

No. 690,742.

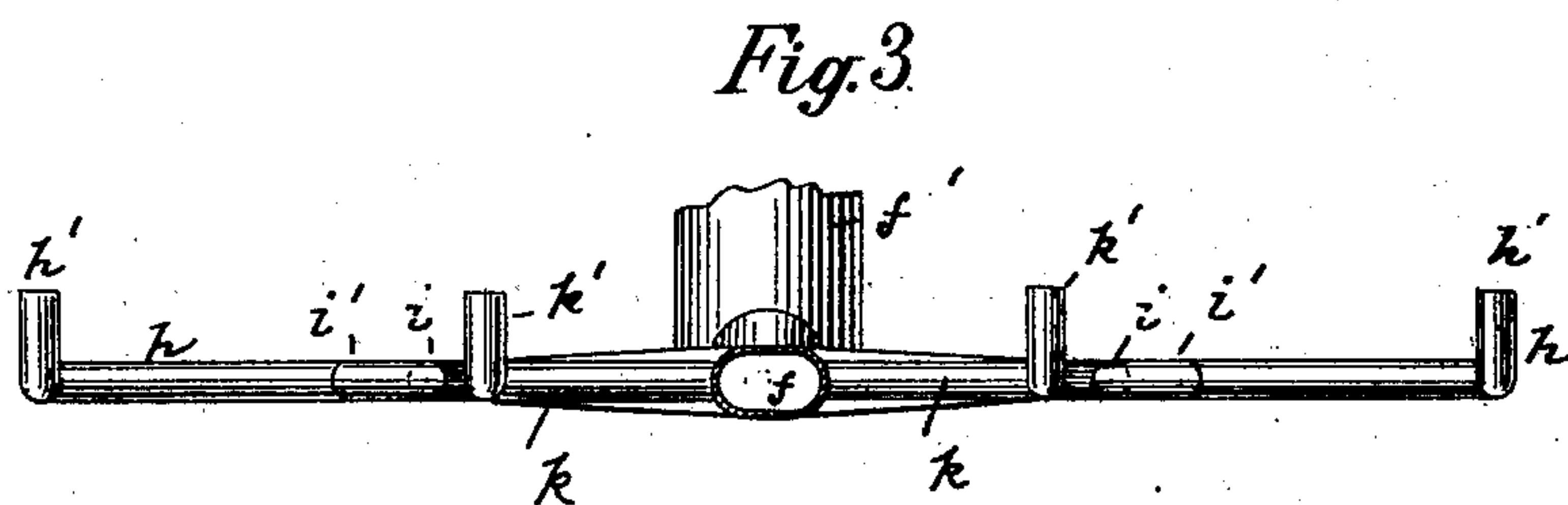
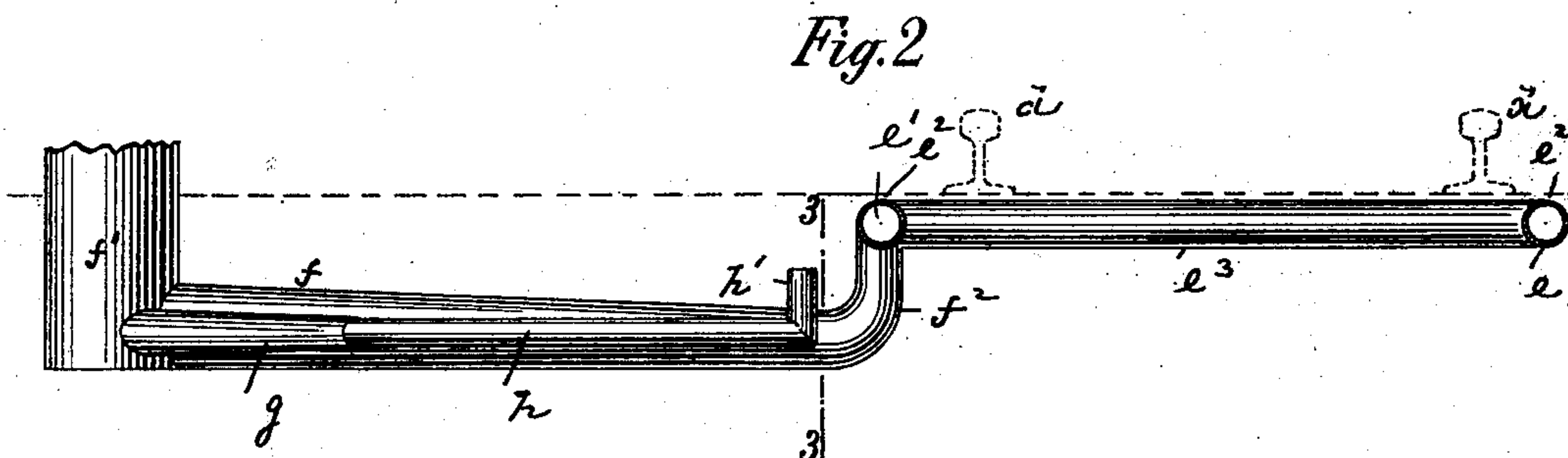
