## UNITED STATES PATENT OFFICE.

HUGO NOERDLINGER, OF STUTTGART, GERMANY.

## PREPARING ACIDULATED OIL.

SPECIFICATION forming part of Letters Patent No 441,803, dated December 2, 1890.

Application filed June 7, 1890. Serial No. 354,621. (No specimens.) Patented in Germany June 5, 1889, No. 52,448; in France June 8, 1889, No. 198,833; in England June 8, 1889, No. 9,564; in Belgium June 17, 1889, No. 86,660; in Luxemburg June 18, 1889, No. 1,147; in Italy June 30, 1889, XXIII, 25,660, LIV, 130; in Spain August 20, 1889, No. 9,695; in Norway October 28, 1889, No. 1,384; in Austria-Hungary April 18, 1890, No. 53,271 and No. 11,233, and in Sweden May 29, 1890, No. 2,376.

To all whom it may concern:

Be it known that I, HUGO NOERDLINGER, a subject of the King of Würtemberg, and a resident at Stuttgart, Würtemberg, Germany, 5 have invented new and useful Improvements in Processes for Obtaining Oil and Vinegar Preparations for Industrial, Medicamental, and other Purposes, (for which I have obtained patents in Germany, dated June 5, 1889, No. to 52,448; in France, dated June 8, 1889, No. 198,833; in Great Britain, dated June 8, 1889, No. 9,564; in Belgium, dated June 17, 1889, No. 86,660; in Luxemburg, dated June 18, 1889, No. 1,147; in Italy, dated June 30, 1889, Vols. 15 XXIII and LIV, Nos. 25,660 and 130; in Spain, dated August 20, 1889, No. 9,695; in Norway, dated October 28, 1889, No. 1,384; in Austria-Hungary, dated April 18, 1890, No. 53,271 and No. 11,233, and in Sweden, dated May 29, 1890, 20 No. 2,376,) of which the following is a specification.

This invention relates to the manufacture of a clear permanent homogeneous mixture consisting of vinegar and fatty oil—such as cotton-oil, &c.—which is applicable for various manufacturing and other purposes—such as, for instance, for mordanting for medical purposes. It offers, in addition, the special advantage that the oil becomes purified by the addition of the vinegar and preserved from deterioration, while, on the other hand, the vinegar is freed from water, so that a permanent homogeneous mixture of vinegar and oil free from water is obtained.

For all the above applications a simple mixture of vinegar and oil is quite useless, as the constituents always separate again directly after incorporation.

According to the present invention the atty oil and vinegar are first mixed mechanically, forming a more or less opaque compound, which holds the impurities of the oil

and the water of the vinegar in suspension. This is now mixed with a body soluble in water, for which a suitable salt—such as common salt—is used, and after stirring together the mixture is allowed to stand. A perfectly clear and homogeneous mixture of pure oil and vinegar free from water then separates. forming a layer floating upon the impure saline aqueous solution below, so that the former can be readily decanted either for immediate use or for transport.

It is not necessary to take perfectly pure fatty oil in the first instance, as, as above 55 stated, it becomes freed from impurities during the process

ing the process.

The proportion between vinegar and fatty oil may be varied according to the use to which it is to be applied. The quantity of salt 60 to be added also varies according to the percentage of water contained in the mixture.

Having thus described my invention, I disclaim the mixture of volatile oils with vinegar; but

What I claim is—

The process herein described of obtaining a homogeneous mixture of fatty oil and vinegar free from water and other impurities, consisting in first mixing the oil and vinegar, 70 next adding a salt soluble in water to throw down the water and other impurities from the oil and vinegar, and afterward separating by decantation the acidulated oil from the impurities and saline liquid thus thrown down, 75 as herein described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

## HUGO NOERDLINGER.

Witnesses:

OTTMAR ROEUR,
CARL WENDLING.