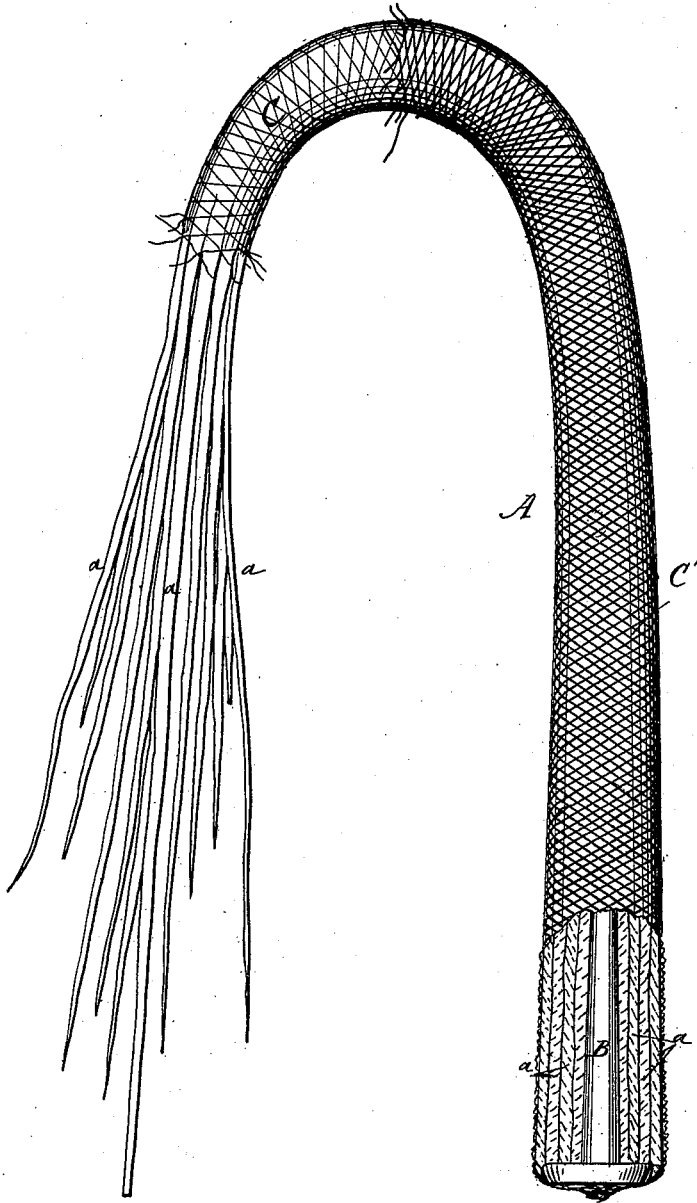


E. B. LIGHT.  
Leather-Whip.

No. 204,985.

Patented June 18, 1878.



WITNESSES:

*C. Sedgwick*  
*J. M. Henley*

INVENTOR:

*E. B. Light*

BY

*M. M. Muntz*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

EDWARD B. LIGHT, OF DENVER, COLORADO.

## IMPROVEMENT IN LEATHER WHIPS.

Specification forming part of Letters Patent No. 204,985, dated June 18, 1878; application filed February 26, 1878.

*To all whom it may concern:*

Be it known that I, EDWARD B. LIGHT, of Denver, in the county of Arapahoe and State of Colorado, have invented a new and Improved Leather Whip, of which the following is a specification:

The object of this invention is to furnish an improved leather whip of perfect taper and bend, and of such elasticity and cheapness as to form a durable and very serviceable whip.

These leather whips were heretofore manufactured by cutting leather into tapering strips, which were saturated with glue and then bound together with a rope. The leather strips were then allowed to dry, after which the rope was removed and the rigid stem shaped in a lathe, the same as in carriage-whips. This formed the filling for the leather whip, which was finally covered by a leather cover or casing.

Whips of this construction are stiff and unyielding, and liable to break, as the hot glue destroys the fibers of the leather.

This invention is intended to overcome the defects of the present style of leather whips, and to furnish a whip of superior flexibility, strength, and taper.

The invention consists of a leather whip made of a filling of tapering leather strips of different length and size, that are arranged so as to form a perfect taper, spiked and tied at the butt-end, and finally plaited, first in wet, then in dry, state, the filling being then inclosed into a leather cover in the usual manner.

The accompanying drawing represents a perspective view of my improved filling for leather whips, the same being partly in section on the butt-end, and having the covering-plaits partly removed to show the interior construction of the whip.

Referring to the drawing, A represents the filling of my improved leather whip, which is made of a number of tapering leather strips, *a*, of different sizes and lengths. These strips are shaped in a leather pattern that is made of a strip of leather cut of the required length and width, wider at one end and tapering to a point at the opposite end. This strip of

leather is rolled so that the two edges will come together.

The tapering filling strips *a* are then placed into the pattern by allowing the longest strips to run through from butt to point, then some from butt to near the point, and so on by using gradually shorter strips until the pattern is entirely filled and a filling obtained which, when completed, gives a whip of perfect taper.

A spike, B, of lead or iron, is inserted into the butt-end for the purpose of loading the filling, after which a string is tied around the filling at the larger end, so as to hold the strips into position for being covered by plaiting. This is done by the usual plaiting-machine employed for covering the exterior of rattan and whalebone whips. The filling-strips are placed in wet state, butt-end up, into the machine, and bound together by plaiting them with a strong cotton thread, after which the filling is rolled until perfectly smooth and of uniform taper and circular shape.

The filling is then allowed to dry thoroughly, which causes the strips to shrink and the plaited cover C to fit loosely thereon. The filling is then plaited a second time or oftener, in the same manner as before, so as to give it a second tightly-fitting cover, C', which holds the strips firmly together and completes the filling, furnishing a very serviceable filling at a reasonable cost.

The filling is finally covered with an outer leather cover in the customary manner in such leather whips, which cover is not shown in the drawing.

In this manner a leather whip of perfect taper and bend and of greater flexibility, durability, and cheapness is furnished.

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

1. A leather whip covered with a plaiting of thread, as shown and described.

2. In making whips, the method of cutting the leather in a wet state, filling the pattern therewith, then plaiting on the thread-cover, and finally drying the whip, as described.

3. The method of making the filling of leather whips, consisting, first, in shaping the

tapering leather strips of different length or size in a mold, and plaiting them first in wet state, and finally in dry state, substantially as described.

4. The method of making fillings of leather whips, consisting, first, in molding the tapering leather strips into tapering shape; secondly, spiking and tying them at the butt-end,

then plaiting them in wet state and rolling them into proper shape; and finally plaiting them in dry state, substantially as specified.

EDWARD B. LIGHT.

Witnesses:

JACOB H. ALLER,  
THOMAS A. ASHCUM.