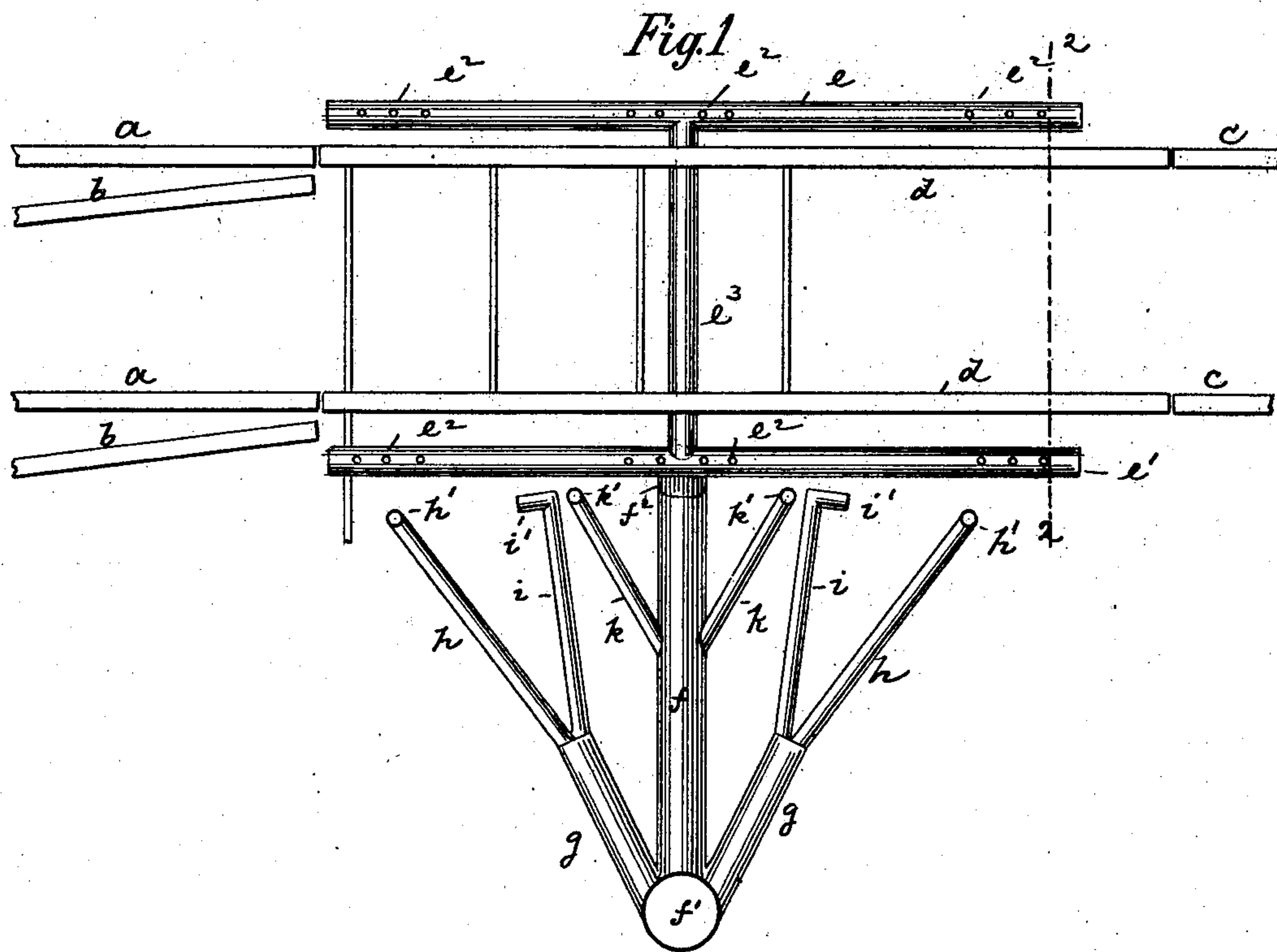
Patented Jan. 7, 1902.

