H. G. DREYER.

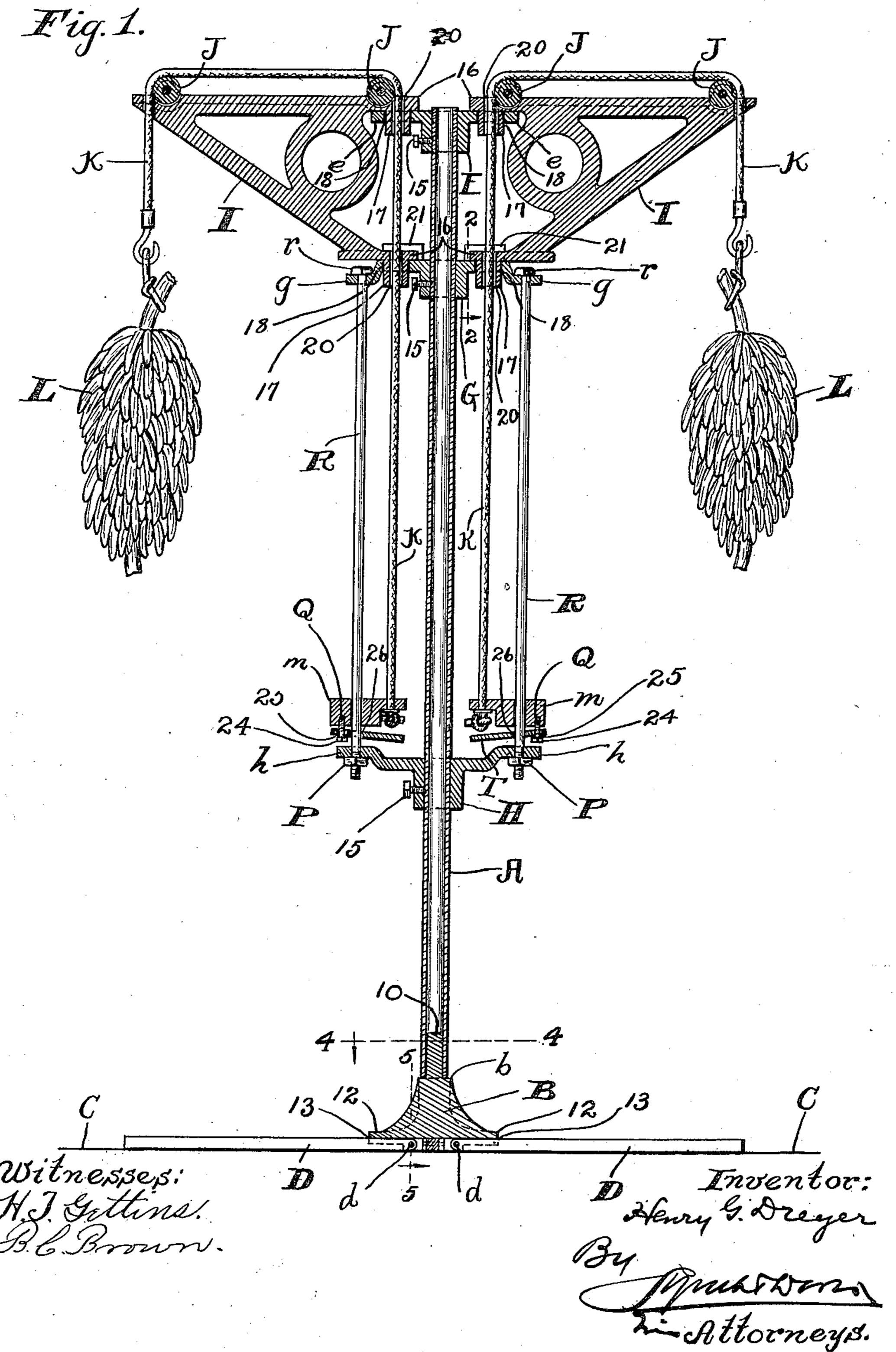
DISPLAY STAND.

