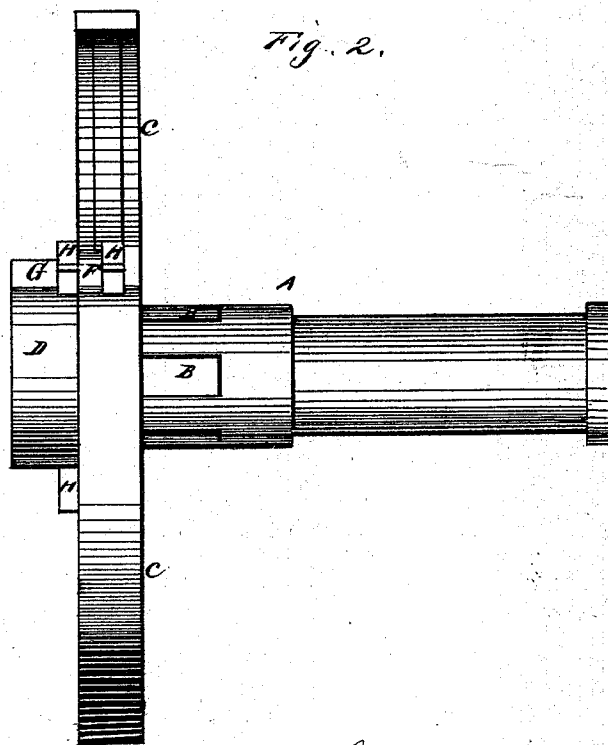
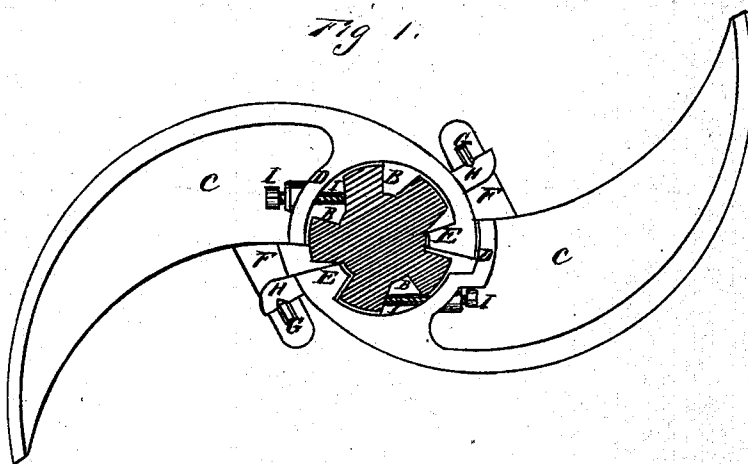


J. F. MALLINCKRODT.
Sectional Cams.

No. 146,193.

Patented Jan. 6, 1874.



Witnesses.

John L. Borne,
Chas. Richardson

John F. Mallinckrodt,
by Sewey & Co.
Attys.

UNITED STATES PATENT OFFICE.

JOHN F. MALLINCKRODT, OF MIDDLE BOULDER, COLORADO TERRITORY.

IMPROVEMENT IN SECTIONAL CAMS.

Specification forming part of Letters Patent No. **146,193**, dated January 6, 1874; application filed July 3, 1873.

To all whom it may concern:

Be it known that I, JOHN F. MALLINCKRODT, of Middle Boulder, Boulder county, Territory of Colorado, have invented a Sectional Cam; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

The object of my invention is to provide an improved sectional cam which can be easily taken from and readjusted to the shaft upon which it is secured, and thus avoid the difficulties which are met with when one of the old style of entire cams breaks, or when it is necessary to change the relative positions of a number of cams upon the same shaft. My invention consists, principally, in a novel and simple mode of constructing the two parts of the cam, so that they can be effectually secured to their place upon the shaft, in which key-seats are set.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a transverse section of the cam-shaft, showing a side view of the cam. Fig. 2 is an edge view of the cam upon its shaft.

A is the shaft, upon which any number of cams are to be secured. This shaft has the key-seats B cut in it longitudinally, and into these seats the hooks from the cams are placed. The cam is divided into two parts, C C, each having a section of a long stout hub, D, cast or otherwise formed with it. From the ends of each of these sections, which form the inner extension of the backs of, or lifting-faces of, the cams, a hook, E, projects inward, and this hook fits into one of the key-seats B. From

the inside of the web of the cam a lug, F, projects, and this is slotted, so as to admit a wedge or key, G. Two similar lugs, H, arise from the hub, just behind the hook E, and the lug F of each section passes between the lug H of the opposite section. The key G, being then driven through the slot in the lug F and behind the lugs H, holds the whole cam firmly to its place. As the hooks do not fit absolutely tight in the key-seats B, the cam might move backward a little upon the shaft. In order to prevent this, I employ a set-screw, I, which passes through the hub of each half of the cam and enters one of the key-seats, so that, when drawn tight, its force is exerted against that of the hooks. This holds the cam strongly in its place, and at the same time renders it a short operation to change the position of or renew a cam. The lifting-face of the cam is formed by bending upon it a plate of spring-steel, which can be renewed at any time.

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

1. The sectional cam composed of the two parts C C, having the hooks E, fitting into the key-seats of the shaft, and secured by the lugs F and H and the key G, substantially as herein described.

2. In combination with the sections C C of a cam with other hooks E, the set-screw I, substantially as and for the purpose described.

In witness whereof I hereunto set my hand and seal.

JOHN F. MALLINCKRODT. [L. S.]

Witnesses:

C. E. BONNEL,
CHARLES H. HOOK.