

well dried, the sample is dipped for about half its length, into common oil of vitriol, and kept there for about half a minute to two minutes, according to the strength of the tissue. The immersed portion is seen to become transparent. It is now placed in water which dissolves out the gummy mass produced from the cotton; this solution may be expedited by a gentle rubbing of the fingers; but since it is not easy to remove the whole of the acid by repeated washing in fresh water, it is advisable to immerse the sample for a few minutes in spirits of hartshorn, (purified potash or soda have just the same effect,) and then to wash it again with water. After it has been freed from the greater portion of the moisture by gentle pressure between blotting paper, it is dried. If it contained cotton, the cotton threads are found to be wanting in that portion which was immersed in the acid; and by counting the threads of the two portions of the sample, its quantity may be very readily estimated.

If the sample has been allowed to remain too long in sulphuric acid, the linen threads likewise become brittle, or even eaten away; if it were not left a sufficient time in it, only a portion of the cotton threads have been removed; to make this sample useful, it must be washed, dried, and the immersion in the acid repeated. When the sample under examination consists of pure linen, the portion immersed in the acid likewise becomes transparent, but more slowly and in a uniform manner; whereas, in the mixed textures, the cotton threads are already perfectly transparent, while the linen threads still continue dark and opaque. The sulphuric acid acts upon the flax threads of pure linen, and the sample is even somewhat transparent after drying, as far as the acid acted upon it, but all the threads in the sample can be seen in their whole course.

Cotton stuffs containing no linen dissolve quickly and entirely in the acid; or if left but one instant in it, become so brittle and gummy that no one will fail to recognise it as cotton when treated in the above manner.

TO PREVENT THE SMOKING OF A LAMP.

Smoke is the result of imperfect combustion. Combustion is always imperfect where more matter is decomposed than is consumed. This is evident from the fact that smoke may be collected and burned. To prevent the smoking of a lamp, therefore, it is only necessary to prevent the decomposition of too much oil. This is done by lowering the wick till the blaze terminates without smoke. A little care in trimming a lamp will save expense, (an unnecessary waste of oil,) prevent the blackening of the ceiling, and the offensive and unwholesome smell occasioned by the smoke of a lamp.

The Ladies.

In another portion of this sheet a promise is made that in each number some useful, interesting, and appropriate pieces will be carefully prepared or selected for our "fair readers." In performing this promise we beg to crave the indulgence of the ladies, and trust that those who are blessed with a literary taste will aid us in storing the two or three pages in each number devoted to their especial benefit, with a variety of useful hints, appropriate to the style and character of our work.

The ladies in the United States frequently favor the press with highly interesting original pieces, among which are practical hints on the management of household affairs; and in the city of Lowell a very talented weekly sheet has been published for many years, under the editorial management of factory girls. The literary acquirements of the young women in the cities of the Eastern States, are deserving of the highest commendation, and to our mind the Canadian press might do much in promoting a similar state of things in this country. Unless we have intelligent young women, we need not expect in future years to have sage mothers, nor will great progress be made in those arts and sciences that elevate the condition of man. The influence of the mother over the child is all-powerful, and hence the necessity of a greater degree of pains being taken in the education of young ladies. The style and character of the original and selected articles in this department of our paper, will have a direct tendency to improve the tastes of the ladies, and in order to adapt them to the rank and condition of the largest class of readers, we shall be obliged to give an almost endless variety of reading, at the same time keeping in mind its adaptation to our columns.

The following remarks, from the *New York Farmer and Mechanic*, written by an experienced female, will be found seasonable by many of our farmer's wives and daughters:—

DIRECTIONS FOR MAKING A HANDSOME CARPET.

SIR,—In your paper of April 1st I noticed a letter from "Roella," asking information about colouring, &c.; and the thought just entered