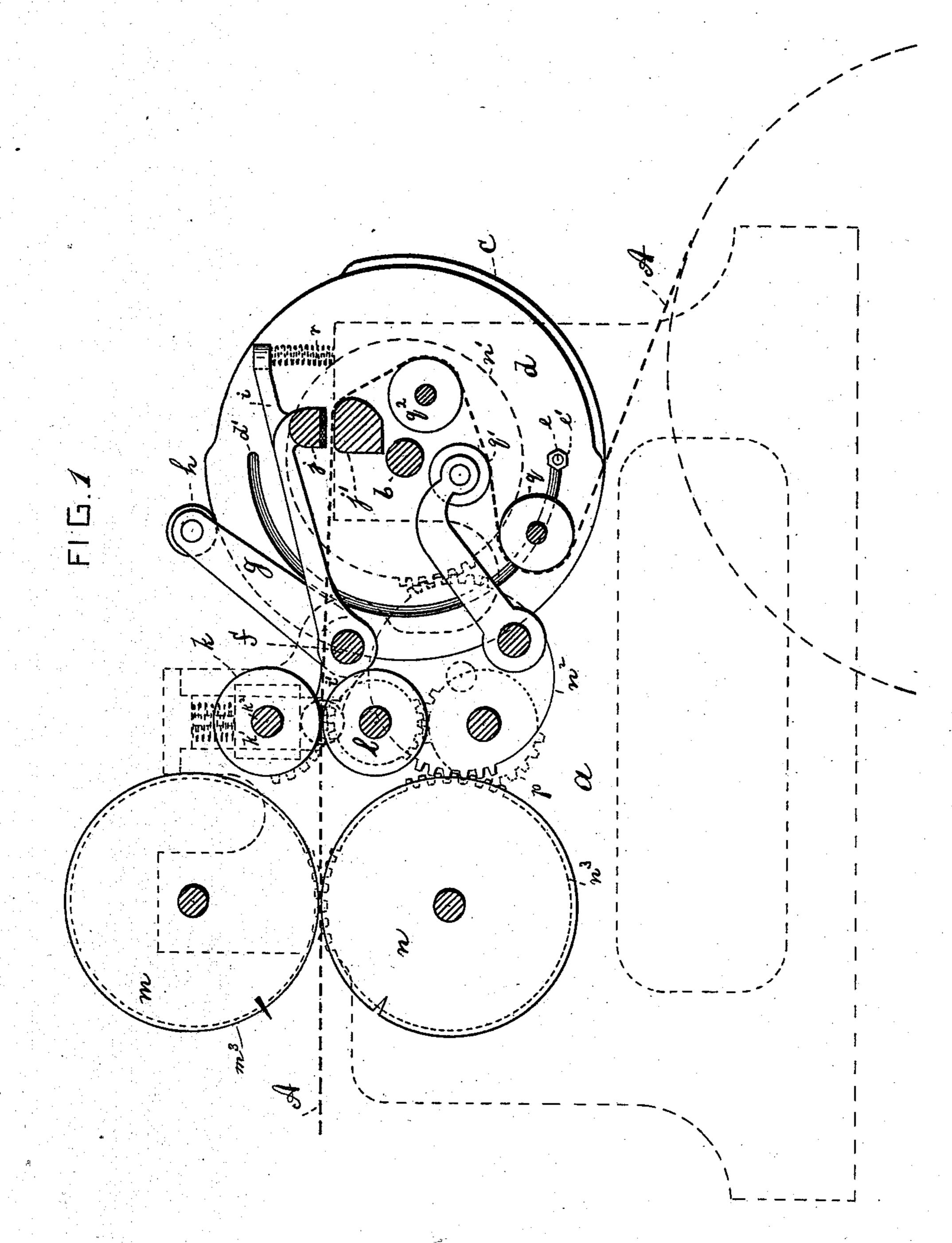
A. R. BARTLAU.

CUTTING ATTACHMENT FOR PRINTING PRESSES.

No. 413,887.

Patented Oct. 29, 1889.

