BLOTTING PAPER.

Professor Lauboeck is going to produce in the Journal Technologique du Musee de l' Industrie de Vienne an essay upon the power of absorption of various blotting or unsized papers.

Our contemporary, the Revue de la Papeterie, gives some interesting particulars about the experiments made during this research. Professor Lauboeck measures the power of absorption by the height to which water rises in bands of paper of 15 millimetres in length, which he suspends by small metal pliers.

The experiments were made at a temperature of about 65° Fahr. for the water and a relative temperature of 60° Fahr. for the air.

The samples of paper submitted to examination were made of pure cotton material and their thickness varied between .09 and .6 of a millimetre. The results of the experiments give the heights to which the water ascends after 1, 5, 10, 15, 20, 25 and 30 minutes' intervals of immersion. The average results are 40 millimetres for yellow blotting paper of German make and 72.5 millimetres for white blotting paper of English make, after an exposure of ten minutes.

The following are the main conclusions of Professor Lauboeck's experiments;

1. The height to which water rises is independent of the thickness of the paper.

2. The weight of the paper has no influence upon its power of absorption.

3. The power of absorption is in inverse ratio to the quantity of ash left by the paper after incineration.

4. The power of absorption is greater in the strips of paper cut parallel to the motion of the machine than in those cut transversely.

These deductions are important to blotting makers and are also full of interest generally. One of the great features of English blottings is its bulk. We are supposed to judge of blotting paper to a slight extent by its bulking capacity. The popular idea has been that the thicker a sheet of blotting paper is the more water or ink it will absorb. Consequently blottings have been made as thick as possible without increasing their weight. Our readers will see that Professor Lauboeck's first conclusion is contrary to any advantage to be gained by the paper being bulky. If this be so—and we make no remark either for or against the probability of this view being quite correct—we think that blotting makers will be very pleased. No doubt the great anxiety to make a bulky blotting seriously interferes with the strength of the sheet. At present many good blotting papers crumble and fray to pieces upon the least friction. If these papers were submitted to more pressure in manufacture they would last longer, and therefore be more economical.

The second conclusion is also of great consequence. Some people won't use a blotting paper unless it is of a certain thickness or bulk. Professor Lauboeck here again tells us that this is of no importance whatever. In fact, Nos. 1 and 2 conclusions are practically the same.

The third deduction, relative to the amount of mineral matter, or ash, in blotting paper, is of course quite easy of belief, as mineral matter chokes up the pores of the paper, and would, therefore, not only add to the ash of the sheet but seriously interfere with its absorptive properties. The essential features of blotting paper is to present a mass of fibre to the fluid, which will be immediately absorbed by it.

The last conclusion of the learned professor once more impresses upon us the fact that the tension of the paper machine is sure to be present in the sheet of paper made. We should say that the tension has the effect of drawing the fibres lengthways, or compelling the fibres to follow the course of the sheet according to their length. We gave some tables some time ago which proved that the strength of a sheet of sized paper was greater in its width than in its length, owing to the pull of the machine. In blotting papers the absortive property runs in the other direction, and Professor Lauboeck mentions this, but unfortunately we have no figures relative to the comparison. This would seem to point out that the fibres are pulled by the machine, and the sheet of good blotting paper consists practically of fibres placed longitudinally, thereby enabling them to absorb more fluid by presenting a larger surface for capilliary attraction. Whether our blotting paper makers will agree with Professor Lauboeck's conclusions we cannot say, but his researches are interesting and well worthy of close and attentive consideration. — Paper Making, London.