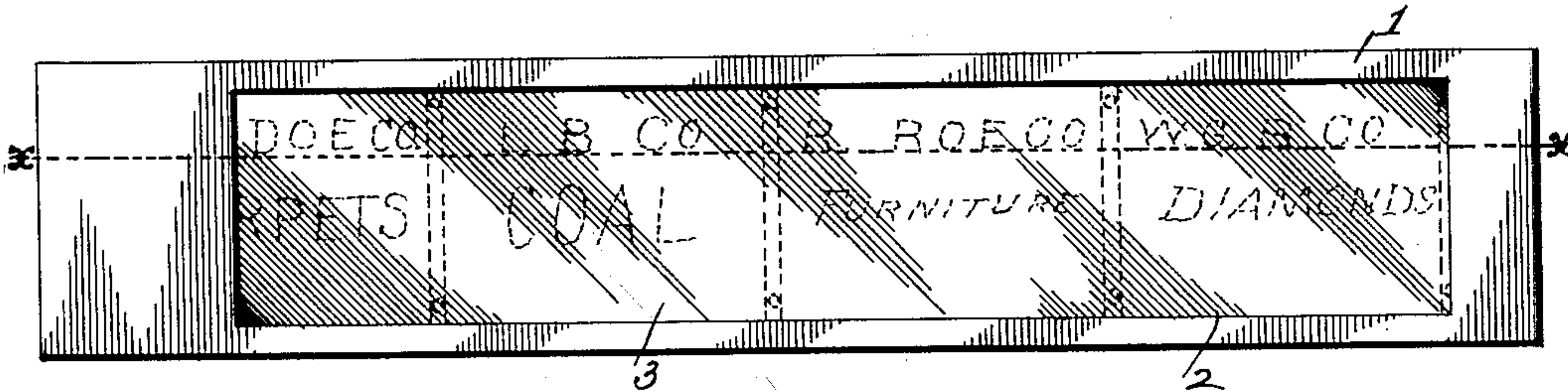


S. J. SCOTT.  
MOVING ADVERTISING DEVICE.  
APPLICATION FILED JUNE 26, 1909.

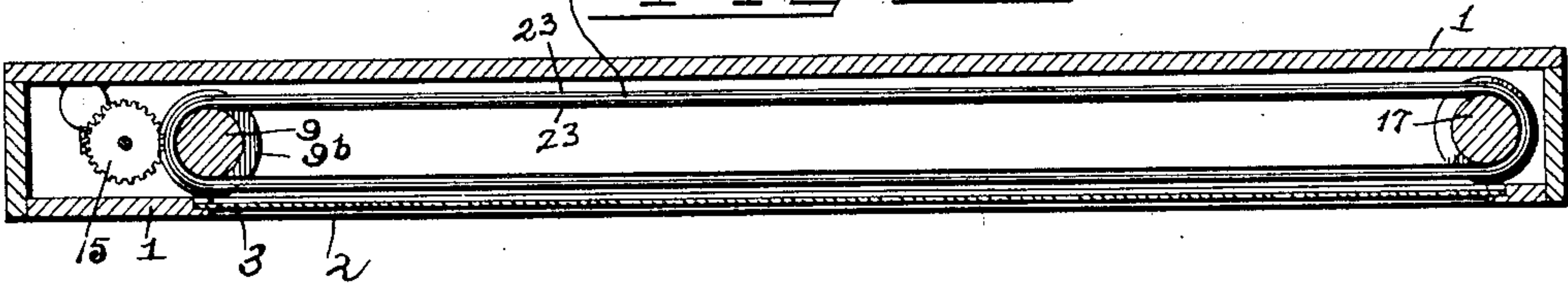
964,320.

Patented July 12, 1910.

