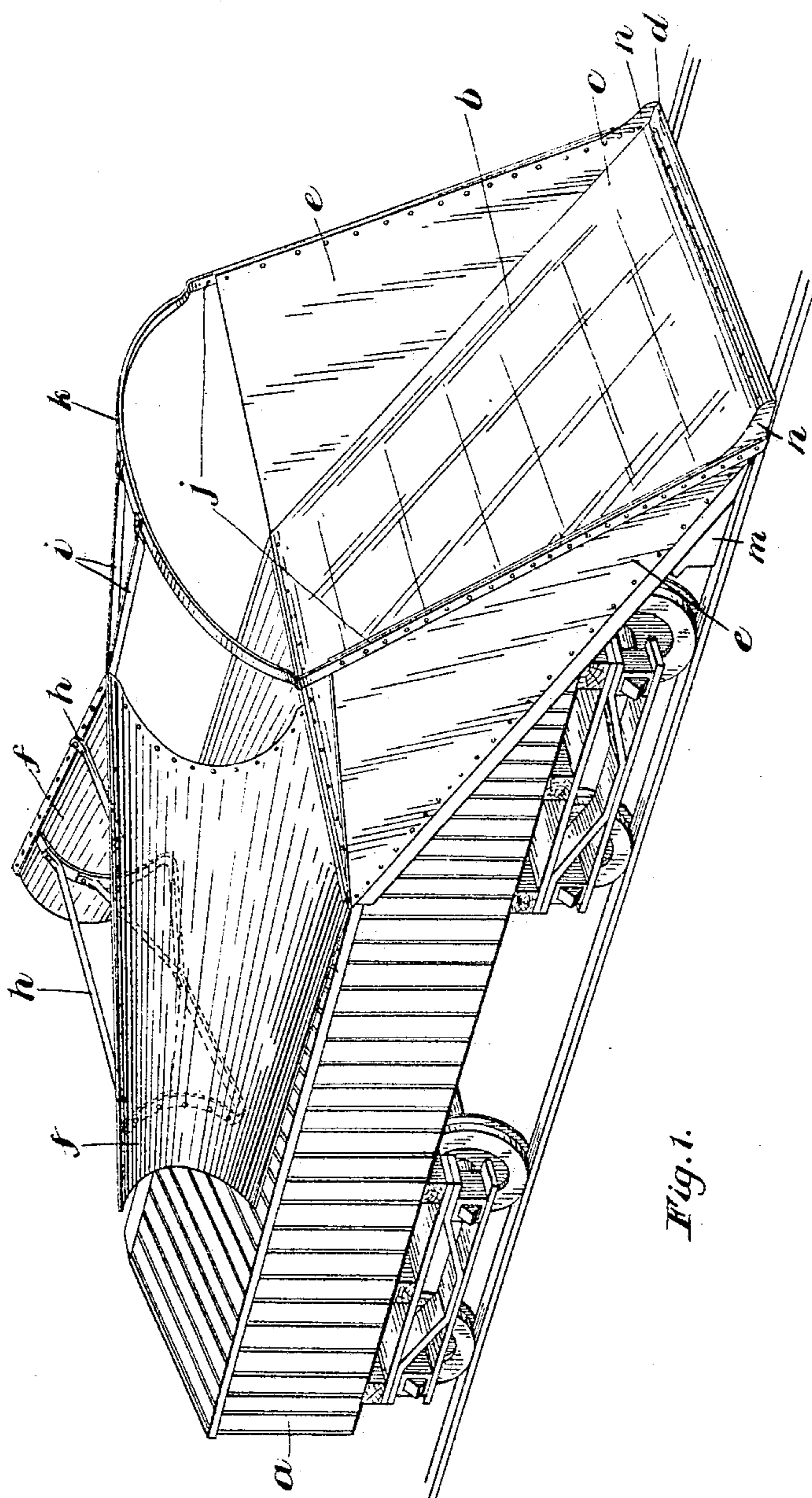


No. 782,149.

PATENTED FEB. 7, 1905.

