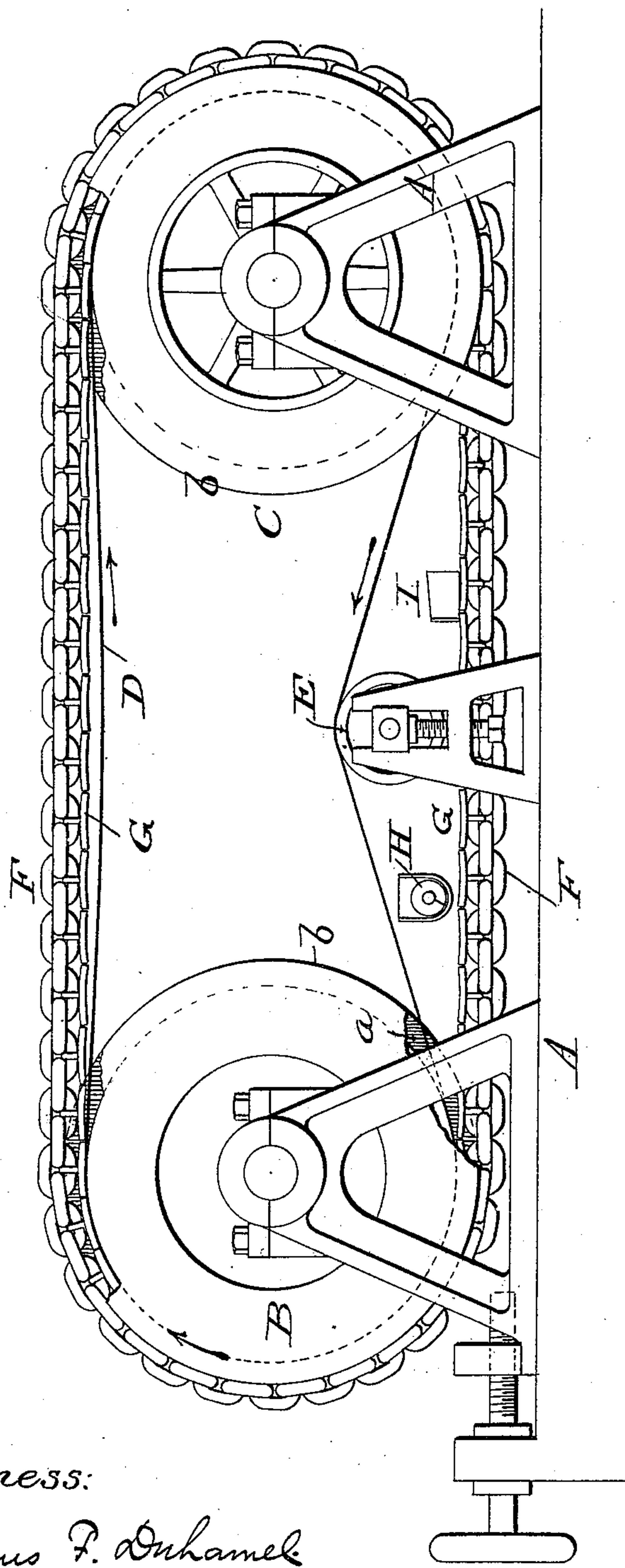


(No Model.)

V. D. ANDERSON.  
PRESS.

No. 464,599.

Patented Dec. 8, 1891.



Witness:

James F. Duhamel  
Horace A. Dodge.

V. D. ANDERSON,  
Inventor,

BY *Dodge & Sons,*  
ATTYS.

# UNITED STATES PATENT OFFICE.

VALERIUS D. ANDERSON, OF CLEVELAND, OHIO.

## PRESS.

SPECIFICATION forming part of Letters Patent No. 464,599, dated December 8, 1891.

Application filed July 2, 1891. Serial No. 398,246. (No model.)

*To all whom it may concern:*

Be it known that I, VALERIUS D. ANDERSON, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Presses, of which the following is a specification.

My invention relates to presses designed more particularly for expelling the moisture from or for compressing or condensing various substances.

The drawing shows my improved press in side elevation and partly in section.

A indicates a main frame or support, which may be made of any suitable material and of any suitable design.

At one end of the frame A is a drum or cylinder B, which is provided with a circumferential groove or channel *a* and side flanges *b b*, while at the opposite end of the main frame is a second drum or cylinder C, which is advisably constructed in the same manner as drum B. Passing about these wheels or drums B C is a cloth or similar apron D, which on the lower side is held slightly elevated by a wheel or pulley E.

F indicates a chain composed of links, to which are attached the lags G, of a width to fit between the flanges of the drums or wheels B C.

H indicates a worm or conveyer for feeding the material into the space between the apron and the lag-chain, and I indicates a scraper or deflector arranged in contact, or nearly in contact, with the lags to scrape off the material and discharge or deflect it laterally. Now when the material is fed onto the lag-chain and the parts are moved in the direction of the arrows, the material is carried gradually and slowly into the narrowing-throat and is pressed against the apron in the bottom of the groove of the wheel or drum and whatever moisture there may have been in the material is expelled by the time that it reaches the upper side of the drum. When the material reaches this point, it is carried by the apron across to the drum C and there

subjected to a second pressing action, similar to that first received. At a point below the center of the drum the apron and chain begin to separate, and when the material is carried around to this point by the drum it (the said material) will rest upon the lag-chain and be carried forward until intercepted and deflected laterally by the inclined scraper or scraping-blade. The flanges of the drum may be omitted and suitable side guards or plates substituted therefor.

I do not limit myself to the use of any particular feeding mechanism or scraper, nor do I wish to be understood as limiting myself to the precise details of construction herein shown and described.

Having thus described my invention, what I claim is—

1. In combination with the wheels or drums, an apron passing about the same, and a pressing-chain outside of said apron also passing about the said wheels or drums, all substantially as shown and described.

2. In combination with the grooved drums, the apron passing about the same, and the lag-chain outside of said apron also passing about the said drums, all substantially as shown and described.

3. In combination with two wheels or drums, an apron passing about the same, a lag-chain also passing about the said drums, and means for feeding the material into the space between the apron and the chain, all substantially as shown and described.

4. In combination with the drums, the apron passing about the same, a wheel or pulley for holding up the lower side of the apron, a lag-chain passing about the drums and the apron thereon, a feeding device, and a scraper located between the lag-chain and the apron.

In witness whereof I hereunto set my hand in the presence of two witnesses.

VALERIUS D. ANDERSON.

Witnesses:

WALTER A. BIDDLE,  
L. T. FISH.