

(No Model.)

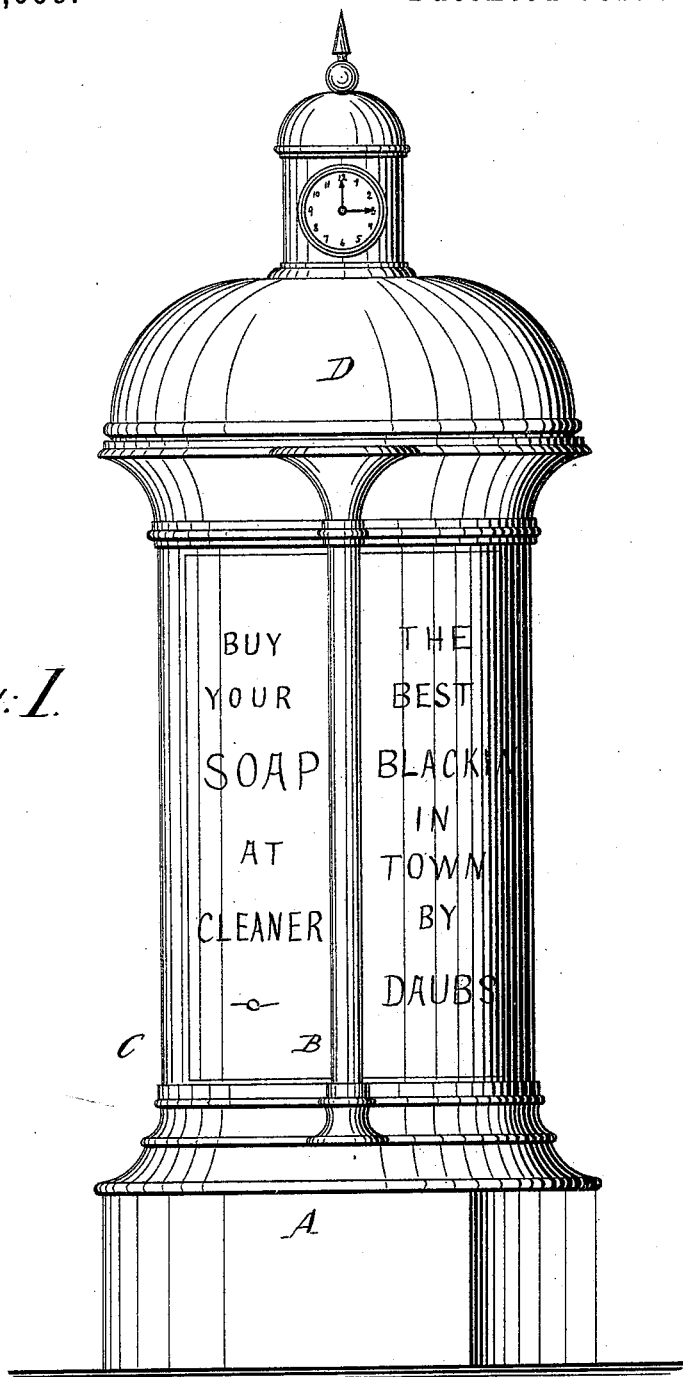
2 Sheets—Sheet 1.

E. GRAF.
ADVERTISING SHOW CASE.

No. 421,699.

Patented Feb. 18, 1890.

Fig. 1.



WITNESSES:

