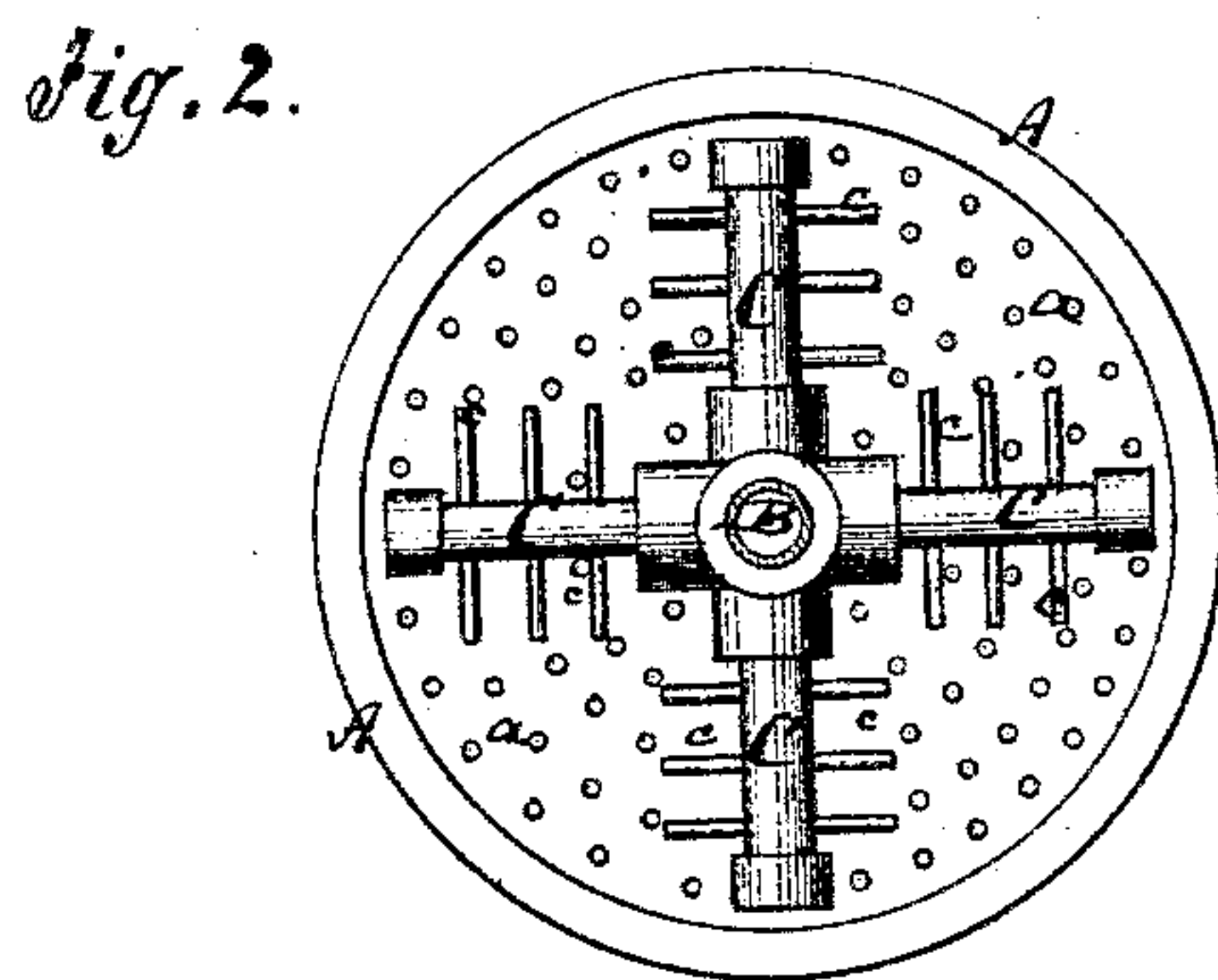
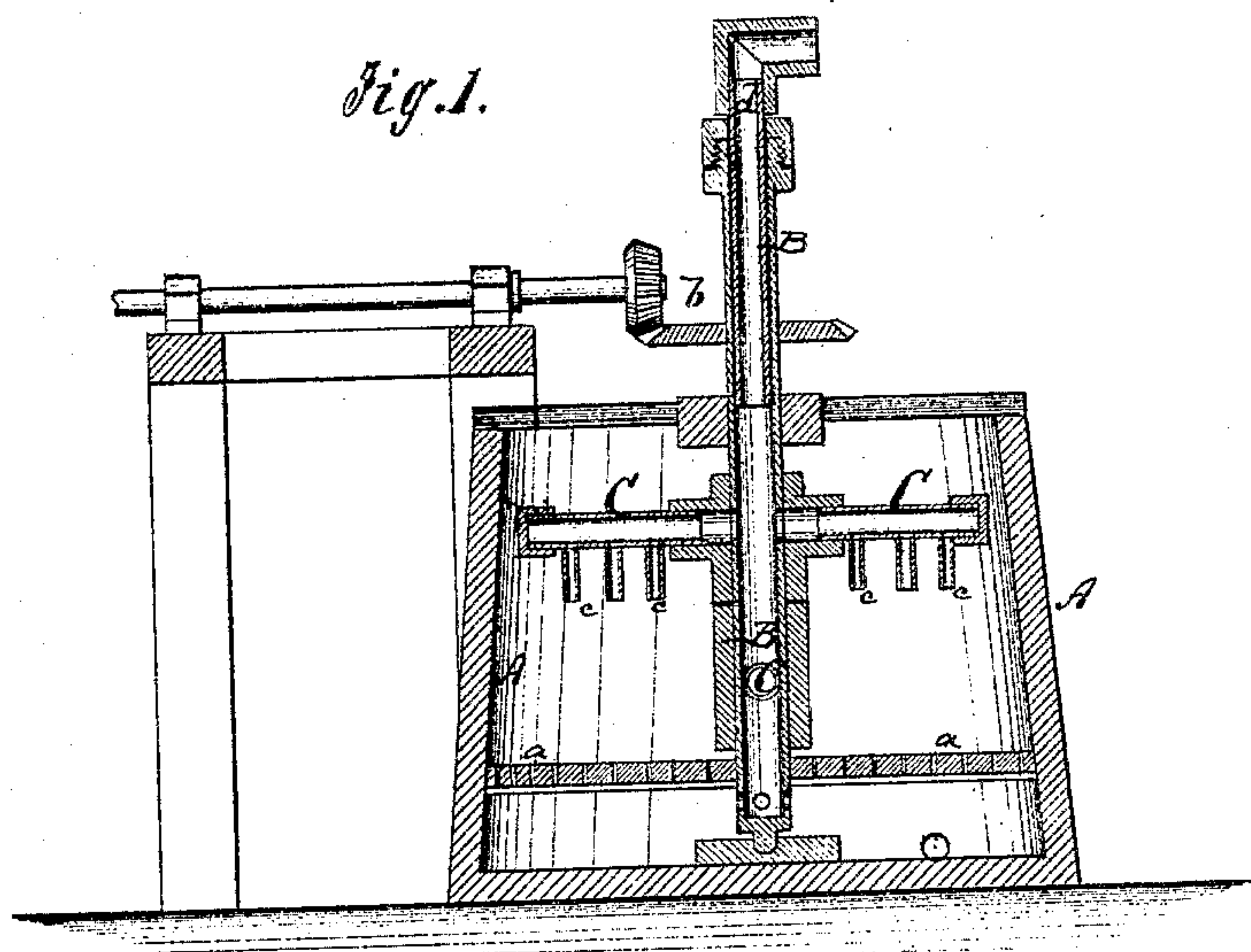