APPLICATION FILED AUG. 12, 1910.

990,346.

Patented Apr. 25, 1911.

2 SHEETS-SHEET 1.

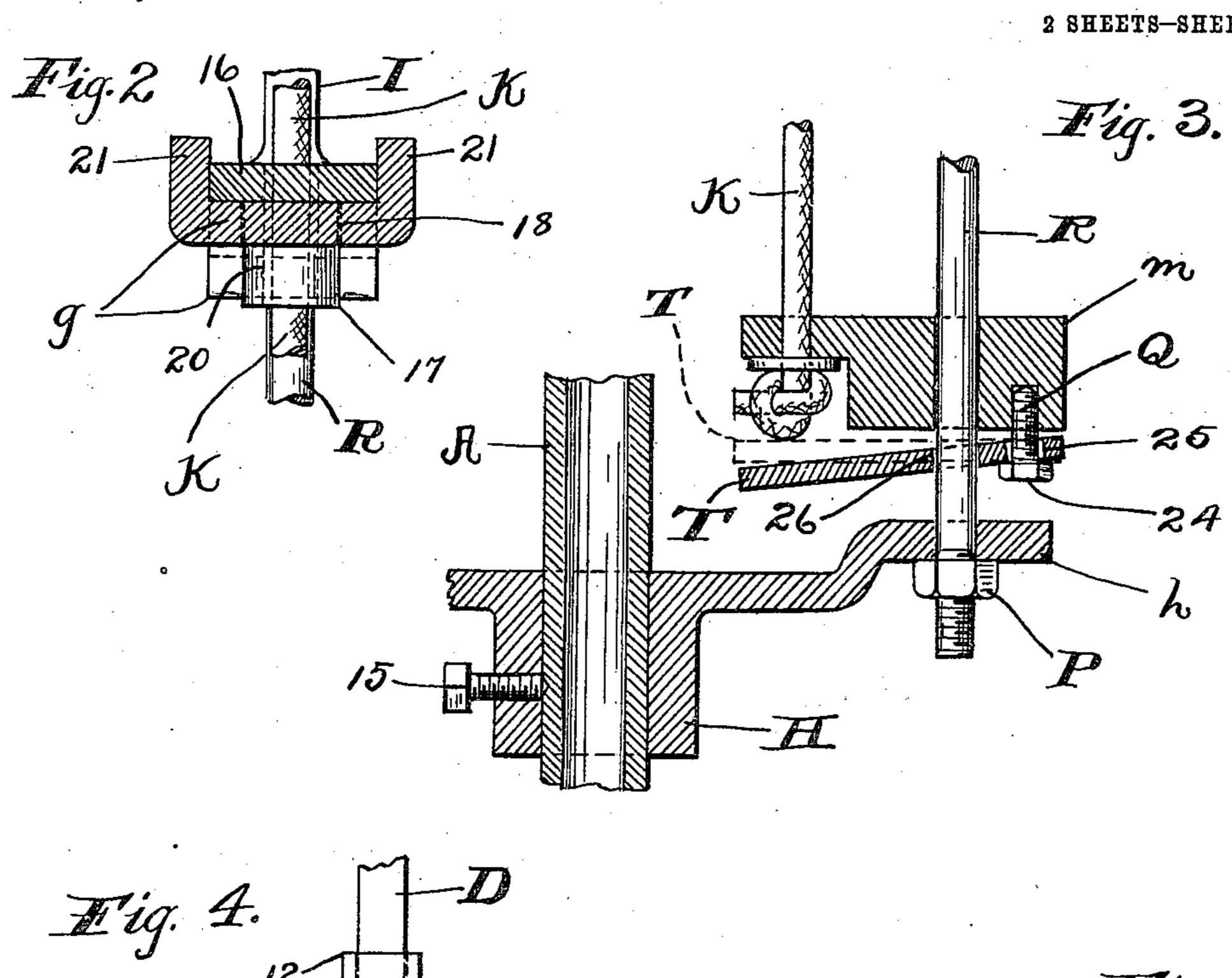