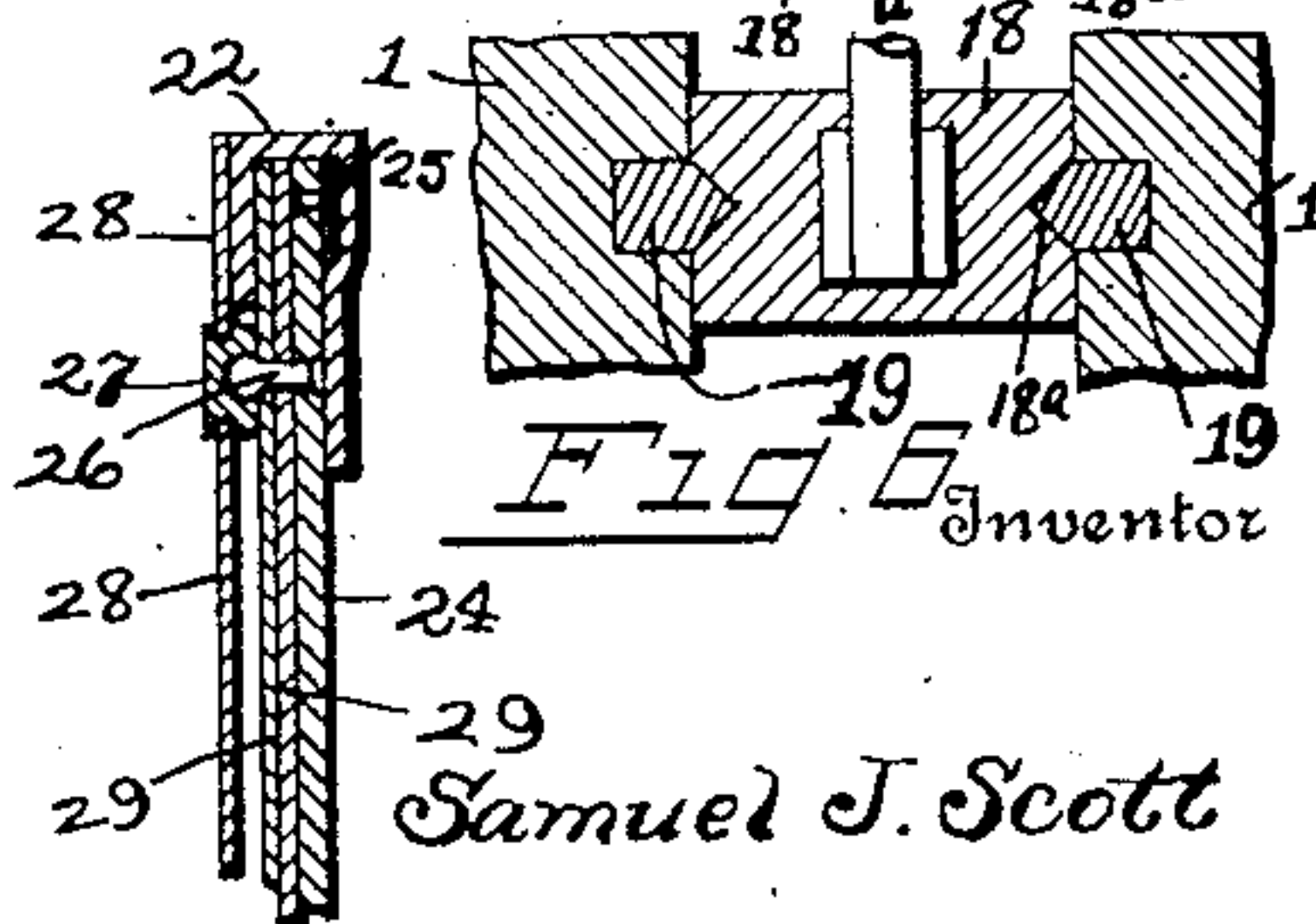
