

ALBERT R. GOULD.

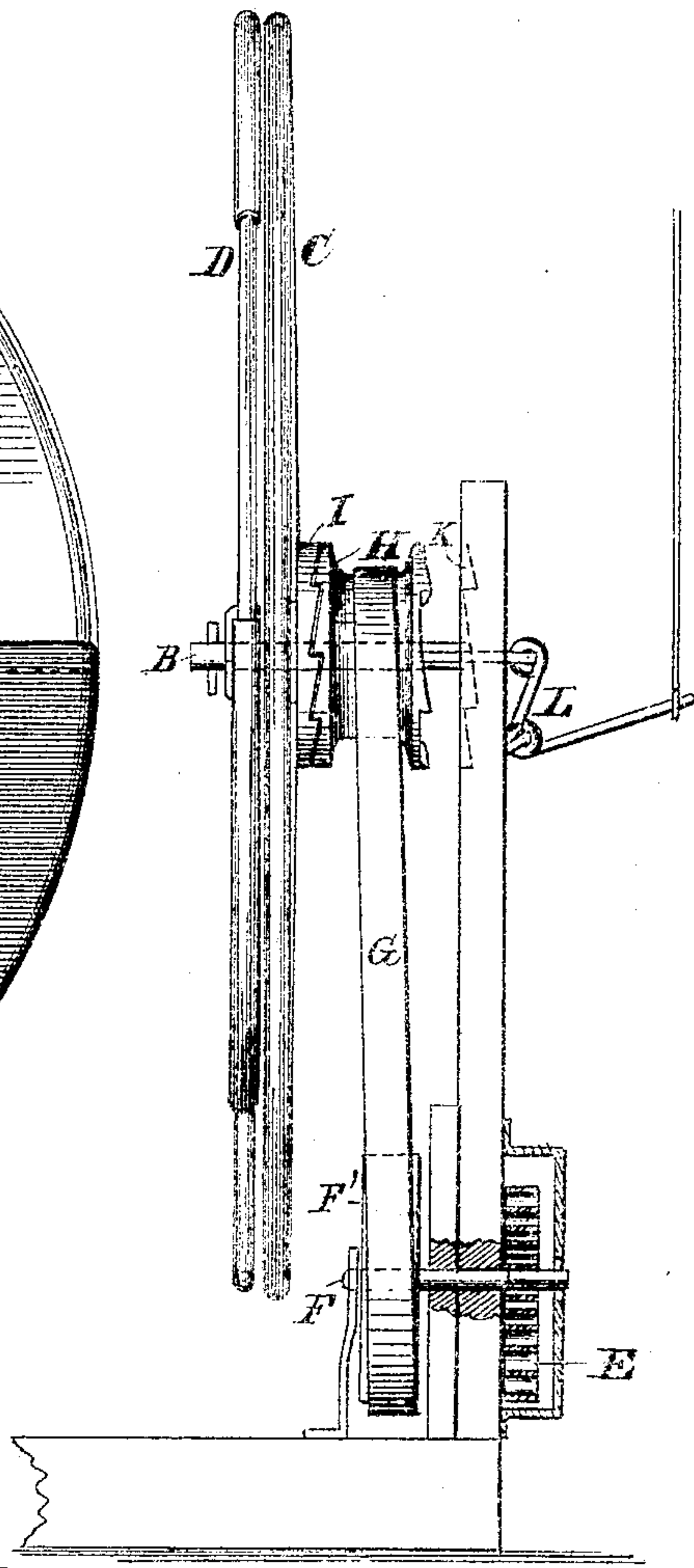
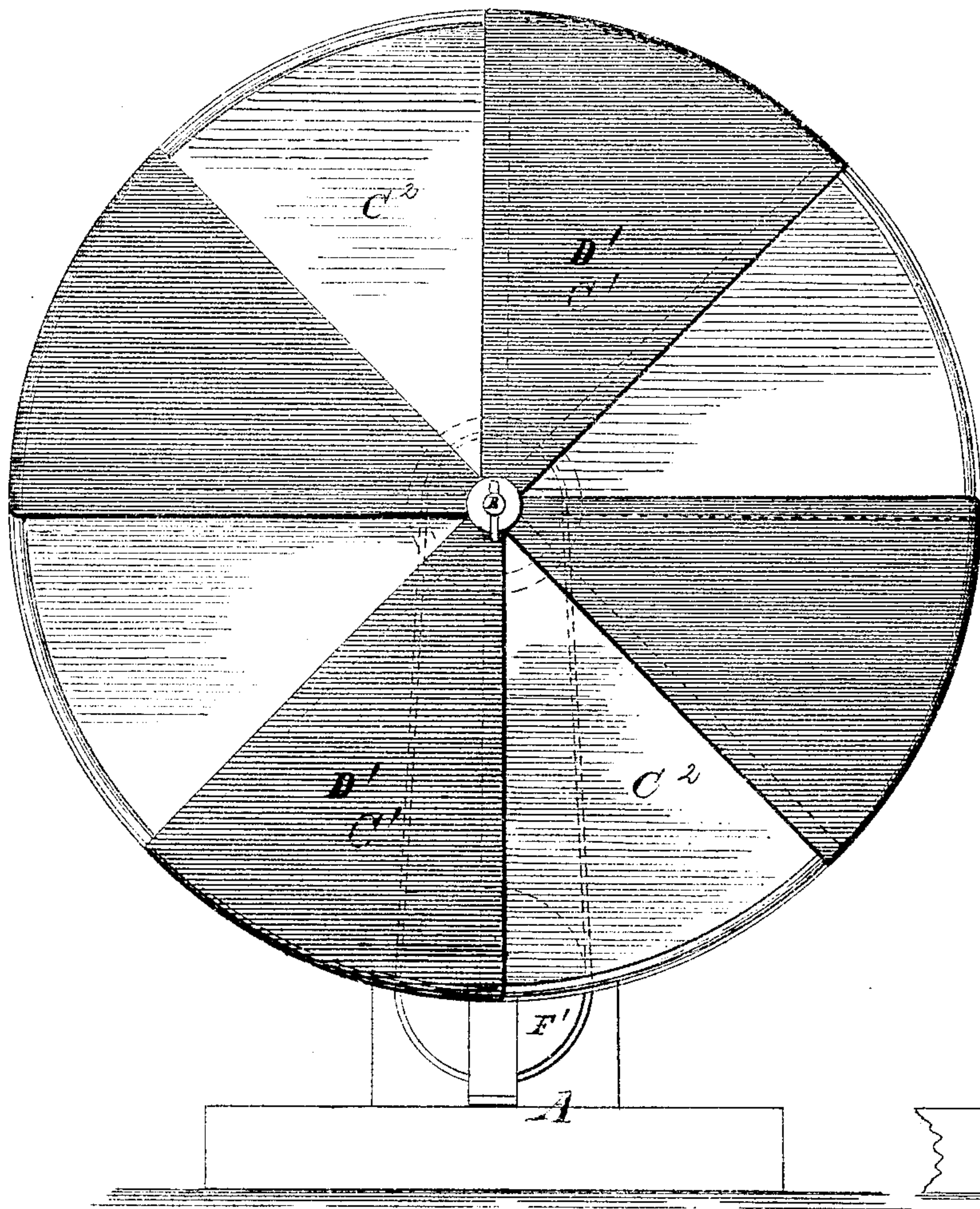
Improvement in Photographic Back-grounds.