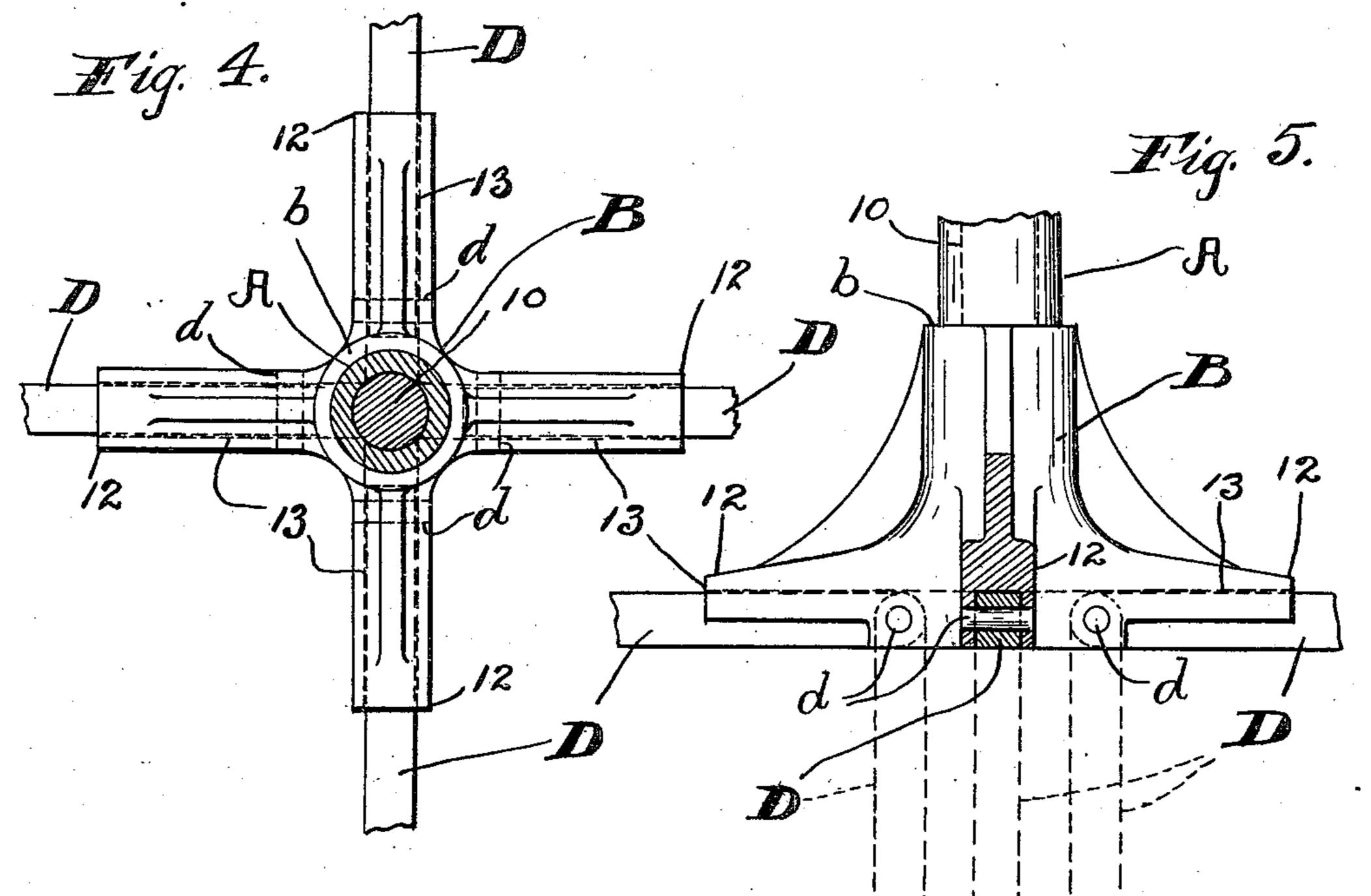
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## UNITED STATES PATENT OFFICE.

