In the manufacture of this invention it is important to note that substantially no material is removed in making cuts 22. The object being that a substantial base is left for the cut portion 24 and at the same time have the cut portion 24 raise up when the friction of the cloth pulls against it thereby squeezing the fabric and giving a better grip.

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Due to the simplicity of this invention further detail is considered unnecessary.

I believe that I have been the first to develop a temple roll as described above and wish to be limited only as to the scope of the appended claims as obvious modifications could be made without departing from the spirit of this invention.

Having thus described my invention, I claim:

1. A cylindrical loom temple roll including a resilient cover, said cover having a helical groove forming a helical thread, said thread having chordal slits in the sides thereof, lips spaced peripherally about said thread on the surface of said resilient cover and at the terminal portions of said slits.

2. A cylindrical loom temple roll including a resilient sleeve, said sleeve having a helical groove forming a helical thread, said thread having chordal slits in the sides thereof, lips on the peripheral surface of said thread at the ends of said slits, said slits being formed solely by a cut thereby making said slits without removal of an appreciable amount of material therefrom.

3. A cylindrical loom temple roll comprising a hollow core and a resilient cover therearound, said cover having a helical groove therein, said groove forming a thread longitudinally of said roll and chordal slits in the sides of said thread, lips on the periphery of said thread formed at the terminal portions of said chordal slits.

4. A temple roll including a resilient sleeve, a helical thread in said sleeve, lips on the peripheral surface of said thread formed by chordal slits in the side surfaces of said thread, said slits extending partially across the peripheral surface of said thread.

VIRGIL B. SPLAWN.

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