A. Schehl
W. Reinher

INVENTOR

Emil Graf

BY *Goepel & Paeguer,*

ATTORNEYS

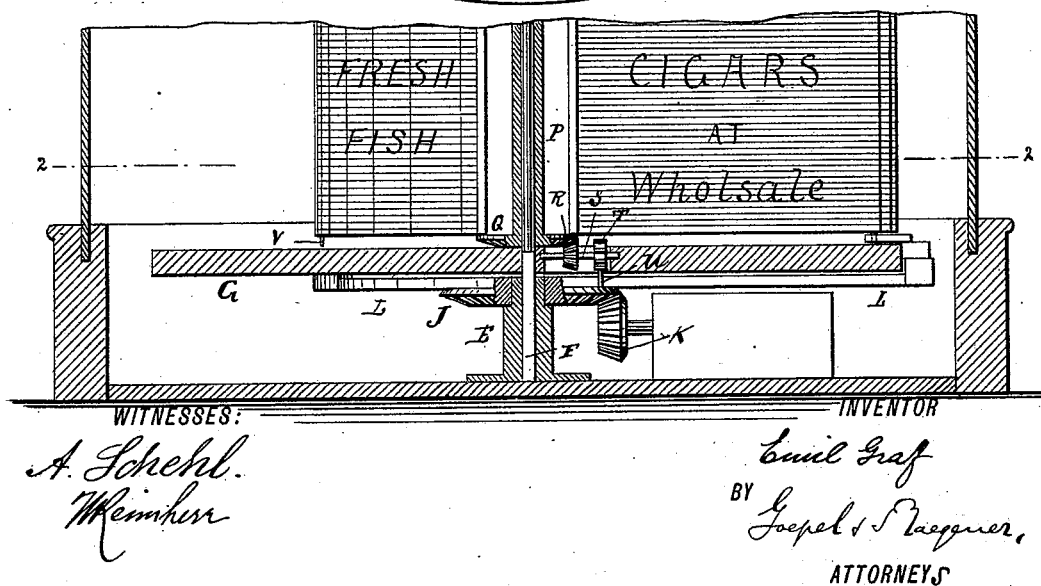
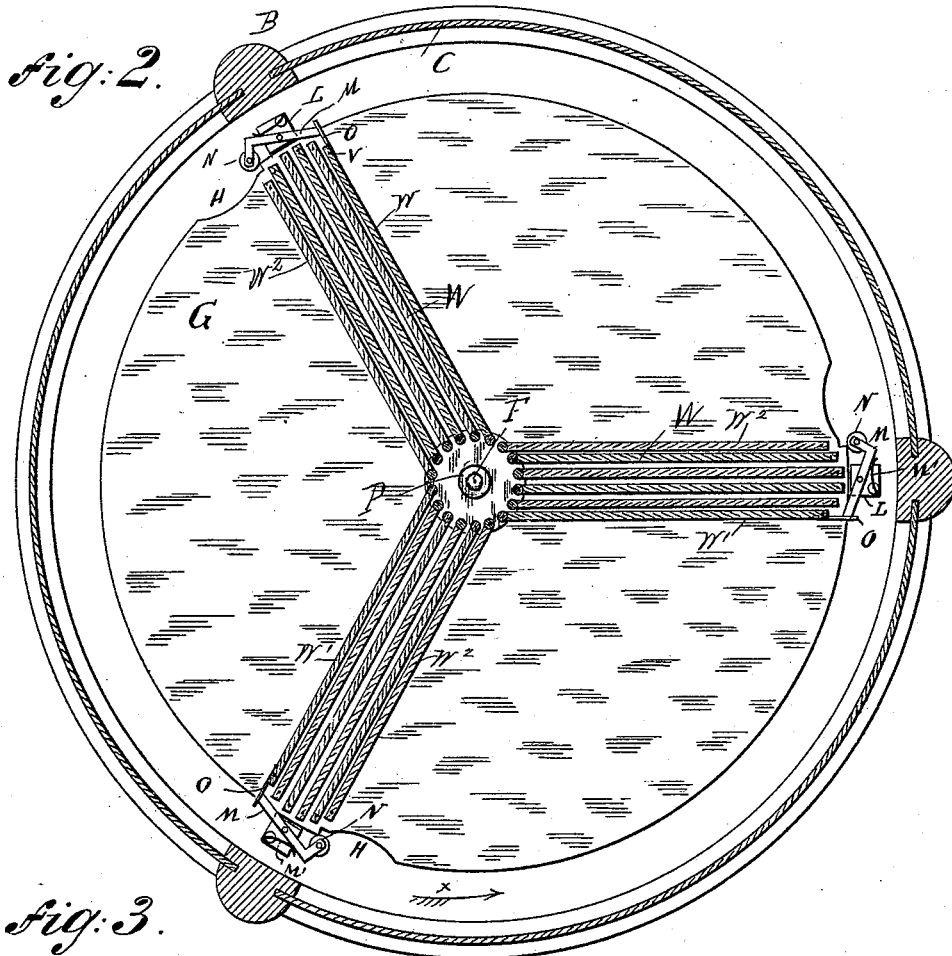
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WITNESSES:

A. Schehl.
Weinman

INVENTOR

E. Graf
BY Loepel & Naegener,
ATTORNEYS

UNITED STATES PATENT OFFICE.

EMIL GRAF, OF NEW YORK, N. Y.

ADVERTISING SHOW-CASE.

SPECIFICATION forming part of Letters Patent No. 421,699, dated February 18, 1890.

Application filed October 9, 1889. Serial No. 326,402. (No model.)