HENRY G. DREYER, OF CLEVELAND, OHIO.

## DISPLAY-STAND.

990,346.

Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed August 12, 1910. Serial No. 576,866.

To all whom it may concern:

Be it known that I, Henry G. Dreyer, a citizen of the United States of America, residing at Cleveland, in the county of Cuyaboga and State of Ohio, have invented certain new and useful Improvements in Display-Stands; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

This invention relates to improvements in display-stands designed more especially for the suspension and adjustment vertically, through the medium of ropes or cables, of bunches of bananas or other articles.

One object of this invention is to provide means whereby the said cables, and consequently any load suspended by the cables, are normally locked in the desired adjustment but can readily be rendered free to be readjusted.

Another object is to produce a displaystand of the character indicated which is so 25 constructed that the component parts thereof are assembled with facility and as readily taken apart, and that the said parts when separated can be gathered in a comparatively small bundle for shipment.

Another object is to produce a displaystand which does not require skill in the assemblage of its parts.

With these objects in view, and to attain any other advantages hereinafter appearing, this invention consists in certain features of construction, and combinations and arrangement of parts, hereinafter described, pointed out in the claims, and illustrated in the accompanying drawings.

the accompanying drawings. In the said drawings, Figure 1 is a central vertical section of a display-stand embodying my invention. Fig. 2 is a vertical section on line 2-2, Fig. 1, looking outwardly. Fig. 3 is a vertical section, in de-45 tail, illustrative of the cable-locking means with which the display-stand is provided. Fig. 4 is a horizontal section on line 4-4, Fig. 1, looking downwardly. Fig. 5 is a vertical section on line 4-4, Fig. 1, looking 50 in the direction indicated by the arrow, and Fig. 5 also shows, in dotted lines, the position into which the pivoted bars of the base of the display-stand are swung preparatory to the gathering of the component parts of 55 the display-stand for shipment. Figs. 2, 3,

4 and 5 are drawn on a larger scale than

Fig. 1.

My improved display-stand comprises a vertically arranged or upright standard A which is preferably rotatable in a horizontal plane. The said standard consists preferably of a vertically arranged hollow shaft which is seated at its lower end upon an upwardly facing annular shoulder or seat b on the central portion or body B of a base with which the display-stand is provided. The body B is provided, at its upper end and centrally, with a vertically upwardly projecting axle or cylindrical member 10 which is arranged within the lower end portion of and affords lateral bearing to the shaft or standard A.

Preferably the body B of the base is provided at its lower end with laterally and outwardly projecting arms 12 which are arranged radially relative to and spaced circumferentially of the shaft or standard A. Each arm 12 is provided in its under side with a recess 13 which extends longitudinally of the arm and substantially horizontally from the inner end to the outer extremity of the arm, and a bar D engages the said recess and is arranged to rest on the floor.

In Fig. 1, C represents the floor-line, and each bar D (see Figs. 1, 4 and 5) extends 85 longitudinally of the engaging recess 13 and substantially horizontally and outwardly beyond the outer end of the said recess and is horizontally pivoted at its inner end, as at d, to the side walls of the said recess. 90

By the construction illustrated it will be observed that the body B of the base has each recess 13 extending to the adjacent lateral extremity of the said body, that the bars D are arranged horizontally and conse- 95 quently are arranged to rest from end to end thereof on the floor and form an adequate bearing surface for the base, that each bar D is rounded at its inner end and that the pivotal attachment of each bar D to the 100 body B of the base is arranged in such proximity to the inner extremity of the bar that the bar is capable of being swung downwardly and inwardly into the position indicated in dotted lines, Fig. 5, so as to ren- 105 der the bars D and body B of the base more compact for shipment.