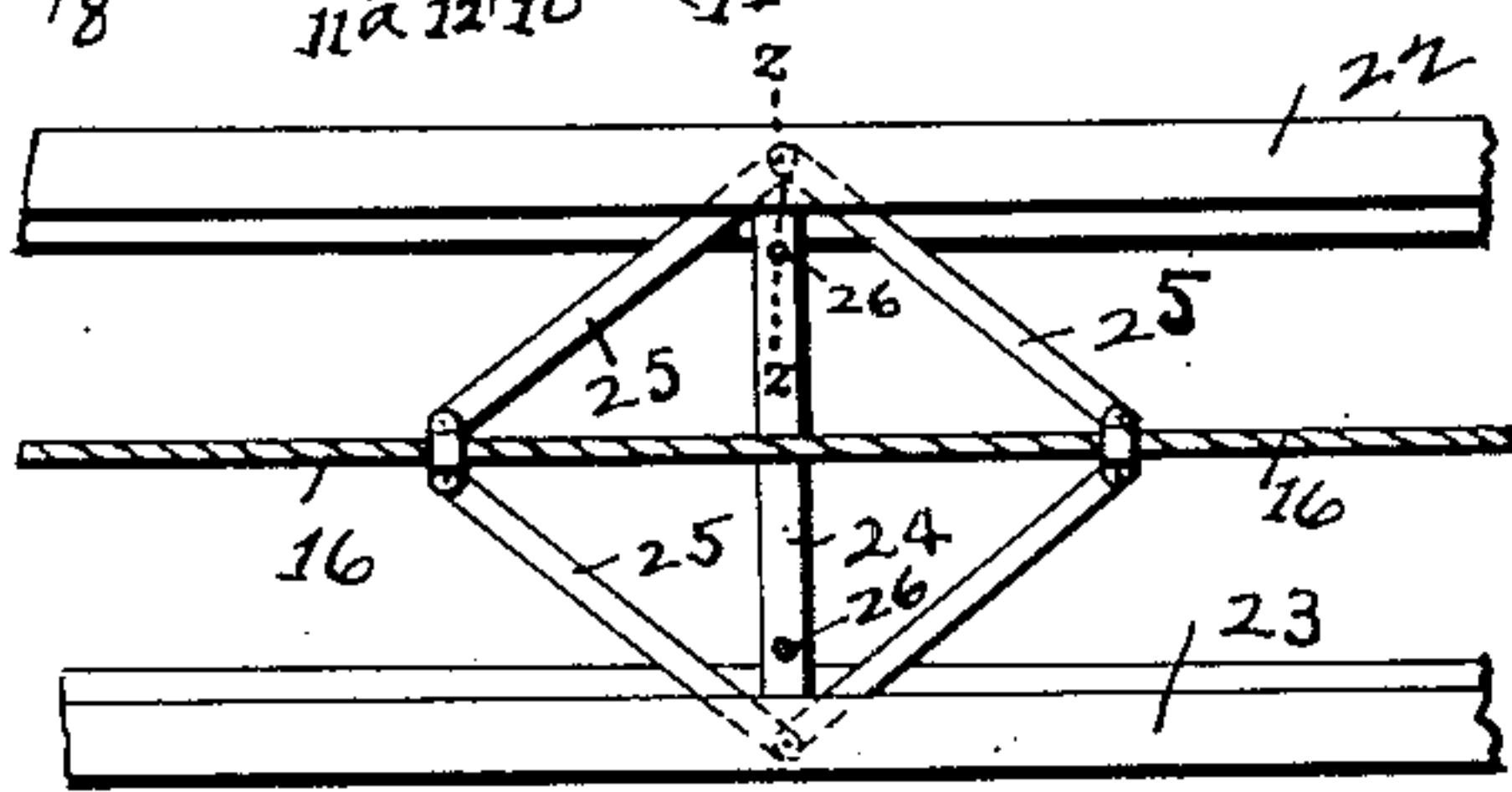