To all whom it may concern:

Be it known that I, EMIL GRAF, of the city, county, and State of New York, a subject of the Emperor of Germany, have invented certain new and useful Improvements in Advertising Show-Cases, of which the following is a specification.

The object of my invention is to provide a new and improved device for displaying advertisements conspicuously and changing them at regular intervals.

The invention consists in the combination, with a casing, of a fixed cam-disk and rotating arms below the cam-disk, pawls mounted on said arms and acted upon by the cam-disk, a rotative support, and wings mounted on said rotative support, which wings can be carried along by the pawls on the rotative arms.

In the accompanying drawings, Figure 1 is an elevation of my improved advertising show-case. Fig. 2 is a horizontal sectional view of the same on the line 2 2, Fig. 3. Fig. 3 is a vertical transverse sectional view of the bottom part of the same.

Similar letters of reference indicate corresponding parts.

The advertising show-case rests on a base A, and is composed of panes of glass C, fixed to suitable columns B, surmounted by ornamental top D. In the base the standard E is provided with the vertical shaft F, on which the cam-plate G is fixed, which is provided in its edge with three cam-recesses H, equidistant from each other and preferably located at the standards B of the show-case. Below said cam-plates G the beveled cog-wheel J is mounted to turn on the standard E, and is driven by the cog-wheel K, which in turn is rotated by some suitable motor. On said cog-wheel J three horizontal arms L are fixed, which project beyond the edge of the cam-plate G, and each of which carries on its outer end a spring-pressed pawl M, provided on one end with a roller N, that is pressed by the spring M' of the pawl against the edge of the cam-plate G, and on the other end each pawl is provided with an arm O. A sleeve P surrounds the shaft F, and is provided on its lower end with a beveled cog-wheel Q, engaging a pinion R, mounted on a shaft S, journaled in a slot of the cam-plate G, which shaft S carries a toothed wheel T, that can engage

a pin U, projecting upward from the beveled cog-wheel J. A series of wings W, bearing advertisements, are pivoted at their inner edges on the wheel Q, and are pivoted in any suitable manner at their upper ends. Each wing is provided at its swinging edge with a pin V at the bottom.

The operation is as follows: As shown in Fig 2, the arms O of the pawls M rest against the pins V of the left-hand wings W' of each series or group. As the arms L rotate in the direction of the arrow α the rollers N on the pawls M pass into the recesses H in the edge of the fixed cam-plate G, whereby the arms O are moved outward, so as to clear the pins V of the several wings until they each arrive at the right-hand wings W² of the groups, as by that time the rollers N arrive at the ends of the recesses H and are forced outward to such an extent that the arms O pass in between the pins V of the right-hand wing W² and the wing adjacent to it, and, acting on the pin of the right-hand wing W², carries the same along in the direction of the arrow α , thus conveying each right-hand wing W² of each group to the adjacent group, and so on after every one-third of a revolution of the arms L around the central shaft of the apparatus. The wings bearing the advertisements are thus constantly changed and shifted automatically and new advertisements brought into view after every one-third of a rotation of the arms L. As the wings are swung from one section to the other, the disks to which said wings are hung must also be rotated, and this is accomplished by the pin U on the wheel J, which for every revolution of the wheel J rotates the wheel T a distance of one tooth, and thus successively turns the wheel Q, on which the wings are mounted.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In an advertising show-case, the combination, with a fixed cam-support, of a series of wings radiating from the center and mounted on a rotating support above the cam-support, rotating arms below the cam-support, and pawls mounted on the ends of said arms and adapted to carry along the wings, substantially as set forth.

2. In an advertising show-case, the combi-

nation, with a fixed cam-disk, of rotating arms below the same, pawls pivoted on the ends of said arms, rollers on said pawls running on the edge of the cam-disk, a series of wings pivoted on a rotative support, and pins on said wings radiating from the center and on which pins the pawls can act, substantially as set forth.

3. In an advertising show-case, the combination, with a fixed cam-support, of rotating arms arranged below said cam-support, pawls on the ends of said arms, a rotative support above the cam-support, wings radiating from the center and pivoted on said support, and means for rotating the support of the wings from the rotative pawl-bearing arms, substantially as set forth.

4. The combination of a fixed cam-disk, a series of wings radiating from the center and arranged in groups, a rotative support to which the inner ends of the wings are pivoted, and rotating arms provided with pivoted pawls at their ends, said pawls being actuated by the cam-disk, so as to engage and turn one wing of each group at each partial rotation of the arms, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

EMIL GRAF.

Witnesses:

OSCAR BAUER,
B. ROESCH.