

# UNITED STATES PATENT OFFICE.

CHARLES W. COOPER, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN THE MANUFACTURE OF GLUE.

Specification forming part of Letters Patent No. **32,979**, dated August 6, 1861.

*To all whom it may concern:*

Be it known that I, CHARLES W. COOPER, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and improved method of neutralizing the lime or other alkali contained in glue-stock; and I do hereby declare that the following is a full and exact description.

It is well known to manufacturers of glue that before the skins, sinews, or other materials known as "glue-stock," and which have been subjected to the action of lime or other alkali, are dissolved for the purpose of making glue or gelatine it is necessary that the caustic lime or other alkali contained in them should be rendered neutral. To accomplish this it has been customary to expose the skins, &c., to the free action of the atmosphere, by which means the carbonic acid of the air would combine with the lime and convert it into a carbonate. This is a slow and tedious process, the skins having to be so exposed for weeks in order to have the lime perfectly carbonized.

The object of my invention is to accomplish the carbonizing process more expeditiously and in a smaller space of room. To do this,

instead of depending on the carbonic acid naturally existing in the air, I use carbonic-acid gas obtained by the combustion of coal or by any other artificial means.

To enable others skilled in the art to use my invention, I will proceed to describe its application.

When the skins or other material are taken from the lime or other alkali they are well washed, and then placed in a chamber and separated so as to expose much surface to the action of the gas. Carbonic-acid gas is then introduced into the chamber in a sufficient quantity, and the skins, &c., are allowed to remain until the lime or other alkali contained in them is all converted into a carbonate.

What I claim as my invention, and desire to secure by Letters Patent, is—

The application to glue-stock, for the purpose of neutralizing the lime or other alkali contained therein, of artificially-prepared carbonic-acid gas, in the manner set forth.

CHAS. W. COOPER.

Witnesses:

EBENR. CONKLIN,  
WM. COOPER.