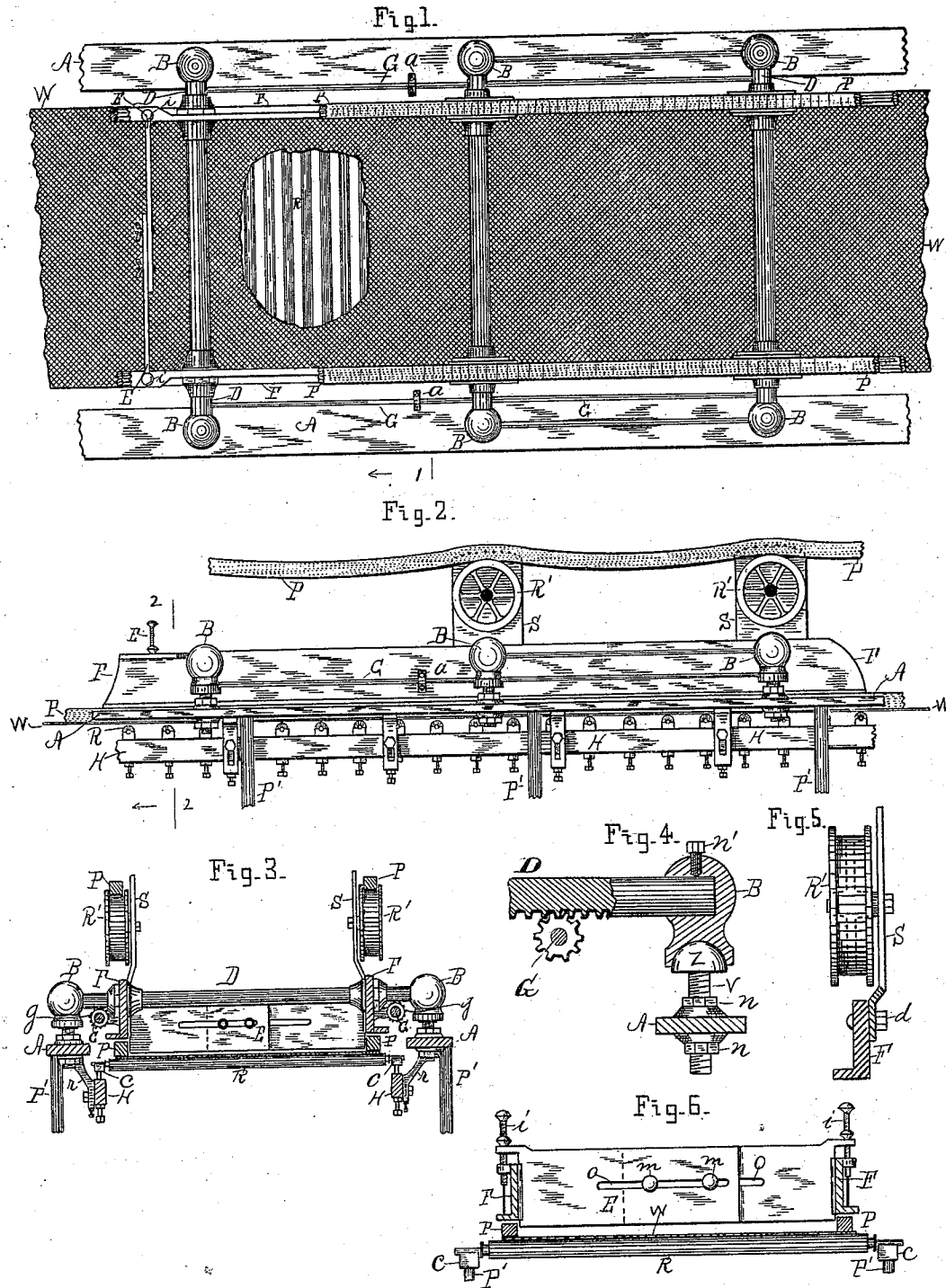


(No Model.)

A. ALDRICH.
PAPER MAKING MACHINE.

No. 502,266.

Patented Aug. 1, 1893.



Witnesses:

Ray Hutchins.
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Inventor:

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UNITED STATES PATENT OFFICE.