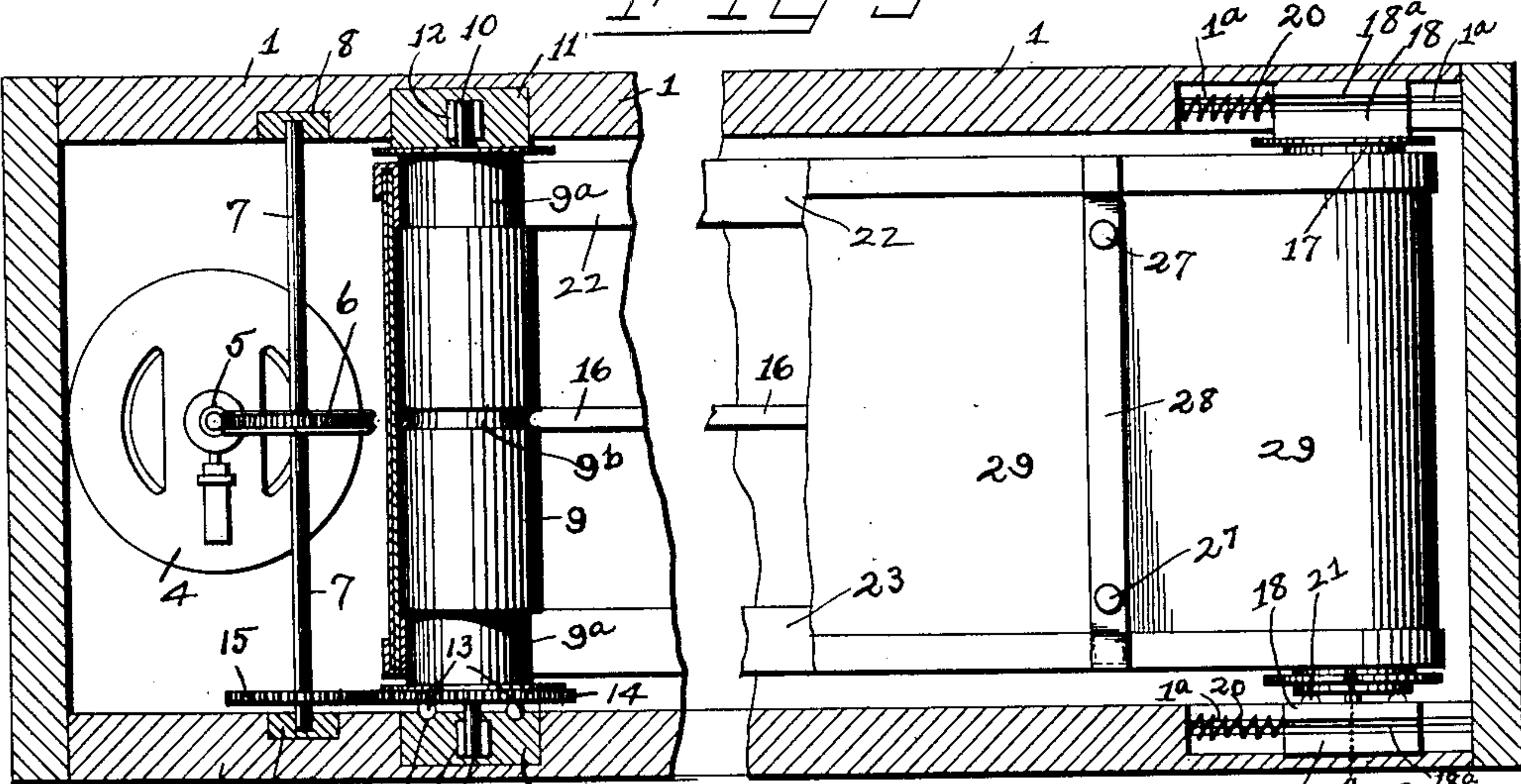
F 1 □ 1