G. KOVACS.

SNOW MELTER FOR RAILROAD SWITCHES.

(Application filed Aug. 13, 1901.)

(No Model.)



Witnesses:  
Eugene Guerin  
Edward Ray

Inventor  
Georg Kovacs  
by Roeder & Briesen Attys.

# UNITED STATES PATENT OFFICE.

GEORG KOVACS, OF TRENTON, NEW JERSEY.

## SNOW-MELTER FOR RAILROAD-SWITCHES.

SPECIFICATION forming part of Letters Patent No. 690,742, dated January 7, 1902.

Application filed August 13, 1901. Serial No. 71,905. (No model.)

*To all whom it may concern:*

Be it known that I, GEORG KOVACS, a citizen of the United States, and a resident of Trenton, Mercer county, New Jersey, have  
5 invented certain new and useful Improvements in Snow-Melters for Railroad-Switches, of which the following is a specification.

This invention relates to an improved apparatus for rapidly melting the snow and ice  
10 around railway-switches, so that any obstruction to the free movement of the latter may be effectively avoided or removed.

In the accompanying drawings, Figure 1 is a plan of my improved snow-melter; Fig. 2,  
15 an enlarged section on line 2 2, Fig. 1; and Fig. 3, an enlarged section on line 3 3, Fig. 2.

The letters *a*, *b*, and *c* represent the track-rails, and *d* represents the switch-rails. Along the switch-rails *d* extend a pair of parallel  
20 steam-tubes *e e'*, perforated, as at *e<sup>2</sup>*, and connected by means of a transversetube *e<sup>3</sup>*. Steam is admitted to the tube *e'* from a suitable boiler (not shown) by means of a main steam-pipe *f*, that receives the steam at the upright pipe  
25 *f'* and conveys it to tube *e'* by an elbow *f<sup>2</sup>*. From the tube *e'* the steam flows into the tube *e* through the connection *e<sup>3</sup>*. The main steam-pipe *f* is flanked by a pair of radial pipes *g*, which also receive the steam at  
30 *f'* and are branched at their free ends to form the tubes *h* and *i*. The outer branch tubes

*h* have upwardly-projecting nozzles *h'*, while the inner branch tubes *i* have horizontal nozzles *i'* to direct the steam against ground ice. Within the space inclosed by the branches  
35 *i* there radiate from main pipe *f* a pair of branch pipes *k*, having upwardly-turned nozzles *k'*. The steam flowing through the pipes *f e' e<sup>3</sup> e* and through the radiating branches *g h i k* will melt the snow at the side of and  
40 around the switch, the area attacked increasing gradually from the pipe *f'* toward the rails. Thus a surface sufficient for the free movement of the switch is cleared from snow  
and ice. 45

What I claim is—

1. A snow-melter for railway-switches composed of a steam-supply pipe, and a series of branch pipes radiating therefrom and having  
nozzles turned in different directions, substantially as specified. 50

2. A snow-melter for railway-switches composed of a steam-supply pipe, a pair of radial pipes *g*, having branches *h, i*, provided with nozzles *h', i'*, and a pair of branches *k*,  
55 having nozzles *k'*, substantially as specified.

Signed by me at Trenton, Mercer county, New Jersey, this 3d day of August, 1901.

GEORG KOVACS.

Witnesses:

SIGMUND GEISLER,  
IGNATZ LIEBERMAN.