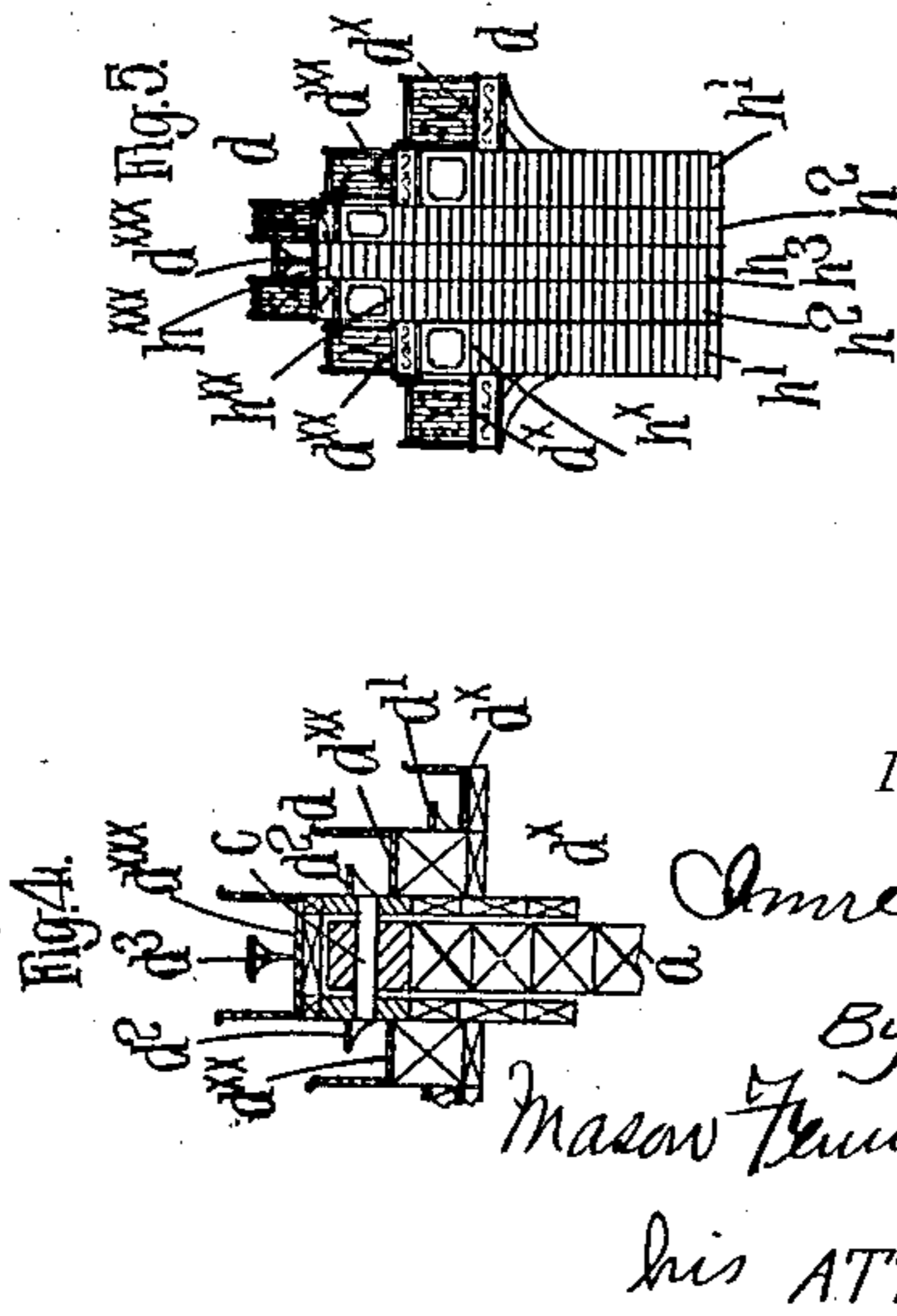
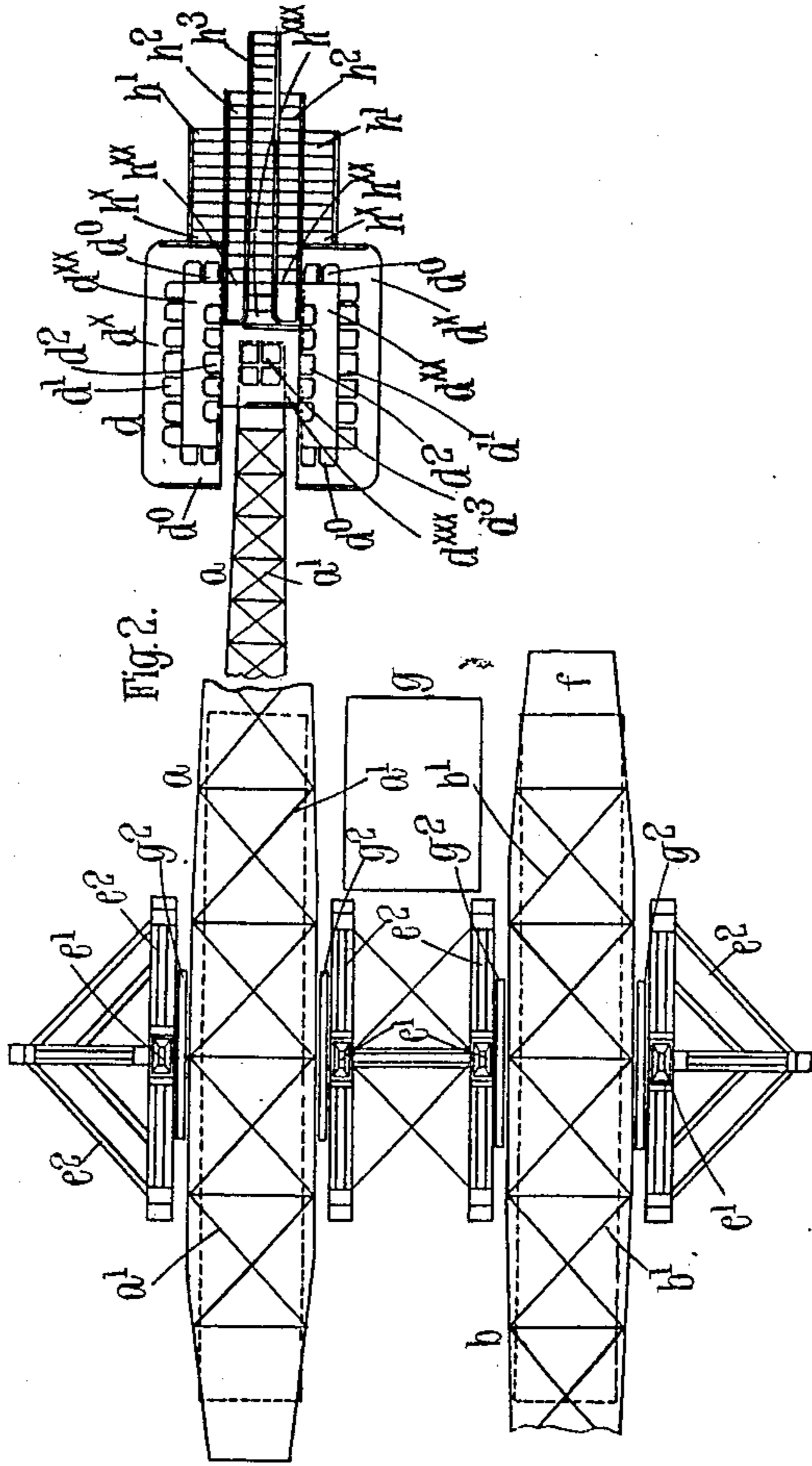
