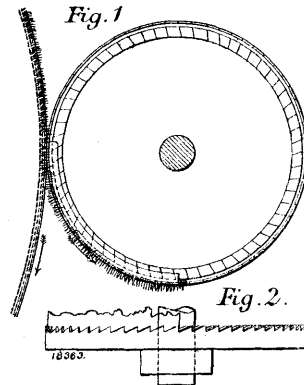
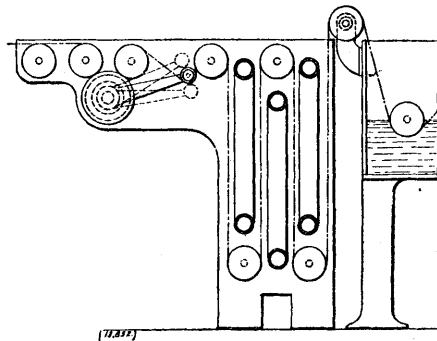


clean noil. The nip consists of a horizontal circular nip plate revolving close to the comb so that its edge extends beneath the fringe or fibres projecting therefrom. Radial or approximately radial serrations are formed in the edge of the face of this plate and a concentric annular groove is made in the plate cutting through these serrations. A stationary curved press bar held down by spring pressure is formed and mounted in such a way



that the fringe or fibre passing beneath is gripped between the press bar and groove and is drawn out. The serrations are of such a form that the fibres drawn out are carried round with the nip plate until they pass from beneath the press bar, and a plough piece (or pieces) or its equivalent is provided to turn the fibres off the plate and deliver them in any convenient way. (Accepted September 12, 1900.)

**13,852. W. H. Eastwood, Manchester. Improvements in Tension-Regulating Apparatus, applicable to Regulating the Supply of Warps or Yarns or Threads in other Forms to Treatment with or the Action of Size or Filling or Dyes or other Liquids or Materials or Gases or Vapours or Winding Warps or Yarns or Threads in Machines or Apparatus in which they are Subjected to such Treatment or Action or Regulating the Supply of Woven Fabrics or Paper or other Materials in the Form of Bands, Ropes or Continuous Sheets to Treatment with or the Action of Size or Filling or Dyes or other Liquids or Materials or Gases or Vapours or to Beeting, Calendering or other Treatment Wholly or Partially Mechanical or of other kinds.** [6 Figs.] August 2, 1900.—To “enable a more uniform treatment of the materials operated upon than has hitherto been



obtained, and obviate the subjection of the materials operated upon to variable or other injurious strains, and enable the tension to which materials are subjected to be made as small as may be desirable, especially in cases in which it is desirable to have the materials operated upon in an open and absorbent condition, as, for example, in the sizing of warps and the filling of woven fabrics, and the printing of woven fabrics.” Tension regulating apparatus, according to this invention, may comprise “the combination of a roller, bar, or equivalent apparatus which is arranged to be moved by and moved in opposition to the force or pressure exerted upon it by the material being operated upon, and is arranged to control the action of a friction-driving mechanism or brake or other suitable apparatus by which variations in the transmission of motion or in the speed at which a roller or other device and other devices is or are allowed to move may be brought about or permitted.” The invention is stated to be applicable to “warp-sizing machines for sizing warps,” &c. (Accepted September 12, 1900.)

#### TEXTILE MACHINERY.

**13,363. J. Cooper, Bradford, Yorks. Combing Machine.** [6 Figs.] September 12, 1899.—In Platt's and other machinery for combing wool or hair and similar fibrous material, in order to obtain a proportion of superior noil after one or more slivers of “top” have been drawn off, a nip is used which is adapted to engage the short fringe of noil left projecting, and thereby draw off a good proportion of the longer fibres of this in the form of a