

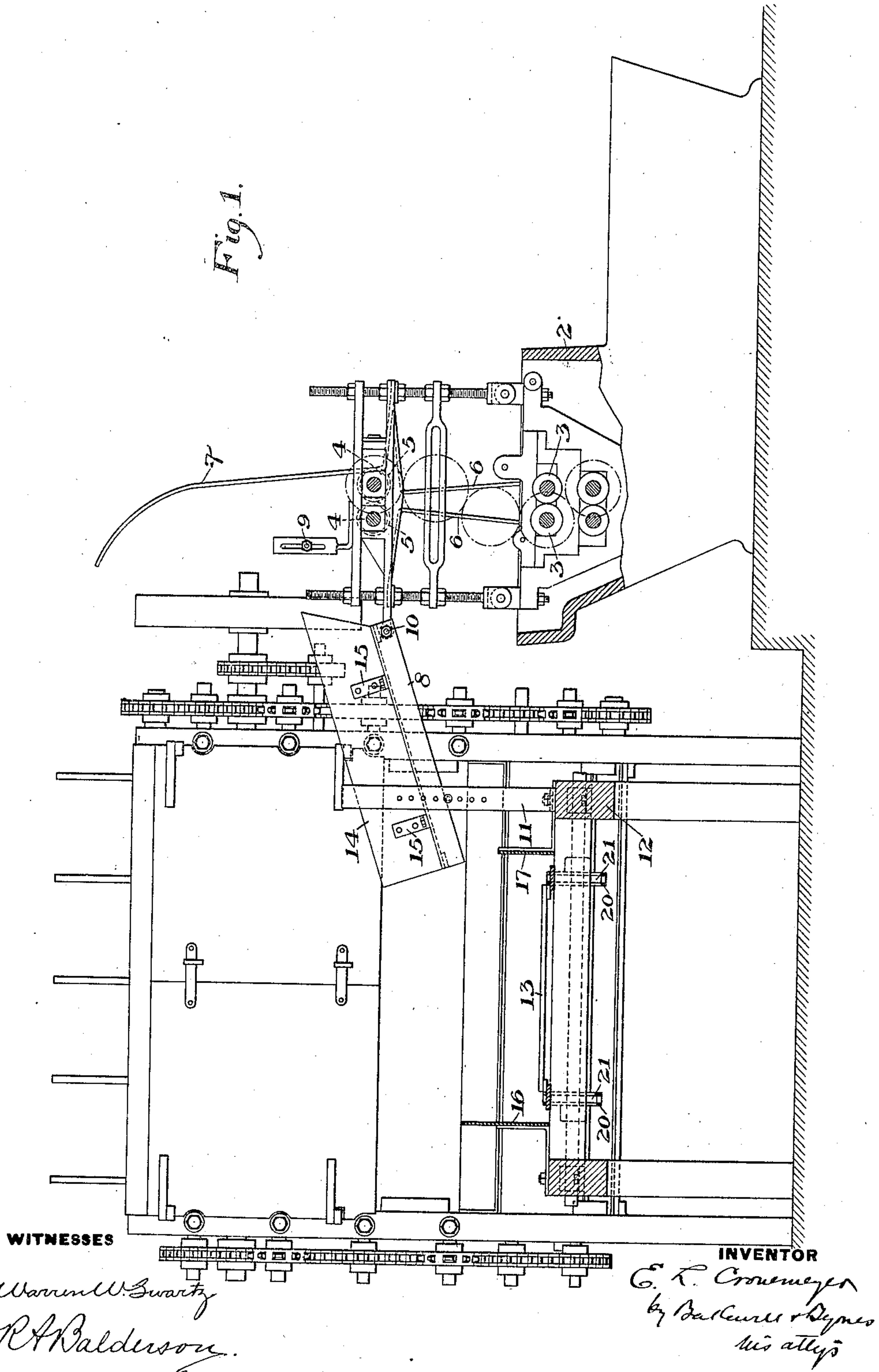
No. 832,537.

PATENTED OCT. 2, 1906.

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BRANNER FEEDING MECHANISM.

APPLICATION FILED JUNE 1, 1905.