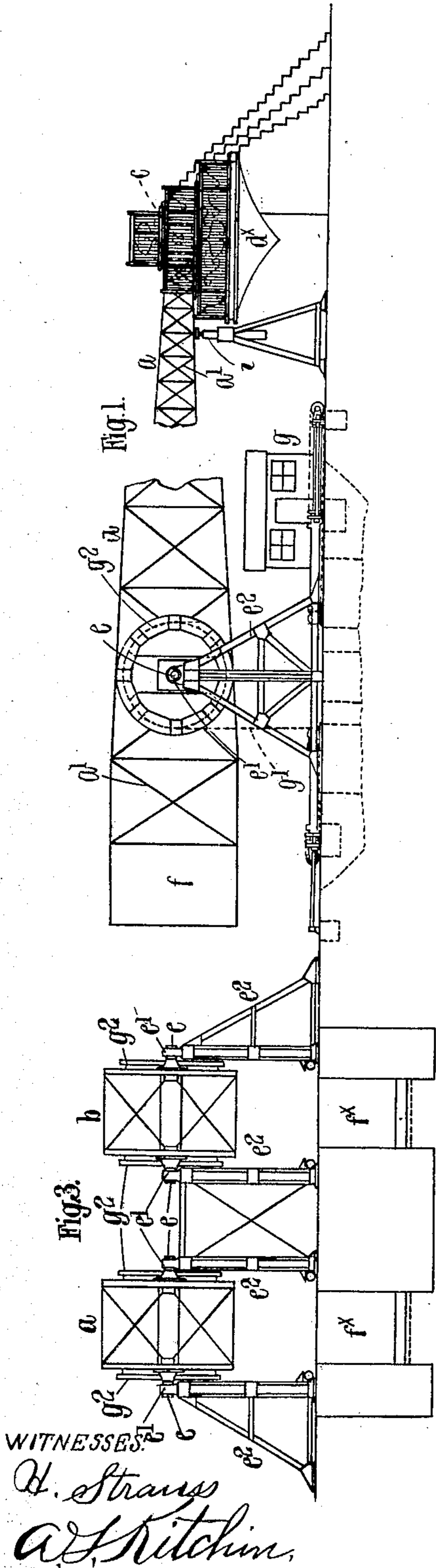