F 1 □ 2



F 1 □ 3



Witnesses

Carl Stoughton  
A. L. Phelps

F 1 □ 4

By

F 1 □ 5 C. C. Shepherd  
Attorney

Samuel J. Scott  
Inventor



# UNITED STATES PATENT OFFICE.

SAMUEL J. SCOTT, OF COLUMBUS, OHIO, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-THIRD TO JAMES O. SLOAN AND ONE-THIRD TO ISAAC N. GATRELL, OF COLUMBUS, OHIO.

MOVING ADVERTISING DEVICE.

964,320.

Specification of Letters Patent.

Patented July 12, 1910.

Application filed June 26, 1909. Serial No. 504,420.

*To all whom it may concern:*

Be it known that I, SAMUEL J. SCOTT, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Moving Advertising Devices, of which the following is a specification.

This invention relates to the improvement of moving advertising devices, and the objects of my invention are to provide an advertising device comprising improved means for displaying a plurality of traveling advertisements; to provide improved means for supporting and carrying the advertising cards and imparting motion to the card supporting belts and to produce other improvements, the details of which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawing, in which:

Figure 1 is a front elevation of an advertising device having my improved construction, Fig. 2 is a longitudinal section on line  $x-x$  of Fig. 1, the divisions between the advertising cards being omitted in said view for the sake of clearness in illustration, Fig. 3 is an enlarged vertical section of my device, in which portions of the advertising cards are removed, Fig. 4 is a front or face view of a portion of my device with the casing and advertising cards removed, Fig. 5 is an enlarged sectional view on line  $z-z$  of Fig. 4, and, Fig. 6 is an enlarged detail sectional view on line  $a-a$  of Fig. 3.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I employ an oblong casing such as is indicated at 1, said casing being formed in its forward face with a longitudinal opening 2, which extends throughout the greater portion of the length thereof, said opening being preferably filled with a glass plate 3. Within one end of the casing, I provide a suitable form of electric motor, which is indicated at 4, the central shaft thereof carrying a power transmitting worm 5, which meshes with a worm wheel 6 carried on a vertical shaft 7, the upper and lower end portions of which are rotatably mounted in fixed bearing blocks 8, which are supported in the upper and lower horizontal members of the casing 1. Adjacent to this shaft 7 and parallel therewith is provided a vertical roller body

9, said roller body having reduced end portions 9<sup>a</sup> and having end spindles 10 which bear in blocks 11 fixed in the upper and lower sides of the casing 1, each of said blocks being provided with an inner side recess containing a plurality of bearing rollers 12, which are arranged about the roller spindles 10. The lower bearing block 11 has a continuous race-way in its upper face as indicated at 11<sup>a</sup> in which are mounted bearing balls 13, the upper sides of these balls having in contact therewith the lower face of a gear wheel 14 which is carried on the lower end portion of the shaft 9 and which gears with a similar wheel 15 carried on the shaft 7 and near one end thereof. The central portion of the roller 9 has formed therein, a continuous peripheral groove 9<sup>b</sup> within which is adapted to run a card belt 16, which near the opposite end of the casing 1 runs in a similar groove over a second roller 17 corresponding with the roller 9. This roller 17 is as prescribed for the roller 9 pivoted in bearing blocks 18, these blocks 18, however, being supported in longitudinal recesses 1<sup>a</sup> in the inner surfaces of the upper and lower casing sides. In opposite sides of each of the blocks 18 is formed a V-shaped way or groove 18<sup>a</sup> and into these opposing grooves project the correspondingly shaped ends of fixed keys 19 which project into the recesses 1<sup>a</sup> from opposite sides thereof, as shown more clearly in Fig. 6 of the drawing. The bearing blocks which are thus slidably mounted in the recesses 1<sup>a</sup> are limited in their movement toward the blocks 11, by coiled springs 20 which bear between the inner ends of the casing recesses 1<sup>a</sup> and the corresponding ends of said blocks, said springs serving to normally hold the card belt 16 taut.

The lower end of the roller 17 is supported on bearing balls 21 which are arranged as prescribed for the bearing balls 13 in a race-way of the lower bearing block 18. Running over the reduced outer portions of the rollers 9 and 17, are upper and lower belt members 22 and 23. Each of these belt members is channel shaped in cross section, its forward vertical member being shorter than its rear vertical member, as shown more clearly in Fig. 5. The rear vertical member of the belts 22 and 23 are connected at suitable intervals by a vertical or transverse bar 24 by gluing or cement-