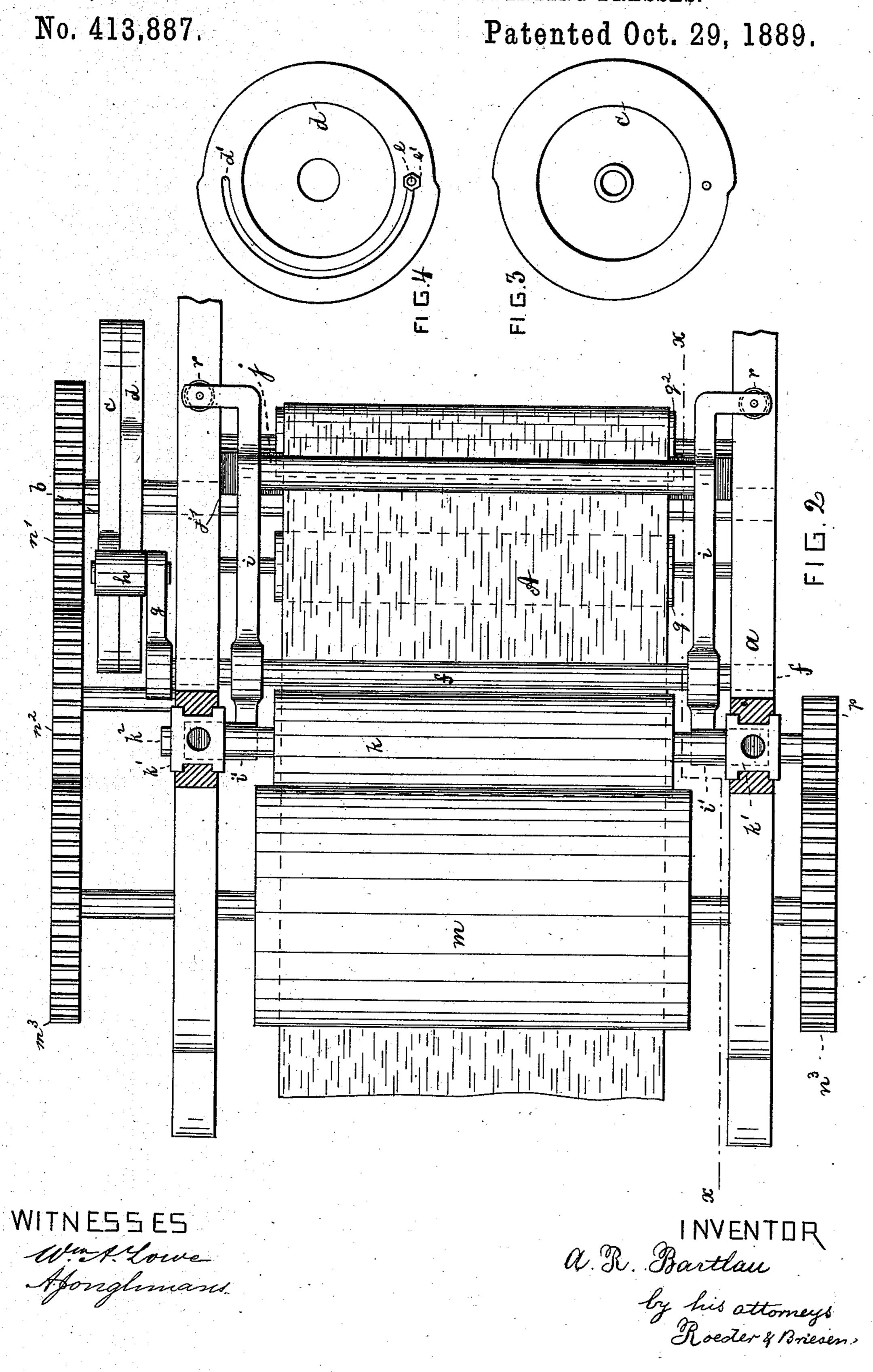


WITNESSES West Sowe

INVENTUR O.B. Bartlau by his attorneys Roeder & Briesen

A. R. BARTLAU.

CUTTING ATTACHMENT FOR PRINTING PRESSES.



United States Patent Office.

AUGUST R. BARTLAU, OF PLAINFIELD, NEW JERSEY.

CUTTING ATTACHMENT FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 413,887, dated October 29, 1889. Application filed July 25, 1889. Serial No. 318,656. (No model.)