I. KIRALFY.  
AMUSEMENT DEVICE.  
APPLICATION FILED NOV. 8, 1907.

913,511.

Patented Feb. 23, 1909.



# UNITED STATES PATENT OFFICE.

IMRE KIRALFY, OF LONDON, ENGLAND.

## AMUSEMENT DEVICE.

No. 913,511.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed November 8, 1907. Serial No. 401,359.

*To all whom it may concern:*

Be it known that I, IMRE KIRALFY, a subject of the King of Great Britain, residing at Tower House, Cromwell Road, South Kensington, London, England, have invented certain new and useful Improvements in Amusement Devices, of which the following is a specification.

This invention relates to an improved device adapted to afford amusement and instruction to the users, and also to serve in transporting or conveying passengers from one position or spot to another or over areas, such as in the case of rivers, valleys and in other situations.

According to this invention the essential features of the device comprise a pair of counterbalanced radial arms or cantalivers furnished with cars or carriages mounted and operated in such a manner that, in its movement, each arm is capable of traversing a semi-circular path from the ground level or starting point to the point diametrically opposite thereto; the arms being capable of crossing or passing each other at or about the mid point of the path or of traveling only a half or portion of the said path and returning to the point of starting. Thus by suitably arranging the seats of the cars or carriages the occupants may experience views of the surrounding objects or country from varied aspects and altitudes. A stop adapted to serve as a buffer may be arranged to arrest each car on the completion of its travel and to prevent shock arising from concussion incidental to contact with such stop. The stop may conveniently be arranged to yield by means of rubber or other yielding material or by means of suitably arranged springs. Or the buffer may be of hydraulic type. For assisting in loading the cars there may be a staging having levels adapted to coincide with the levels of the several floors of the cars, the levels of the said staging being reached by means of suitably constructed steps or stairways. The motion may be transmitted from a suitable motor to the arms by means of rope gearing in conjunction with drums of suitable proportions and adapted to effect the desired movements of the arms.

In order that the invention may be clearly understood and readily carried into effect, I will proceed to describe the same with reference to the accompanying drawings, in which:—

Figure 1 is an elevation illustrating the pivoting portion and the outer extremity of one of the arms and a means of operating the latter. Fig. 2 is a plan showing the method of mounting the arms and the arrangement of the seats on the car. Fig. 3 is an end view. Fig. 4 is a transverse section of the car showing the several platforms and the mode of arranging the seats thereon. Fig. 5 is a corresponding end view showing the approaches to the several platforms from the steps pertaining to the staging whereby the intending occupants enter the car.