E. J. LITT.
SNOW PLOW FOR RAILROADS.
APPLICATION FILED JUNE 24, 1904.

2 SHEETS—SHEET 1.



Witnesses

Ch. Sheffield
P. S. Smart

Inventor:

e.g. Litt

By
Fred. B. Fotherstonhaugh
Atty

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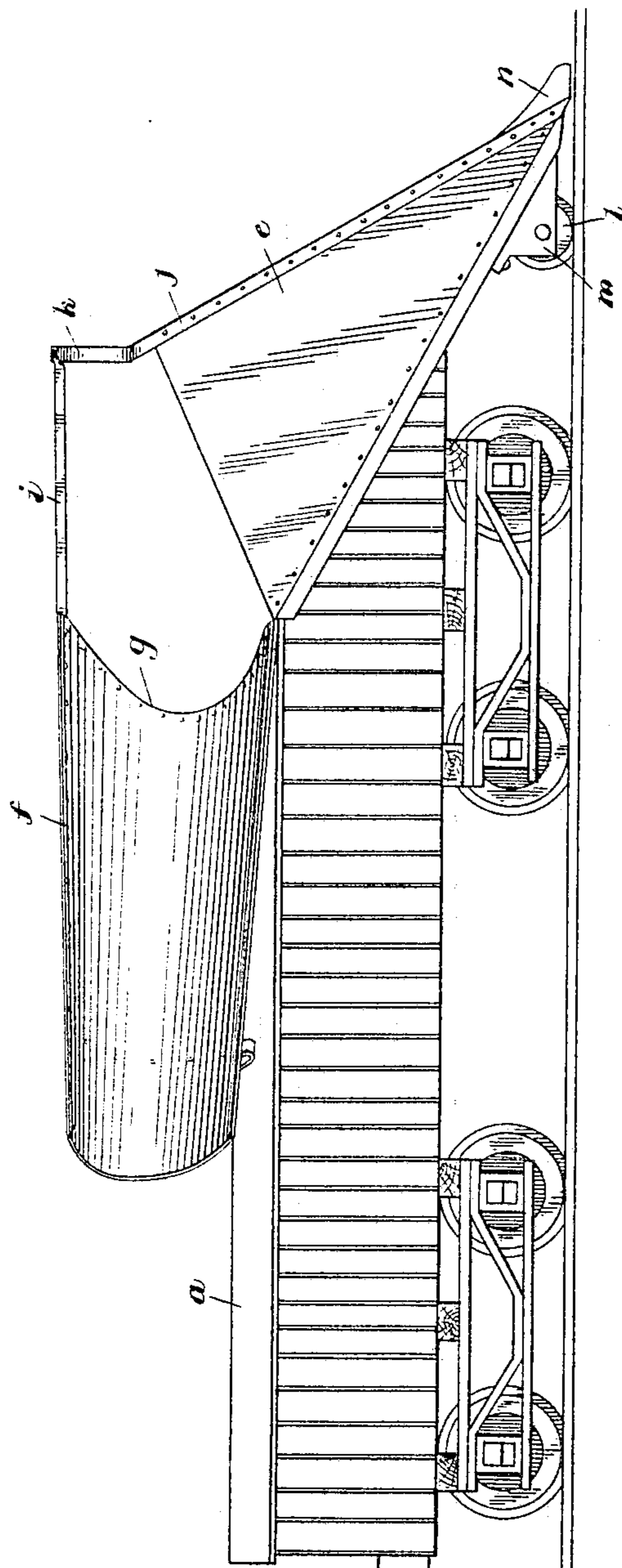


Fig. 2.

Witnesses.
E. B. Sheffield
R. S. Smart.

Inventor.
E. J. Litt
by
Fred B. Fetherstonhaugh
att'y

UNITED STATES PATENT OFFICE.

EDWARD JOHN LITT, OF DUBLIN, CANADA.

SNOW-PLOW FOR RAILROADS.

SPECIFICATION forming part of Letters Patent No. 782,149, dated February 7, 1905.

Application filed June 24, 1904. Serial No. 213,998.

To all whom it may concern:

Be it known that I, EDWARD JOHN LITT, of Dublin, in the county of Perth, Province of Ontario, Canada, have invented certain new and useful Improvements in Snow-Plows for Railroads, of which the following is a specification.

