

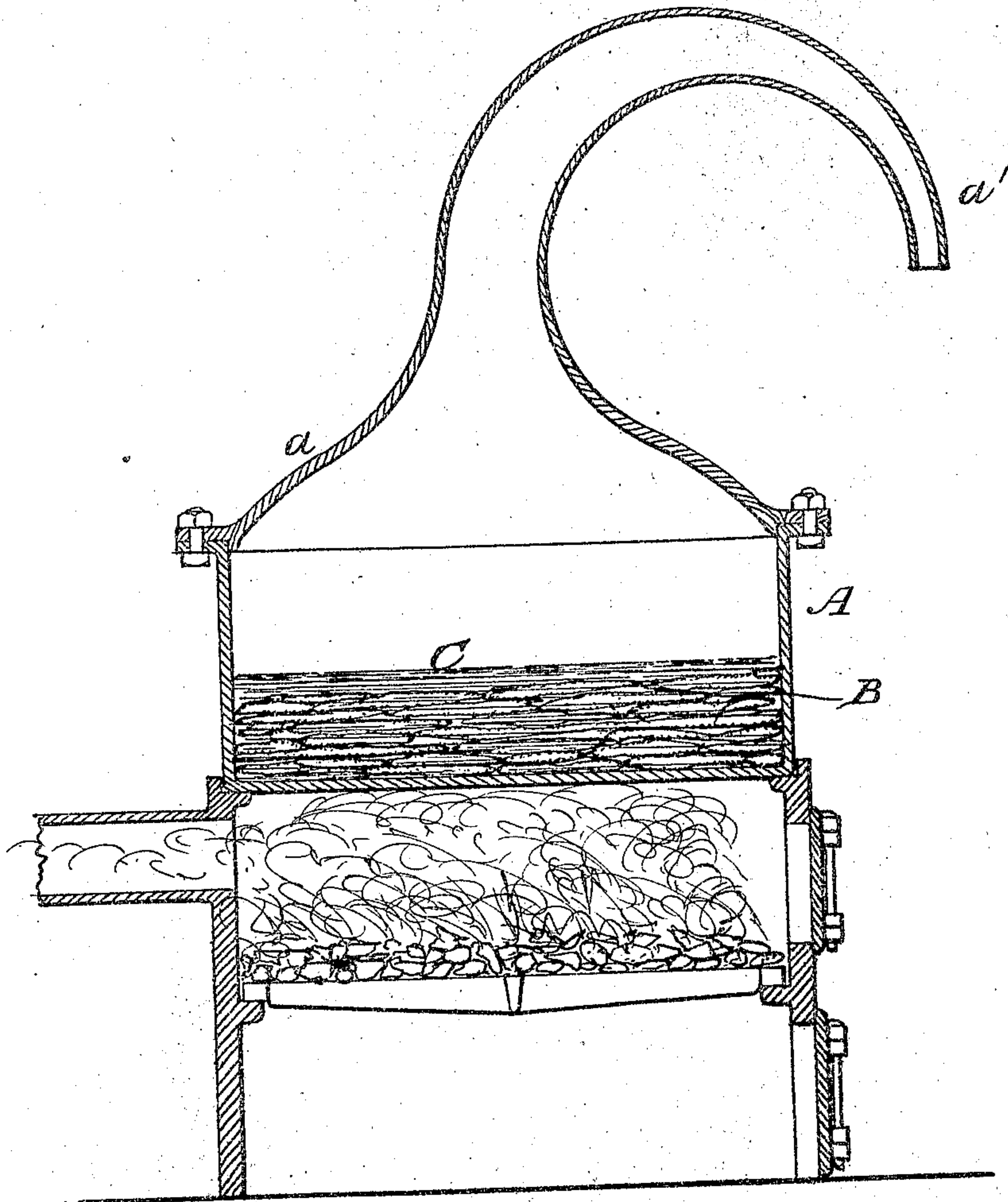
No. 804,358.

PATENTED NOV. 14, 1905.

E. B. WEED.

PROCESS OF OBTAINING TERPENES AND OTHER PRODUCTS FROM WOOD.

APPLICATION FILED JAN. 16, 1900. RENEWED APR. 8, 1905.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EDWARD B. WEED, OF CLEVELAND, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WEED DISTILLING AND MANUFACTURING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

PROCESS OF OBTAINING TERPENES AND OTHER PRODUCTS FROM WOOD.

No. 804,358.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed January 16, 1900. Renewed April 6, 1905. Serial No. 254,531.

*To all whom it may concern:*

Be it known that I, EDWARD B. WEED, a citizen of the United States of America, residing at Cleveland, county of Cuyahoga, Ohio, have invented a new and useful Process of Obtaining Terpenes and other Products from Wood, of which the following is a specification.

The object of this invention is to provide a process by which turpentine or other terpenes, essential oils, or other volatile products, either preëxistent or formed during the process, can be obtained from woods which contain them more rapidly and thoroughly than is possible with the usual methods of distillation.

In accordance with the invention the wood which contains the product to be obtained or the elements thereof is subjected to the action of a bath of rosin, which has a higher boiling-point than the product to be obtained and is substantially neutral, so that it does not affect either the wood or the product, this bath when heated separating from the wood the product sought, which is at the same time distilled over from the bath.

The accompanying drawing represents one form of an apparatus suitable for carrying on the process, which apparatus will be described hereinafter, it being understood that it is merely one convenient form of apparatus chosen for explanation of the nature of the invention.

The apparatus referred to comprises in substance a still A, provided with a cap a, having an outlet-pipe a'. The still is partially filled with rosin, (indicated at C,) which is in a liquid condition when heated, but has a boiling-point higher than that of the turpentine or other product to be obtained from the

wood. The wood which contains the product sought or the elements thereof, as represented at B, is immersed in the bath contained in the still, the temperature of the bath being raised to a degree which is sufficient to volatilize the product to be obtained from the wood, while it is not sufficient to volatilize the bath itself, which thus communicates the necessary heat to the wood and facilitates the volatilization and separation of the product to be obtained. For the extraction of turpentine the temperature of the bath is raised to about 320° Fahrenheit, at which temperature the turpentine within the wood is volatilized and leaves the wood. For other products the temperature of the bath may be raised subsequently to a higher degree until finally all of the volatile constituents of the wood may be separated, leaving the pure carbon. The time of treatment of the wood as well as the temperature of the bath will vary in different cases, according to the nature of the product to be obtained from the wood. It will be understood that the volatile products driven off from the wood as described pass through the still and are condensed in the usual manner.

I claim as my invention—

The process of obtaining volatile products from wood which consists in subjecting the wood to a bath of rosin, heating the bath to the point of volatilization of the desired product, and distilling over the product.

In testimony whereof I sign this application, in the presence of two witnesses, this 13th day of January, 1900.

EDWARD B. WEED.

Witnesses:

G. H. FOSTER,  
C. I. HENDERSON.