3 SHEETS—SHEET 1.



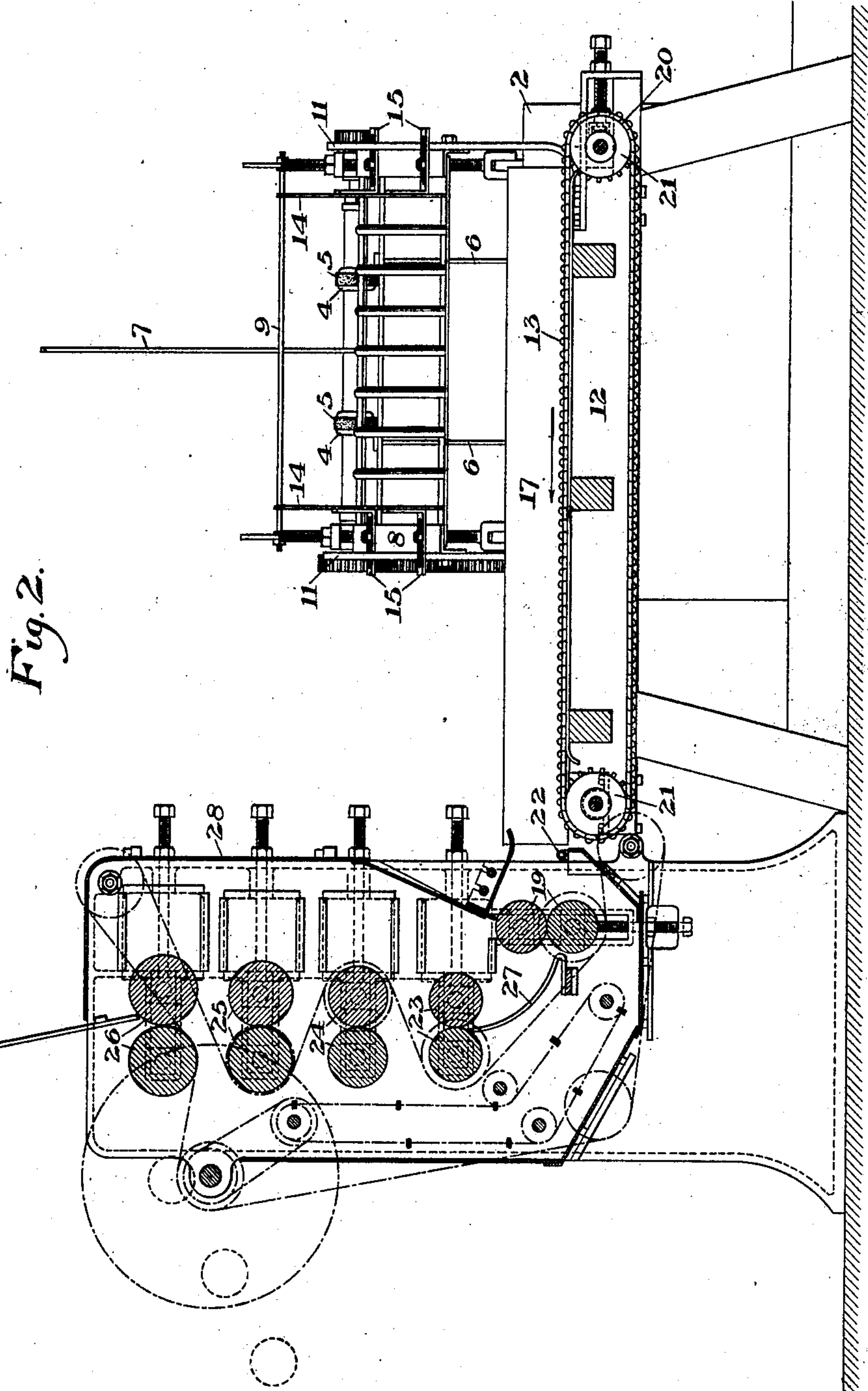
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WITNESSES