My invention relates to improvements in snow-plows for railroads; and the objects of my invention are to devise a snow-plow to be driven in front of a locomotive in order to raise the snow from the tracks and throw it outwardly over the banks along the sides of the road a sufficient distance to prevent its sliding back and obstructing the railway, further objects being to make the device such that it cannot choke and to make it cheap and simple in construction; and it consists, essentially, of a suitable truck having a downwardly-sloping flat-ended scoop at the forward end thereof, said scoop having side walls suitably connected thereto, and braced and curved converging wings located on the top of the truck and adapted to throw the snow off to the sides, the various parts of the device being constructed and arranged in detail, as hereinafter more particularly described.

Figure 1 is a perspective view of the plow. Fig. 2 is a side view thereof.

In the drawings like letters of reference indicate corresponding parts in each figure.

a is the body of the truck, the top of which is at a suitable height, but preferably at about the height of the highest snow banks or drifts which are likely to form alongside of the track. At the forward end of the truck *a* a scoop *b* is provided, which consists of the downwardly-sloping portion *c*, the lower end of which is terminated in a knife-edge *d* at or very close to the level of the rails and the side walls *ee*, which flare outwardly to a slight extent and are adapted to cut out the sides of snow through which the plow is cutting its way. The scoop *b* extends upwardly to the top of the truck *a* or thereabout and has at its upper end a pair of converging wings *f' f'*, meeting in an inwardly-curved line *g*. These wings are concave, and their general direction is an outward and rearward slant. By means of suitable bracing-rods *h* or the like the

wings are held rigidly in their proper position, and similarly the side walls *e* are braced by means of the bracing-rods *i* and the continuous strip *j*, which is secured to the side walls *e* and forms the intermediate arch *k*, to which the rods *i* are rigidly secured. The opposite extremities of these rods are secured preferably to the wings *f'*, where they intersect.

Underneath the lower portion of the scoop *b* I may provide an auxiliary supporting-wheel *l*, journaled in suitable bearings *m*, the object of this wheel being obviously to assist in supporting the forward part of the scoop. Auxiliary knives *n* are also provided and may be formed integral with or suitably secured to the side walls *e*, these knives extending forwardly from the bottom of the walls *e* to the edge of the knife *d*.

The mode of operating my invention is as follows: The locomotive having been attached to the end of the truck, the plow is driven preferably at as high a rate of speed as possible along the track which is to be cleared of snow. The result will be that when the lower edge of the scoop *b* comes in contact with the snow it will be forced up the sloping portion *c* at a very rapid speed, owing to the rate at which the plow travels, and then will be thrown with great force outwardly to the sides of the track by means of the wings *f' f'*. It is to be particularly noted that on account of the sloping part *c* and the height of the upper portion of the same the snow will be raised higher than the top of any ordinary drifts before it is thrown outwardly, and consequently it cannot fall back again into the cutting, but will be thrown to a distance of in the neighborhood of twenty feet or more from the track.

It will now be seen that I have invented a snow-plow for railway use which has considerable advantages over plows previously used.

I am aware that plows have been constructed with sloping portions to raise the snow and deflecting portions or wings to throw it outwardly; but in all such plows of which I am aware the deflecting portion extended down to within a very short distance of the bottom of the raising portion, and the result was that when the plow was forced into a drift of considerable height the snow would not be raised

sufficiently high to be thrown clear of the banks at the sides, but would jam between the banks and the deflecting-wings, so that before the plow could get very far into such
5 a drift it would be completely choked. From the above description, however, it will be readily seen that my device overcomes this difficulty. The side knives or walls of the scoop *b* cut clean into the drift, and the snow
10 is raised by the impetus of the plow to a sufficient height to be thrown entirely clear of the banks of snow at the sides of the track.

It is to be understood that in manufacturing my plow certain changes in the details of
15 construction may be made without departing from the spirit of my invention—such, for instance, as the substitution of different forms of bracing-rods or a different kind of truck, &c. I therefore do not wish to be limited in

the scope of my patent to the precise construction which I have shown and described herein.

What I claim as my invention is—

A snow-plow, consisting of a truck, a downwardly and forwardly extending scoop secured 25 to the front portion thereof and semicircular deflecting-wings secured horizontally to the top of the truck, said wings meeting at the top of the scoop and converging outwardly toward each side of the truck, substantially 30 as described.

Signed at Mitchell, in the Province of Ontario, this 1st day of April, 1904.

EDWARD JOHN LITT.

Witnesses:

EDGAR ALEXANDER DUNBAR,
BENJAMIN FRANKLIN ROSTNER.