The upper end portion of the shaft or standard A (see Fig. 1) is provided with two vertically spaced collars E and G, and 110

the said shaft or standard is also provided with a collar H arranged a suitable distance below the collar G. Each of the said collars is secured to the shaft or standard A 5 in any approved manner as, for instance, by a suitably applied set-screw 15. The upper collar E is provided with two laterally and outwardly projecting brackets e and e which are spaced circumferentially of the said col-10 lar and consequently circumferentially of the shaft or standard A. The intermediate collar G is provided with two laterally and outwardly projecting brackets g and g which are spaced circumferentially of the said col-15 lar and consequently circumferentially of the shaft or standard A. The lower collar H is provided with two laterally and outwardly projecting brackets h and h which are spaced circumferentially of the said col-20 lar and consequently circumferentially of the shaft or standard A. Each intermediate bracket g is arranged substantially in line vertically with an upper bracket e, and each lower bracket h is arranged substantially in 25 line vertically with an intermediate bracket g. Racks I are spaced circumferentially of the upper end of and supported from the

shaft or standard A, which racks project laterally of and outwardly from the upper 30 portion of the standard. Preferably each upper bracket e and the intermediate bracket g which is arranged substantially in line vertically with the said upper bracket support a rack I which at its inner end has two 35 vertically spaced arms 16 and 16 which rest on the said upper bracket and said intermediate bracket respectively, and each arm 16 is provided at its under side with a lug 17 which projects vertically downwardly 40 through a hole 18 formed in and extending vertically through the bracket bearing the said arm. Each arm 16 has a hole 20 which is arranged centrally of the depending lug 17 of the arm and extends vertically from

each rack I is efficiently connected with and supported from the shaft or standard A. To facilitate the construction both lugs 17 50 of each rack I are circular and arranged in line vertically, and consequently the holes 20 in the brackets supporting the said rack are arranged in registry, and the lower arm 16 of the said rack extends between two up-55 wardly projecting lugs 21 and 21 which are formed on the bracket g which bears the said arm, and consequently the last-men-

45 the top of the arm to the lower extremity of

the lug. It will be observed therefore that

tioned lugs not only afford lateral bearing to the said rack but, if the lugs 17 of the said 60 rack are circular, prevent swinging or swaying of the rack laterally in opposite directions respectively.

Each rack I is provided at the top thereof with two guide-sheaves J and J which are 65 spaced endwise of the rack and arranged to

rotate in a vertical plane and have their axes substantially parallel, and a rope or cable K instrumental in suspending a bunch of bananas L or other article from the outer end of the rack leads over and is guided by 70 the said sheaves. The said cable has its outer end under the said end of the said rack and thence leads upwardly to and over the outer sheave, thence inwardly to and over the inner sheave, and thence downwardly 75 through the holes 20 in the arms 16 of the rack to a point below the bracket g instrumental in supporting the rack, and there the cable is operatively connected at its inner end with  $\bar{a}$  sleeve m which loosely embraces 80 and is consequently slidable or adjustable lengthwise of a vertically arranged rod R which is connected, at its upper end and above the range of adjustment of the said sleeve, with the said bracket and connects, at 85 its lower end and below the said range of adjustment, with that bracket h which is arranged substantially in line vertically with the said bracket g and is provided at its upper end with a head r resting on the said 90 bracket g from which the said rod is therefore suspended. The said rod extends vertically and loosely through the sleeve m embracing the said rod and also through the connected bracket h, and a nut P is screwed 95 onto the rod at the under side of the lastmentioned bracket. It will be observed therefore that the said rod R is fixed in place and supported from but spaced laterally of the shaft or standard A, and the 100 sleeve m adjustable along the said rod is arranged to move between the brackets g and h between which the said rod extends, and the said sleeve is provided at its under side with a latch which consists preferably of a 105 plate T which at one side of the said rod rests on the head 24 of a screw Q which is screwed into the lower end of the sleeve. The hole 25, formed in the said plate T and through which the said screw Q extends, is 110 large enough in dimensions and the said screw has its head 24 spaced far enough from the connected sleeve m to permit a limited swinging of the plate in a vertical plane, and the said plate also has a hole 26 through 115 which extends the rod R embraced by the said sleeve. The said hole 26 is large enough in dimensions to permit the said swinging of the said plate, and the relative arrangement of the parts is such that the 120 said plate or latch normally slants downwardly from the screw Q or member connecting it with the said sleeve, as shown in solid lines Figs. 1 and 3, and binds against the said rod and thereby operates as a lock 125 whereby the said sleeve, and consequently the cable which is operatively connected with the said sleeve, are locked in the desired adjustment vertically of any load suspended from the outer end of the cable.