To all whom it may concern:

Be it known that I, AUGUST R. BARTLAU, of Plainfield, Union county, New Jersey, have invented an Improved Cutting Attachment 5 for Printing-Presses, of which the following | is a specification.

This invention relates to a cutting attachment for printing-presses which may be adjusted to cut paper printed upon the press

10 into different lengths.

The invention consists in the various features of improvement more fully pointed out

in the claims.

In the accompanying drawings, Figure 1 is 15 a longitudinal section of my improved cutting attachment on line x x, Fig. 2. Fig. 2 is a top view thereof. Figs. 3 and 4 are face views of the cams c d.

The letter a represents the frame of a print-20 ing-press, in which is hung a revolving shaft b, upon which are mounted a pair of cams cd, of equal diameter. These cams are set side by side, the hub of one being slipped over the hub of the other, and are adjustably con-25 nected by means of bolt e, having nut e'. This bolt is tapped in cam c and engages a curved slot d' of cam d. In this way the cams may be turned upon their shaft, after which they are tightened up by set-screws, as usual. 30 The working-edge of each cam is partly raised and partly sunk, and by turning the cams a suitable distance their raised parts may be made to overlap to any desired extent. Thus . it will be seen that the working-edge of the 35 combined cams may be changed to change the relative extent of sunken and raised surface. Upon a shaft f—also hung in frame a there is secured an arm g, provided with a roller h, that engages the working-surfaces of

40 both cams c d, Fig. 2. To the shaft f there are also secured a pair of arms i, provided with stop j, above a fixed block j'. The arms i are provided with extensions i', which | engage the sliding bearings k'. In these 45 bearings is hung the shaft k^2 of the upper feed-roller k. The feed-roller k is situated above and is intergeared with the lower feedroller l.

m is the upper cutting-cylinder, placed |

above the lower cutting-cylinder n, to which 50 the power is applied from the main press. These cylinders are only so far apart as to permit a sheet of paper to pass between them. The cylinder n transmits motion by wheel n^3 on its shaft, and by wheels n^2 n' to shaft b. 55 The wheel n^3 also engages a wheel m^3 on shaft of cylinder m and revolves the latter. Moreover, the wheel n^3 , by wheel p, revolves lower feed-roller l.

The operation of the device is as follows: 60 The paper A to be cut is from its deliveryroller passed over pulley q, thence over a suitable weighted tension device q' and pulley q^2 through the stop mechanism j j'. Thence the paper passes between the feeding- 65 rollers k l, and finally between cutters m n. Motion being imparted to the machine, it will be seen that when the roller h is raised by the raised working-surfaces of the joint cams cd the stop j is raised, so as to allow the 70 passage of the paper between the stop and the block j'. At the same time the upper feeding-roller k is lowered upon the roller l. Thus these feed-rollers engage the paper and carry it to the cylinders m n to be cut. As 75 soon as the roller h is brought opposite the sunk surface of joint-cams cd, pull-springs rdraw arms i down to close the stop mechanism j j' and grasp the paper. At the same time the roller k is raised from roller l and 80 the feed is stopped. Thus the desired intermittent feed is imparted to the machine.

As already described, the length of time during which the machine feeds may be regulated by adjusting the cams cd, and thus pa- 85 per of different lengths may be cut.

What I claim is—

1. The combination of a pair of adjustable cams with a shaft f, carrying arms gi, the arm g, having roller h, that engages the cams, 90 and the arms i, having stop j, and with the block j', substantially as specified.

2. The combination of a pair of adjustable cams with shaft f, arm g, and roller h, engaging the joint surfaces of the cams, and with 95 the arms i, having extensions i', the arms i, carrying stop j, and the extensions i', engaging the adjustable bearings of a feedingroller, and with the block j', substantially as

and for the purpose specified.

3. The combination, in a cutting attachment for printing-presses, of the following elements: a pair of cams, a roller engaging the cams, a pair of arms connected to the roller-carrying shaft, a stop and a feed mech-

anism operated by the arms, and a pair of cutting-cylinders, substantially as and for the purpose described.

AUGUST R. BARTLAU.

Witnesses:

A. Jonghmans,

F. v. Briesen.