The Detection of Dyes.

So many accidents have occurred from the use of stockings dyed with coralline that M. Tardieu, who has investigated the matter, gives the following methods of detecting the several dyes now employed. Garancine red is not altered by solutions containing three to four per cent of hydrochloric acid or of ammonia. The liquids are not sensibly colored. The color is the most resisting of organic reds. Cochineal red plunged into solution of ammonia changes to violet, and communicates a very bright violet tint to the liquid. Murexide red bleaches rapidly in simple contact with a solution of citric acid. Carthamus red is completely decolorized by a short ebullition in a one half per cent solution of soap. Aniline red is decolorized very rapidly by contact with ammonia, but the color is restored either by the addition of an acid or by the evaporation of the alkali. Marsh's apparatus reveals traces of arsenic. Coralline red does not dissolve in cold water. It cedes a little of the color to boiling water, but is decolorized much more rapidly and completely by boiling alcohol. Alkaline liquids do not turn the color; acids precipitate the coloring-matter in yellowish To recognize a tissue dyed red by coralline, it is sufficient, according to M. Tardieu, to detach several fibres, cut them into small fragments, and submit them for several minutes to the action of a small quantity of boiling rectified spirit. The alcoholic liquid assumes a bright red, and the tissue, almost completely decolorized, assumes an apricot-yellow tint. The addition of ammonia or caustic potash to the red alcoholic liquid brightens the color, and distinguishes definitely between coralline and aniline red.