

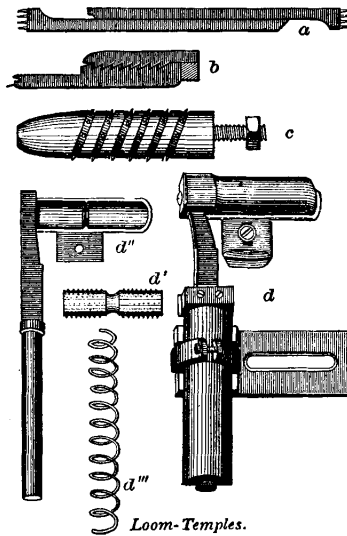
Temple. 1. (*Weaving.*) An instrument for keeping cloth its proper breadth while the reed beats up against it in the process of weaving. In a loom weaving 100 picks per inch, the vibration of the reed being 4 inches, the reed passes over each portion of the warp-threads 800 times. If, therefore, the cloth be not extended so as to bring the warps nearly parallel to the motion of the reed, the selvedge-threads become chafed.

To obviate this difficulty the temple is designed.

The old form is shown at *a*. It consists of two pieces of hard wood with points at the ends to catch the selvedge at either side. They are adjusted as to length for the width of the goods.

b shows Stillman's jaw temple, patented in 1826. The cloth was released and allowed to slide forward when the lay was full up against it, and shut together, holding it out to a proper width when the lay retired. *b* shows the part which held the cloth

Fig. 6290.



Loom-Temples.

The first rotary temple was patented by Ira Draper in 1816. In this, the cloth was held by a horizontal wheel having a row of teeth set obliquely to its axis. It was improved in 1829 in fastening it to the breast-beam by a spring to give it elasticity. George Draper's patent of 1840 added another row of teeth to prevent its leaving a track in the cloth.

c is the Kayser temple which holds the cloth extended by needle-pointed rings turning at an oblique angle to the plane of the breast-beam, thereby automatically stretching the cloth as it passes through.

d is the "Dutcher" temple, now in general use. It has small cylindrical toothed rolls holding the cloth by two or more inches of its breadth. It works nearer to the reed than the others, and has a reciprocating action whereby the lay beating against it produces a motion corresponding with and equal to the motion of the cloth. The lower figure shows several parts, — the spiked roller *d'*, its case and bar *d''*, and the spring *d'''* detached; also the device *d* complete.