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By the construction hereinbefore described it will be observed that the display-stand illustrated comprises three vertically spaced brackets e, g and h for each rack I and also 5 comprises an upright rod extending between and being connected to the lower and intermediate of the said brackets and embraced by a sleeve which is adjustable endwise of the rod and operatively connected with the 10 rope or cable instrumental in suspending a bunch of bananas or other article from the said rack, and that the said display-stand also comprises a vertically tiltable latch supported from the said sleeve at one side of the 15 said rod and extending to and embracing the rod, which latch in its normal and operative position slants downwardly toward and binds on the rod so as to lock the sleeve and connected cable, but is rendered loose rela-20 tive to the rod upon being lifted at its rodembracing portion, as shown in dotted lines, Fig. 3, and thereby frees the said sleeve and connected cable to move endwise as required to readjust the load suspended by the cable.

What I claim is:— 1. A display-stand comprising the following:—a substantially vertically arranged standard which is rotatable in a horizontal plane; racks spaced circumferentially of the 30 upper end of and supported from the standard, and a base for the standard, which base has a body which supports and affords lateral bearing to the standard, said body being provided at its under side with re-35 cesses arranged substantially radially relative to the standard and extending substantially horizontally to the adjacent lateral extremity of the body; bars engaging the recesses and arranged to rest substantially 40 from end to end thereof on the floor, which bars extend longitudinally of the recesses and project laterally of and outwardly from the body of the base and are horizontally pivoted at their inner ends to the said body.

2. The combination, with two suitably supported vertically spaced laterally projecting brackets; a laterally projecting rack supported from the brackets; a suitably guided cable extending along the rack and 50 instrumental in suspending a bunch of bananas or other article from the outer end of the rack, which cable has its outer end arranged under the said end of the rack and thence extends upwardly to the said 55 end of the rack, thence inwardly to the inner end portion of the rack and thence downwardly from the last-mentioned portion of the rack to a point below the lower of the aforesaid brackets, and means where-60 by the cable is normally locked under the inner end portion of the rack in the desired adjustment vertically of any load suspended from the outer end of the cable.

3. The combination, with two suitably supported vertically spaced laterally pro-

jecting brackets provided each with a hole which extends vertically through the respective bracket and is arranged in registry with the hole in the other bracket; a laterally projecting rack mounted on the said brack- 70 ets and having lugs engaging the said holes, said rack being provided at the top thereof with two guide-sheaves spaced endwise of the rack and arranged to rotate in a vertical plane and having their axes substantially 75 parallel; a cable instrumental in suspending a bunch of bananas or other article from the outer end of the rack, which cable leads from under the said end of the rack upwardly to and over the outer sheave, thence 80 inwardly to and over the inner sheave and thence downwardly to a point below the rack, and means whereby the cable is locked under the lower of the aforesaid brackets in the desired adjustment vertically of 85 any load suspended from the outer end of

the cable. 4. The combination, with two suitably supported vertically spaced laterally projecting brackets provided each with a hole 90 which extends vertically through the respective bracket, one of the brackets being provided at the top thereof with two laterally spaced upwardly projecting lugs; a laterally projecting rack mounted on the said brack- 95 ets and having lugs engaging the aforesaid holes, said rack extending between the firstmentioned lugs and being provided at the top thereof with two guide-sheaves spaced endwise of the rack and arranged to rotate 100 in a vertical plane and having their axes substantially parallel; a cable instrumental

in suspending a bunch of bananas or other article from the outer end of the rack, which cable leads from under the said end of the 105 rack upwardly to and over the outer sheave, thence inwardly to and over the inner sheave and thence downwardly to a point below the rack, and means whereby the cable is locked under the lower of the aforesaid 110 brackets in the desired adjustment vertically of any load suspended from the outer end of the cable.