Warren W. Swartz  
R. A. Balderson

INVENTOR

E. L. Cronmeyer  
by Balderson & Swartz  
his attys

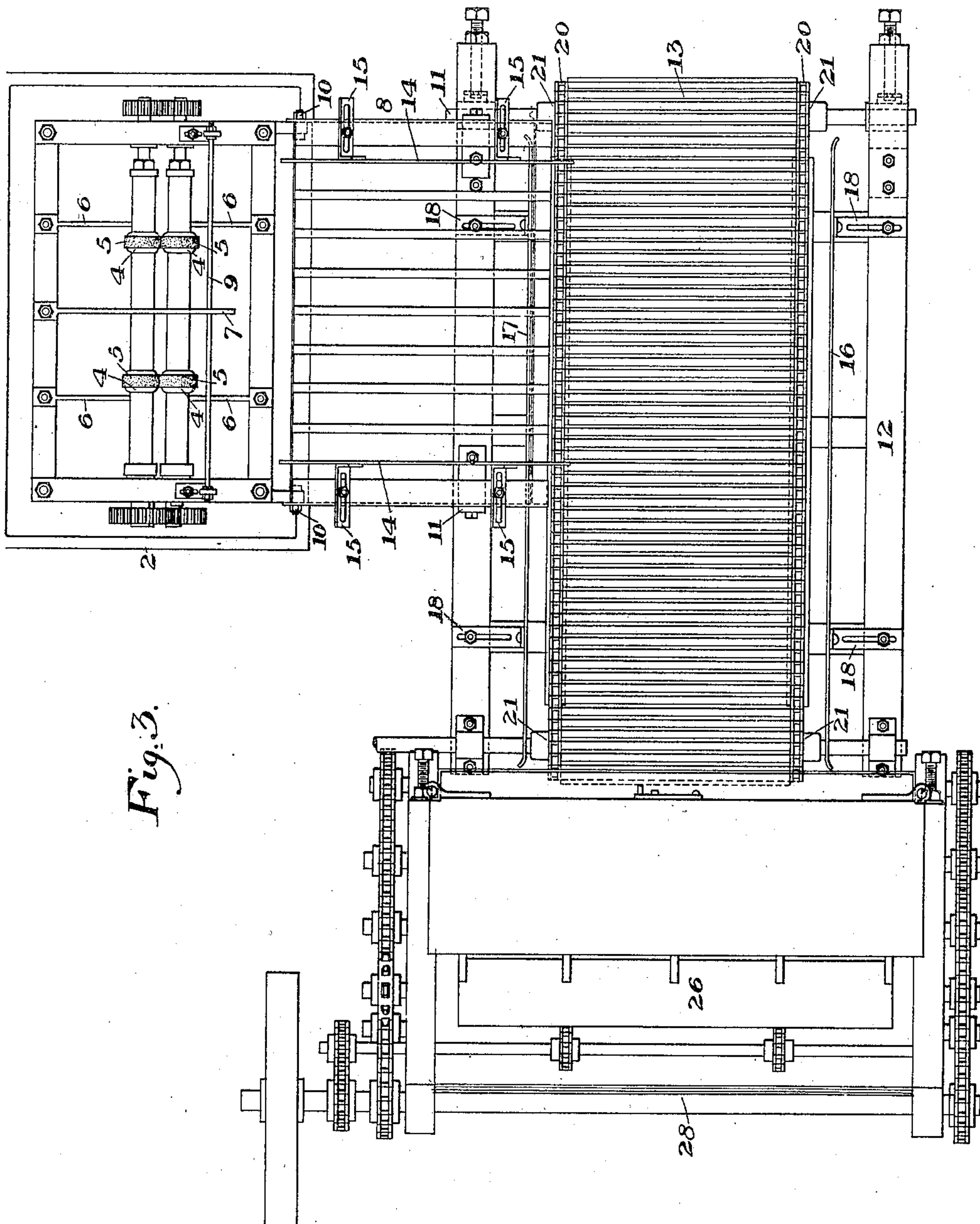
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3 SHEETS—SHEET 3.



WITNESSES

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# UNITED STATES PATENT OFFICE.

ERNEST L. CRONEMEYER, OF MONESSEN, PENNSYLVANIA, ASSIGNOR TO  
AMERICAN SHEET & TIN PLATE COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

## BRANNER-FEEDING MECHANISM.

No. 832,537.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed June 1, 1905. Serial No. 263,296.

*To all whom it may concern:*

Be it known that I, ERNEST L. CRONEMEYER, of Monessen, Westmoreland county, Pennsylvania, have invented a new and useful Branner-Feeding Mechanism, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation, partly broken away, showing my improved feeding mechanism applied to a tinning-pot. Fig. 2 is a front elevation, partly in section; and Fig. 3 is a top plan view.

My invention relates to the automatic feeding of sheets from a tinning or coating pot into a branner of the type where the sheets pass between rolls into and through the branner.

The object of the invention is to provide automatic feed mechanism which will properly square up the sheets and feed them in proper position into the nip of the feed-in rolls of the branner.

In the drawings, 2 represents a tinning-pot having upper tinning-rolls 3 3, above which are mounted the catcher or feed-out rolls 4. These rolls 4 are preferably provided with separated disks 5 5, of soft material, intermediate guides 6 being provided to guide the rising sheet into the nip of the catching-rolls. Above the catcher-rolls is a deflector 7, which curves over the sheets, so that they drop into the inclined chute 8. An adjustable rest-bar 9 is preferably provided below the deflector to prevent bending or kinking of the sheets as they drop over. The chute 8 is preferably pivoted to the catcher-frame at 10, and its lower end is adjustably supported upon pins extending through uprights 11, secured to the frame 12 of the conveyer 13. The inclination of the chute may thus be adjusted. The chute is preferably provided with adjustable side guides 14, which are secured by the slotted brackets 15, secured to the base-frame of the chute. The chute sides may thus be adjusted toward or from each other for different widths of sheets.