*L. S. Smediker,*  
*Ageing Liquors.*  
*No. 103790. Patented May 31. 1870.*



**Witnesses:**  
*A. Bennet*  
*Alex. F. Roberts*

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*L. S. Smediker*  
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**Attorneys.**

# UNITED STATES PATENT OFFICE.

LUKE S. SNEDIKER, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, WM. BANZETT, AND JAMES SHARKEY, OF SAME PLACE.

## IMPROVEMENT IN APPARATUS FOR RECTIFYING SPIRITS.

Specification forming part of Letters Patent No. 103,790, dated May 31, 1870.

*To all whom it may concern:*

Be it known that I, LUKE S. SNEDIKER, of the city of New York, in the county and State of New York, have invented a new and Improved Rectifying Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents a vertical central section of my improved rectifying apparatus. Fig. 2 is a plan or top view, partly in section, of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new apparatus for disturbing and heating alcoholic liquors, and the coal in rectifying machinery, so that thereby the absorption of the fusel-oil will be more rapidly and thoroughly produced.

The invention consists in constructing the agitating machinery with hollow arms, through which steam is conducted into the liquor, so that thereby both the heating and agitating devices will be most intimately connected, the steam serving the double purpose of heating and agitating.

A in the drawings represents the tub or rectifier, provided with a perforated false bottom, *a*, upon which the charcoal is placed. Through the center of the tub is fitted a vertical hollow shaft, B, which is rotated by means of gear-wheels *b b*, or other suitable machinery. The shaft has, within the tub, hollow projecting arms C C, which have tubular

branches *c c*, as shown. Steam is admitted into the upper end of the shaft through a packed pipe, *d*, and is by the arms and branch C *c* distributed in the apparatus. When the operation of the apparatus has been suspended for some hours, the charcoal becomes quite hard or packed, and in that condition the agitator cannot be operated; but the steam, when forced in through the arms *c*, permeates the charcoal and softens or loosens the same, so as to allow the shaft and its arms to be easily revolved, and the rectifying process to be thereby resumed. The liquor to be rectified is, by the agitating-arms, thoroughly mixed with the coal, and in that case is exposed to the direct heat of the steam, and also the agitation of the same.

It is evident that by this apparatus the quickest and most desirable result is obtained. Heretofore only indirect heat was applied by heating the outer wall of the tub, whereby much of the heat was lost.

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

1. The tubular shaft B, provided with the hollow agitating-arms and branches, for the purpose of conducting steam into the liquor which it agitates, as set forth.

2. In a rectifying apparatus, the application of steam to charcoal, for the purpose and in the manner herein set forth.

The above specification of my invention signed by me this 16th day of March, 1870.

LUKE S. SNEDIKER.

Witnesses:

GEO. W. MABEE,  
ALEX. F. ROBERTS.