

G. Draper
Weaving Temple

N^o 1838

Patented Oct. 28, 1840.

Fig. 1.

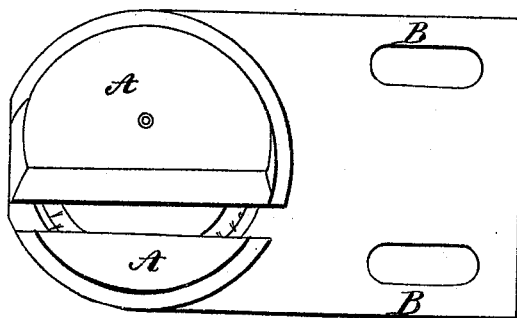


Fig. 5.

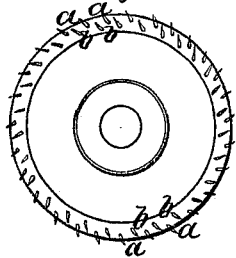


Fig. 4.



Fig. 2.

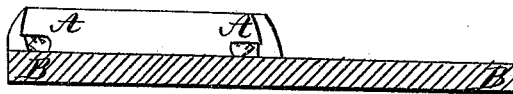
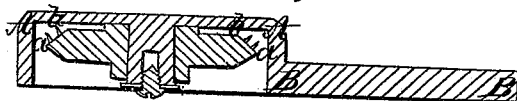


Fig. 3.



UNITED STATES PATENT OFFICE.

GEORGE DRAPER, OF PALMER, MASSACHUSETTS.

IMPROVEMENT IN ROTARY TEMPLES FOR WEAVING-LOOMS.

Specification forming part of Letters Patent No. 1,838, dated October 28, 1840.

To all whom it may concern:

Be it known that I, GEORGE DRAPER, of Palmer, in the county of Hampden and State of Massachusetts, have invented, constructed, made, and applied to use a new and useful Improvement in Rotary Temples Used in Manufacturing Cloth by Machinery, of which the following is a specification.

These improvements, the principles thereof, the application of said principles by which the same may be distinguished from other inventions for a similar purpose, together with such parts, improvements, or combinations as I claim to be my invention and hold to be original and new, I have herein set forth in the following description and accompanying drawings herein referred to, which, taken in connection, form my specification. The main difficulty with the "rotary temples" now in use consists in the construction of the wheel which is provided with only one set or row of oblique teeth, as by this arrangement the teeth must necessarily run constantly on the same thread, which has a tendency in weaving thin fabrics to crowd the threads too much to the selvage of the cloth and by so doing leave an open track where the teeth have passed.

Figures 1, 2, 3, 4, and 5 represent my improvements. Fig. 1 is a top view of a detached temple. Fig. 2 is a side elevation; Fig. 3, a longitudinal section; Fig. 4, an end elevation, Fig. 5 being a detailed view of the wheel on which the teeth are arranged.

The main parts of my improved temple—such as the frame A A, B B, &c.—are precisely similar to those in a rotary temple for which Letters Patent were granted to Ira Draper, bearing date April 1, 1829.

My improvements consist in having two concentric rows of oblique teeth *a a a*, &c., *b b b*, &c., on the wheel of the temple, as shown in Fig. 5, the outer row of teeth *a a a* standing about one-sixteenth of an inch above the inner row and very near the edge or perimeter of the wheel. The teeth of the outer and inner row do not stand opposite each other, but are arranged with spaces between them, as seen in Fig. 5, so that when the teeth of the outer row fix upon the cloth, the wheel revolves a little, and then the teeth of the inner row perform a similar office, which arrangement gives a double bearing upon the selvage of the cloth, the two bearings being upon different threads. This leaves the selvage more perfect than the single row of teeth would, avoiding the formation of an open track between the threads produced by the said single row of teeth, as above mentioned.

Having thus described my improvements, I shall claim as my invention—

Forming two concentric rows of oblique teeth upon the wheel of a rotary temple, the arrangement being substantially in the manner and for the purpose above set forth.

In testimony that the above is a true description of my said invention and improvement I have hereto set my signature this 9th day of October, 1840.

GEORGE DRAPER.

Witnesses:

HENRY MORRIS,
E. A. MORRIS,
JONATHAN NEWELL.