According to the mode of carrying out my invention illustrated in the annexed drawings, the arms *a*, *b*, are constructed of angle iron suitably strutted and connected by iron trellis *a'*, *b'*. The outer end of each arm is provided with a shaft or trunnion *c* whereon is mounted a suitable car or carriage *d* having seating accommodation for a certain number of passengers and the inner end of each arm is formed or provided with or mounted upon a shaft *e* adapted to serve as the pivot hereinbefore referred to; a counterweight *f* is also added at this latter end of each arm, the object being to assist the operation of an electric, hydraulic or other suitable motor which is provided at *g* for giving rotary motion to the arms *a*, *b*. The counterweight may be of any suitable description such as sand or other convenient substance or material of suitable specific gravity. The shafts or trunnions *c* may be carried in bearings *e'* mounted on standards or supports *e''*. The arrangement may be such that the aforesaid shaft or pivot *e* is situated at a point conveniently near to the ground level and the portions of the arms carrying the counterweights *f* may work in a pit or in pits *f'* formed for the purpose. The motor at *g* is preferably arranged adjacent to the device and the arms are disposed as near to each other as safety and other conditions will permit.

The cars or carriages *d* are preferably mounted on the pivots or trunnions *c* and arranged in such a manner as to constantly preserve the cars in a vertical attitude. To this end the said cars are provided with a weighted portion at *d'*. The cars may be constructed of light angle iron and trellis work and be arranged with say three tiers of seats *d''*, *d'''*, *d''''*, but the seats may be differently arranged, and the accommodation

of the cars may be varied to suit varying conditions. In the form of the car shown, the seats as regards some of them are arranged parallel with the arm  $a$  or  $b$ ; the lowermost seats  $d'$  comprising benches disposed on each side of the arm below the pivot  $c$ , the mid seats  $d^2$  comprising similarly disposed benches arranged about the horizontal center line of said pivot and the uppermost seats  $d^3$ , a bench or benches disposed on the vertical center line of the car at a little distance above the aforesaid pivot. There may also be transverse seats  $d^0$  at the ends of the longitudinally disposed benches  $d'$ ,  $d^2$ ,  $d^3$ . Thus, it will be understood, the car has occupants who face outwardly on each side of the arm and car. In traversing the aforesaid path these occupants may view the surrounding objects from various aspects and altitudes and also exchange greetings with the occupants of the other car when the two cars cross or pass each other.

For the purpose of facilitating the loading of or entry to the cars, a staging such as  $h$  may be provided; the said staging may comprise steps or stairways  $h'$ ,  $h^2$ ,  $h^3$  leading to the platforms  $h^x$ ,  $h^{xx}$ ,  $h^{xxx}$  corresponding in level with the several floors  $d^x$ ,  $d^{xx}$ ,  $d^{xxx}$  of the cars  $d$  when the latter are in their lower or starting position as indicated. The lowermost platform may, if desired, be reached from the ground level.

The motion may be transmitted from the motor situated at  $g$  by means of rope or chain gearing  $g'$  in conjunction with drums  $g^2$ ,  $g^2$  of suitable size and adapted to effect the desired rotary movements of the arms  $a$ ,  $b$ . Stops  $i$  are arranged in suitable positions to arrest each car on the completion of its travel and to absorb any shock which may occur at the termination of the movement of the arms; the said stops may be arranged to yield by means of rubber or other yielding material, by means of springs or by means of hydraulic type of buffers suitably arranged in the standards of the stops.

It will be obvious that the above described device may be employed for use in cases where it is required to transport or convey

passengers, cattle, merchandise or the like from one position or point to another as mentioned above, such as in the case of rivers in conveying passengers or other traffic from one bank to another or in the case of hills in conveying passengers or other traffic across the valley. For instance, the device may be situated in mid stream and used as a conveyer or transporter from one bank to another, or in a valley as a conveyer from one hill to another.

The cars may be constructed and decorated in any desired manner and the conformation thereof may be varied to suit individual taste or fancy or the particular use to which they are destined.

What I claim and desire to secure by Letters Patent of the United States is:—

1. A device of the class described comprising an arm mounted to swing vertically about an axis, and a car supported at the end of the arm, the said car being comprised of an intermediate platform and other platforms supported upon each side of the intermediate platform one above the other in series, the said end of the arm being extended between the said side series of platforms.

2. In a device of the class described, an arm mounted to swing vertically about an axis, and a car supported at the end of the arm, the said car being comprised of spaced side portions between which the said end of the arm extends, a platform supported above the said side portions, other platforms supported in series one above the other to each side of the first mentioned platform and below the same and to each side of the said end of the arm, and a shaft journaled through the said end of the arm and the said side portions of the car.

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

IMRE KIRALFY.

Witnesses:

T. SELBY WARDLE,  
A. W. KIRALFY.