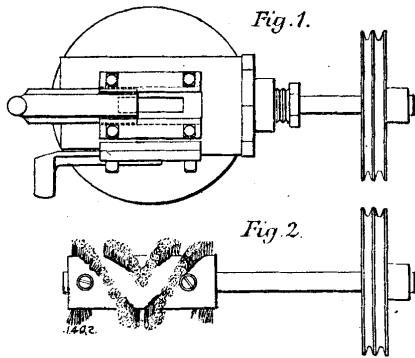


from the oil well to the interior. These holes are tangentially drilled into the interior of the tube in the direction of rotation of the spindle so as to allow the oil to rise lifted by the pressure consequent on rotation of the spindle. The top part of the holder is provided with a nick, slit or slot to allow the oil to trickle down from the flexible tube as it overflows, into a cup attached to the holder to receive it. On the lower end of the flexible tube is placed a loose spring hoop or ring to prevent it from being drawn out of place. (Accepted October 24, 1900.)

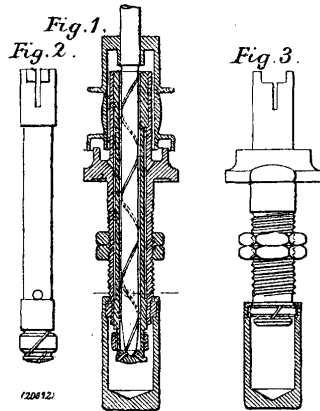
TEXTILE MACHINERY.

1402. J. S. Smith, Bacup, Lancs. Sizing Machines. [5 Figs.] January 23, 1900.—A regulator feeding device for the paste or size used in ball sizing machines, according to this invention comprises a double spiral bristle or other scraper rotating



within a casing to which the paste or size is led by a pipe, the flow of the said paste or size from the casing being regulated by means of a shutter sliding over an orifice on the side thereof which is opposite to the feeding pipe. (Accepted October 24, 1900.)

20,872. F. King, Salford, and W. Moore, Manchester. Flexible Spindles. [4 Figs.] October 18, 1899.—In flexible spindles for spinning and twisting machinery, to improve the lubrication thereof apparatus is provided which



comprises the spindle, the holder, a flexible tube in the holder, and a loose oil well attached or connected thereto. The flexible tube has a chamber on the outside forming an oil reservoir or receiver, and in the foot there are formed holes to admit the oil