ing; or if the belts are made of metal as they may be, the bars 24 may be secured thereto by soldering, and with each end of each of these bars is connected a pair of  
 5 brace bars 25, which extend from opposite sides of said bar ends and have their remaining ends connected with the card belt 16 on opposite sides of the bar 24. The brace bars 25 may be of comparatively thin  
 10 flexible sheet metal or other similar substance, so as to admit of the same bending about the rollers 9 and 17 in passing the same. The bars 24 are preferably arranged at equidistances one from the other, the  
 15 spaces between said bars being substantially equal to the length of the advertising cards to be used as hereinafter described. Above and below the center of the length of each of the bars 24, I provide an outwardly projecting button member or pin 26, the enlarged rounded heads of these pins being adapted to enter and detachably engage correspondingly shaped sockets in button catch  
 20 members 27 which are carried on vertical strips 28 of flexible material, the upper and lower ends of said strips being affixed to the faces of the shorter vertical members of the belts 22, there being one of each of said strips 28 for each of the bars 24. The strips  
 25 28 may be secured to the shorter vertical members of the belts 22 and 23 by cementing or gluing; or if the parts are of metal, by soldering, as in the case of the bars 24.

29 represent advertising cards, the upper  
 35 edge portions of said cards extending, as shown in Fig. 5, within the upper and lower belt channels, while the ends or vertical edges of said cards overlap beneath the strips 28 where they are held in place by  
 40 having the button members 26 forced through their marginal portions and into the sockets of the members 27.

Through a suitable source of electricity, rotary motion is imparted to the motor  
 45 shaft and worm 5, which through its gear connection with the worm wheel 6, operates to rotate the shaft 7, which carries the gear wheel 15. Through the meshing of the gear wheel 15 with the gear wheel 14, rotary motion is imparted to the roller 9 and through  
 50 the card belt 16 thereof, a similar rotary motion is imparted to the roller 17, thus providing a continuous or traveling movement of the belts 22 and 23 and the advertising cards which are carried thereby. Through the medium of the bars 24 and the  
 55 brace members 25, it will be seen that the upper and lower belts 22 and 23 will be held in proper parallel relation with each other and with the card belt 16. The  
 60 springs 20 which exert an outward pressure on the bearing blocks 18 of the roller 17, will serve as will readily be seen to hold the

belts 22, 23 and 16 taut and at the same time relieve said belts of undesirable strain. 65

From the construction and operation described, it will be seen that during the operation of the motor, a continuous successive display of advertising cards will be produced in the opening 2 of the casing 1 and  
 70 that an advertising device of this character, will be of great utility in street cars, railway stations and public places.

From the foregoing description, it will be seen that simple and efficient means are  
 75 herein provided for accomplishing the objects of the invention, but while the elements shown and described are well adapted to serve the purposes for which they are intended, it is to be understood that the  
 80 invention is not limited to the precise construction set forth, but includes within its purview such changes as may be made within the scope of the appended claims.

What I claim, is: 85

1. In an advertising device, the combination with a casing, separated rollers journaled in said casing, upper and lower separately formed belts running over said rollers, each of said belts being of channel form  
 90 in cross section, and an intermediate driving belt also running over said rollers, of successively arranged advertising cards having their upper and lower marginal portions embraced within the channels of  
 95 said upper and lower belts, means for retaining said upper and lower belts in parallel positions, and means for imparting rotary motion to one of said rollers.

2. In an advertising device, the combination with a casing, separated rollers journaled in said casing, upper and lower separately formed belts running about said rollers, an intermediate driving belt, bars extending at intervals between said upper and  
 105 lower belts, brace members connecting the ends of said bars with said intermediate belt, and fastening devices carried by said bars, flexible belt connecting strips on the outer sides of said bars, said strips carrying  
 110 fastening devices adapted to engage with those of the bars, of advertising cards having their upper and lower marginal portions engaged with said upper and lower belts and their adjoining end portions connected by said fastening devices between  
 115 said belt connecting bars and strips, and means for imparting motion to one of said rollers.

In testimony whereof I affix my signature in presence of two witnesses. 120

SAMUEL J. SCOTT.

Witnesses:

L. CARL STOUGHTON,  
 A. L. PHELPS.