At the opposite sides of the conveyer are provided side guides 16 and 17, of which the guide 16 is of sufficient height to insure the front ends of the sheet striking it as they

drop from the chute. The guides 16 and 17 are preferably adjustably secured by slotted brackets 18 to the frame of the conveyer, so that they may be adjusted toward or from each other for different lengths of sheets. These guides preferably extend the entire length of the conveyer, so as to hold the sheets in proper position when their front ends reach the feed-in rolls 19 of the branning-machine. I have shown the conveyer as of slatted form, with side sprocket-chains 20 moving over sprocket-wheel 21, which may be driven in any suitable manner. In the form shown the conveyer extends at right angles to the chute; but of course the branner may be so located that the conveyer is in line with the chute and feeds the sheets forward in the same line in which they slide down the chute.

To prevent the front end of the plate from dropping down between the conveyer and the feed-in rolls 19, I preferably employ a suitable intermediate support 22, which prevents dropping of the front end of the sheets as they approach the feed-in rolls. This intermediate support and the conveyer are preferably in a plane slightly below the nip of the rolls 19. The front end of the sheet fed forward, therefore, strikes the lower roll of the pair, which thus acts to square it up endwise as it enters the nip. This insures the feeding of the sheets in proper squared-up position into the branner.

In the particular form of branner shown successive pairs of rollers 23, 24, 25, and 26 are employed, arranged vertically above each other, with curved guides 27, which direct the sheets from the feed-in rolls into the lower pair of the vertical series. The branner is provided with a surrounding casing 28, which holds the bran or polishing medium, that may be filled in to any desirable height. The particular type of the branner forms no part of my present invention, which relates to the feeding mechanism for carrying the sheets into a branner of the roller type.

The advantages of my invention result from the simple automatic feed mechanism which squares up the successive sheets and feeds them forward into the rolls of the branner.

Many changes may be made in the form



and arrangement of the feed-out mechanism for the tinning-pot and the form of the branner without departing from my invention.

I claim—

5 1. In branner-feeding apparatus, the combination with a tinning-pot and a branner having feed-in rolls, of feed-out mechanism for the tinning-pot, an inclined chute having side guides and down which the plates slide, an  
10 endless conveyer receiving the sheets from the chute and arranged to feed them into the feed-in rolls of the branner, and adjustable side guides for said conveyer said guides being arranged to guide the sheets to the feed-in  
15 rolls of the branner in squared positions; substantially as described.

2. In branner-feeding apparatus, the combination with a tinning-pot and a branner having feed-in rolls, of an inclined chute lead-  
20 ing from the pot and having adjustable side guides, and an endless conveyer into which the chute delivers plates to carry them to the feed-in rolls, said conveyer also having opposite adjustable side guides arranged to guide  
25 the sheets to the feed-in rods of the branner in squared positions; substantially as described.

3. In branner-feeding apparatus, the combination with a tinning-pot, and feed-out  
30 rolls therefor, of a branner, feed-in rolls therefor, and a conveyer intermediate of the said feed-out and feed-in rolls, said conveyer having its plane of feed below the nip of the feed-in rolls; substantially as described.

35 4. In branner-feeding apparatus, the combination with a branner having feed-in rolls, of a tinning-pot having feed-out rolls, a curved guide above the feed-out rolls of the tinning-pot, an inclined chute into which the  
40 plates drop, said chute having side guides, a conveyer into which the sheets drop from the chute, said conveyer extending at an angle to the chute and having opposite side guides

to stop the sheet in proper position as it drops from the chute, said guides being adjustable 45 to and from each other and arranged to guide the sheets to the feed-in rolls of the branner in squared positions; substantially as described.

5. In branner-feeding mechanism, the combination with a branner having a pair of feed- 50 in rolls, of a conveyer arranged to convey the sheets to the said rolls, said conveyer being in a plane slightly below the nip of the rolls, so that the front end of the sheet as it is delivered by the conveyer strikes the lower roll 55 and is squared up before entering the rolls; substantially as described.

6. In branner-feeding mechanism, the combination with a branner having a pair of feed- 60 in rolls, of a sheet-conveyer for carrying the sheets to the said rolls, and an intermediate support between the end of the conveyer and the rolls, said support and the delivery end of the conveyer being in a plane below the nip 65 of the rolls, so that the sheets will strike the lower roll and be squared up thereby before entering said rolls; substantially as described.

7. In branner-feeding apparatus, the combination with a tinning-pot, and a branner 70 having feed-in rolls, of feed-out mechanism for the tinning-pot, an inclined chute onto which the sheets are delivered by the feed-out mechanism, a deflector for assisting such delivery, and an endless conveyer onto which 75 the sheets are delivered by the chute and which carries them to the feed-in rolls of the branner, said conveyer having side guides which also form stops for the front ends of the sheets as they are discharged on the conveyer from the chute; substantially as described. 80

In testimony whereof I have hereunto set my hand.

ERNEST L. CRONEMEYER.

Witnesses:

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G. C. KIMBALL.