5. The combination, with three suitably supported vertically spaced laterally pro- 115 jecting brackets; an upright rod extending between and being connected to the lower and intermediate of the said brackets; a sleeve embracing and adjustable endwise of the rod; a laterally projecting rack support- 120 ed from the upper and intermediate of the said brackets; a suitably guided cable instrumental in suspending a bunch of bananas or other article from the outer end of the rack, which cable leads from under the 125 said end of the rack upwardly to the said end of the rack, thence inwardly to the inner end portion of the rack and thence downwardly from the last-mentioned portion of the rack to and is operatively connected 130 with the sleeve, and means whereby the sleeve is locked in the desired adjustment.

6. The combination, with three suitably supported vertically spaced laterally pro-5 jecting brackets; an upright rod extending between and being connected to the lower and intermediate of the said brackets; a sleeve embracing and adjustable endwise of the rod; a laterally projecting rack support-10 ed from the upper and intermediate of the said brackets; a suitably guided cable instrumental in suspending a bunch of bananas or other article from the outer end of the rack, which cable leads from under the 15 said end of the rack upwardly to the said end of the rack, thence inwardly to the inner end portion of the rack and thence downwardly from the last-mentioned portion of the rack to and is operatively connected 20 with the sleeve; a vertically tiltable latch supported from the sleeve at one side of the rod and embracing the rod, which latch in its operative position slants toward and binds on the rod but is rendered loose rela-25 tive to the rod upon being lifted at its rodembracing portion.

7. The combination, with three suitably supported vertically spaced laterally projecting brackets; a laterally projecting rack 30 supported at its inner end from the upper and intermediate of the said brackets, which rack at its inner end has two vertically spaced arms which rest on the upper bracket and intermediate bracket respectively, each 35 arm being provided at its under side with a lug projecting vertically downwardly through the bracket bearing the said arm, said arm having a hole which is arranged centrally of the said lug and extends from 40 the top of the arm to the lower extremity of the lug, the rack being provided with two. guide-sheaves spaced endwise of the rack and arranged to rotate in a vertical plane and having their axes substantially parallel; 45 a cable instrumental in suspending a bunch of bananas or other article from the outer

end of the rack, which cable leads from under the said end of the rack to and over the outer sheave, thence inwardly to and over the inner sheave, and thence down- 50 wardly through the holes in the aforesaid lugs, and means whereby the cable is locked in the desired adjustment vertically of any load suspended from the outer end of the cable.

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8. A display-stand comprising a standard, racks spaced circumferentially of and projecting laterally of and outwardly from the upper portion of the standard and provided each at the top thereof with two 60 guide-sheaves which are spaced endwise of the respective rack and arranged to rotate in a vertical plane and have their axes substantially parallel; two vertically spaced collars embracing and secured to the afore- 65 said portion of the standard and provided each with laterally and outwardly projecting brackets spaced circumferentially of the standard, each bracket of each collar being arranged substantially in line verti- 70 cally with a bracket of the other collar and these brackets supporting a rack; a substantially vertically arranged rod suspended from each bracket of the lower of the said collars and connected at its lower end to the 75 standard; a sleeve embracing and adjustable endwise of the rod; means for locking the sleeve in the desired adjustment, and a cable operatively connected with the sleeve and leading from the sleeve to and over and 80 guided by the guide-sheaves of the adjacent rack and instrumental in suspending a bunch of bananas or other article from the outer end of the said rack.

In testimony whereof, I sign the forego- 85 ing specification, in the presence of two witnesses.

HENRY G. DREYER.

Witnesses:

C. H. Dorer,

B. C. Brown.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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