ALONZO ALDRICH, OF BELOIT, WISCONSIN.

PAPER-MAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 502,266, dated August 1, 1893.

Application filed January 23, 1893. Serial No. 459,431. (No model.)

To all whom it may concern:

Be it known that I, ALONZO ALDRICH, a citizen of the United States of America, residing at Beloit, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Paper-Making Machines, of which the following is a specification, reference being had therein to the accompanying drawings and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a plan view of a portion of a paper making machine showing the dekles and their supporting frame, and a portion of the endless wire cloth. Fig. 2 is a side elevation of that portion of the paper making machine shown in Fig. 1, omitting that portion of the machine below the tube roll frame. Fig. 3 is a cross sectional view of Fig. 1 taken on line 1 looking in the direction of the arrow. Fig. 4 is a side view of an outer end section of one of the dekle rails, and a section of a socketed cap secured thereon for resting on a ball head for forming a ball and socket joint or connection between the dekle rails and the frame of the machine below. Fig. 5 is a face view of one of the flanged pulleys for carrying the dekles, and a side view of a shield to which it is boxed, and a cross section of a dekle rail to which said shield is attached and Fig. 6 is a cross section of Fig. 2 taken on line 2 looking in the direction of the arrow, and above the frame supporting the tube rolls, and showing a side view of the adjustable slice.

This invention relates to certain improvements in paper making machines, and relates more particularly to the feature of the ball and socket supports of the dekle rails and their appendages, which improvements are fully set forth and explained in the following specification and claims.

Referring to the drawings F. F. represent the dekle rails having attached to them the upwardly extending shields S to which are boxed the flanged pulleys R for carrying the dekles P.

D is a series of cross shafts which pass through and support the dekle rails F. and are adapted to have said rails adjusted to or from each other on said rails to regulate the

distance apart of the dekles and thus fix the width of the paper to be made.

G is a shaft boxed in brackets secured to the outer sides of the dekle rails, and having secured thereon the pinions *g* which engage the teeth of a rack on the under side of the cross shafts D. By turning said shafts G in either direction by means of inserting a bar in the bar holes *a*, said dekle rails F may be moved to or from each other along on said cross shafts for the purpose set forth.

B. represent socket heads that are secured to each outer end of said dekle rail shafts D, which socket heads rest on the ball or head Z forming a ball and socket joint for connecting the dekle rails with the main frame A. of the machine. Said head Z has a depending screw threaded stem V that passes through frame A. and is adjustable therein by means of nuts *n n* on said stem so that the height of the dekle rails and their appendages may be readily adjusted. It is in this ball and socket joint that the principal novelty in this invention consists. Heretofore it has been usual in machines of this character to secure the outer ends of the dekle cross shafts D rigidly to the machine frame A. which necessitates the unbolting and disconnecting of the boxes holding said shafts from the frame whenever it became necessary to elevate or remove the dekle frame, which is necessary for many purposes. By means of such ball and socket joint and connection the dekle rails and their appendages may be lifted off at once without having to unbolt or detach any of the parts.

P' represents the pillars or supports of the frame A., their lower ends being omitted as their lower ends or the parts below the tube rolls not being necessary to be shown in this invention.

H are the rails for supporting the tube rolls R on which travels the endless wire cloth W, and *r* are brackets that connect said rails with the main frame A.

E is the slice arranged to stand in grooves at each end between the dekle rails F and adapted to be vertically adjusted by means of the screw rods *i*, and adjusted as to length by reason of being made in two parts and con-

nected by bolts *m* passing through slots *o* as shown particularly in Fig. 5.

Having thus described my invention, what I claim as new, and desire to secure by Letters
5 Patent, is as follows, to wit:

1. In a paper making machine the combination of the dekle rails, the cross shafts supporting said dekle rails and having sockets on their ends, and heads for supporting said sockets and cross shafts substantially as and for
10 the purpose set forth.

2. In a paper making machine the combination of the cross shafts *D* having sockets *B* on their ends, dekle rails *F* supported by said cross shafts, and the ball supports fitting said
15 sockets, substantially as and for the purpose set forth.

ALONZO ALDRICH.

Witnesses:

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