No. 121,715.

Patented Dec. 12, 1871.

*Fig. 1.*

*Fig. 2.*



*Witnesses.*

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# UNITED STATES PATENT OFFICE.

ALBERT R. GOULD, OF CARROLLTON, OHIO.

## IMPROVEMENT IN PHOTOGRAPHIC BACKGROUNDS.

Specification forming part of Letters Patent No. 121,715, dated December 12, 1871.

*To all whom it may concern:*

Be it known that I, ALBERT R. GOULD, of Carrollton, in the county of Carroll and State of Ohio, have invented new and useful Improvements in Backgrounds for Photographic Purposes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 represents a front elevation of my improved background, and Fig. 2 represents a side elevation, partly in section.

The same letters of reference are used in both figures in the designation of identical parts.

The object of this invention is to provide photographers with a background which, by the simple adjustment of a disk, is capable of furnishing or assuming any shade of color, between a jet black and a pearl white, which may be required to give such a tone to the plate behind the picture as will relieve the latter to the best possible advantage. My invention consists in a background composed of two circular skeleton disks, which are hung upon a horizontal spindle in close proximity to each other, and revolved at a rapid rate of speed while a picture or negative is being taken. Each skeleton disk is divided into an equal number of sectors by radial arms or spokes, and the sectors of the rear one are covered with black cloth and white cloth alternately, or painted black and white, while only every alternate sector of the front disk is covered with black cloth or painted black, the remaining sectors being open or uncovered. The disks are adjustable, so that by turning them on the spindle the ground can be arranged to show either a uniform black surface or alternately black and white surfaces. When the white sectors of the rear disk are fully exposed and the disks are revolved rapidly the result will be a pearl-white background. To produce any shade between white and black it is only necessary to turn the front disk so as to expose greater or lesser white sectors of the rear disk.

In constructing this background a suitable frame, A, is provided, in the top of which the horizontal spindle B has its bearings. On the outer overhung end of the spindle the skeleton disks C and D are hung, and they are held to the spindle by a set-screw or other suitable device, so that it may be adjusted with reference

to the disk C by turning it on the shaft. The disks are arranged in close proximity to each other, as shown in Fig. 2. Each is composed of a circular hoop, connected with a central hub by radial arms which divide them into a number of sectoral fields of equal size. The number of sectoral fields will vary with the size of the disks. The sectors of the rear disk C are covered with black cloth C<sup>1</sup> and white cloth C<sup>2</sup> alternately; but only every alternate sector of the front disk D is covered, and that with black cloth D', while the remaining sectors are left uncovered to expose portions of the rear disk.

The disks may be revolved by any desirable or convenient means. In the example shown a coiled spring, E, furnishes the motive power. The spring turns a spindle, F, carrying a pulley, F'. From this pulley motion is given to the spindle B and disks C and D by means of the belt G and the pulley H, which is placed upon the spindle B between the disks and the frame. The pulley H slides upon a feather on the spindle D, and is constructed with ratchet-teeth or clutches upon each side to engage either with the clutch I to revolve the disks, or with the clutch K permanently secured to the frame to stop the action of the spring simultaneously with stopping the rotation of the disks. The pulley H is thrown in gear with the clutch I by a connecting-rod and bell-crank lever, L, from which a cord may pass to the operator, and thrown out of gear automatically by a spring inserted between it and the clutch I.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A revolving background for photographic purposes, combining in its construction two disks, adjustable with reference to each other, the rear one of which presents a surface of alternate black and white sectoral fields, and the front one alternate black sectoral fields and sectoral open spaces, substantially as and for the purpose set forth.

2. The spring E, pulley F, belt G, pulley H, clutches I and K, and lever L, with the disks C and D, when constructed and operating substantially as and for the purpose set forth.

ALBERT R. GOULD.

Witnesses:

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