

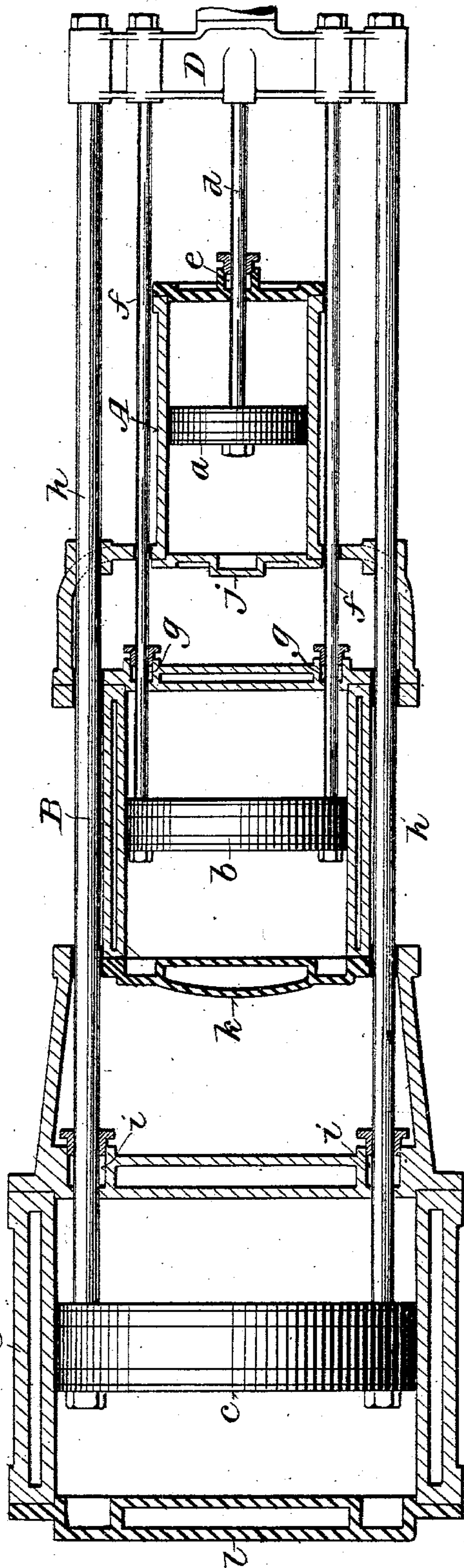
No. 751,997.

PATENTED FEB. 9, 1904.

F. M. PRESCOTT.
MULTIPLE EXPANSION ENGINE.

APPLICATION FILED OCT. 16, 1902.

NO MODEL.



Witnesses:
Geo W. Young,
Chas. R. Goss.

Inventor:
Frederick M. Prescott
By *Wm. H. Smith*
Attorneys.

UNITED STATES PATENT OFFICE.

FREDERICK M. PRESCOTT, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO
FRED. M. PRESCOTT STEAM PUMP COMPANY, OF WEST ALLIS, WIS-
CONSIN, A CORPORATION OF WISCONSIN.

MULTIPLE-EXPANSION ENGINE.

SPECIFICATION forming part of Letters Patent No. 751,997, dated February 9, 1904.

Application filed October 16, 1902. Serial No. 127,582. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK M. PRESCOTT, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Multiple-Expansion Engines, of which the following is a specification, reference being had to the accompanying drawing, forming a part thereof.

This invention relates particularly to triple-expansion engines in which the cylinders are arranged end to end in line with each other.

The main object of the invention is to provide for easy access to the several cylinders and for the removal of any of the several pistons and piston-rods without detaching or displacing any of the cylinders.

It consists in certain novel features of construction and in the peculiar arrangement and combination of parts hereinafter particularly described, and pointed out in the claim.

The accompanying drawing is a central longitudinal section of a triple-expansion engine embodying the invention.

A, B, and C designate the high, the intermediate, and the low pressure cylinders, respectively, which are arranged end to end in line with each other, and *a*, *b*, and *c* are the pistons fitted in said cylinders.

The high-pressure cylinder A is placed next to the cross-head D and the low-pressure cylinder farthest from it. Spaces are left between the adjacent heads of the several cylinders to permit the removal of the rear heads and the pistons of the intermediate and high-pressure cylinders without detaching or displacing said cylinders.

The high-pressure piston *a* is connected with the cross-head D by a rod *d*, passing through a stuffing-box *e* in the front head of the high-pressure cylinder. The intermediate piston *b*

is connected with said cross-head by two side rods *f f*, passing through stuffing-boxes *g g* in the front head of the intermediate cylinder and outside of the high-pressure cylinder, and the low-pressure piston *c* is connected with said cross-head by two side rods *h h*, passing through stuffing-boxes *i i* in the front head of the low-pressure cylinder and outside of the intermediate and high-pressure cylinders. The rear heads *j*, *k*, and *l* of the several cylinders are detachable therefrom and separately removable, thus affording access to the several cylinders and their pistons and means for readily withdrawing said pistons and the piston-rods from said cylinders without displacing or detaching the cylinders from each other or from the engine-bed.

I claim—

In a multiple-expansion engine the combination of high, intermediate and low pressure cylinders arranged end to end in line with each other, spaces being left between the several cylinders, pistons fitted in said cylinders, a cross-head, a piston-rod passing through the front head of the high-pressure cylinder and connecting the high-pressure piston with said cross-head, side rods passing outside of the high-pressure cylinder and connecting the intermediate piston with said cross-head, and side rods passing outside of the intermediate and high-pressure cylinders and connecting the low-pressure piston with said cross-heads, the rear heads of the several cylinders being removable, substantially as described.

In witness whereof I hereto affix my signature in presence of two witnesses.

FREDERICK M. PRESCOTT.

Witnesses:

CHAS. L. GOSS,

JOSEPH F. KAMINSKY.