

GENERAL INTELLIGENCE.

EXPERIMENTS ON THE EXPLOSION OF STEAM BOILERS.

In the year 1865 the Polytechnic Institute of Paris... The experiments were conducted in a boiler... The results showed that the explosion was caused by the sudden liberation of steam...

The first vessel of full of water in these experiments... The committee, commenting on the experiment, say: "It is interesting to note that the explosion was caused by the sudden liberation of steam..."

The fact which is pointed in italics above, is recommended for study to those who have a superstitious notion that a rise of pressure follows the act of opening the safety valve... The danger, it seems, comes solely from the sudden formation of a heavy foam...

The steam in the boiler not being higher than two atmospheres, the following experiment was made... The level of the water was reduced until it stood just below the lowest gauge cock...

After some trials of a prismatic glass water-gauge, which proved too frail, the committee's report describes the glass water-tube gauge used, which will be recognized as substantially what is in use to-day for indicating the water level... The gauge used was 9 1/2 inches in length, the upper part being so near the top of the boiler as only to be affected by the foaming in extreme cases...

The committee experimented in this connection with some apparatus devised by Mr. Thomas Ewbank... The experiment was made in a boiler, and the results were as follows: "When an opening is made in a boiler, of which the sides are heated, will the effect be to diminish the elasticity of the steam within, by permitting its escape or will the water thrown upon the

be heated, the paper processes a good natural sizing, which is a great advantage in paper intended for... It is only by making use of a cold maceration that this quality can be obtained without expense...

Mr. Aron, in his essay on the explosions of steam boilers, states that MM. Fabron and Reyat, at Lyons, found, on opening a boiler, that the safety valve, showing an increase of pressure within...

Thus it seems that there is no foundation for the belief that there is a rise of pressure in consequence of making an opening in a steam boiler, even though there may be hot plates upon which the water is thrown by reason of the sudden liberation from pressure upon its surface...

THE MANUFACTURE OF STRAW PAPER IN FRANCE.

(The Paper Makers' Circular.) The two kinds of straw paper that are manufactured in the Dauphiné have no resemblance with those of southern France, or of the Limousin... The straw is not cut, but laid straight and in its full length, pressed carefully together and bound in bundles of about ten kilogrammes each...

It is a great advantage in paper intended for... It is only by making use of a cold maceration that this quality can be obtained without expense... The paper-makers of Lyons, who work with the new boiler, have adopted a mixed fibre-stone, that is to say, their paper consists of a mixture of half of macerated straw, and half of stone, boiled in the boiler...

INDIAN TEA IN AMERICA.

The news comes from the other side that a syndicate has been formed in Calcutta, for the introduction of Indian tea into this country and Canada... The Indian tea grows in the hills of the Himalayas, and is of a fine quality, and is well adapted for the climate of America...

WHAT MACHINERY HAS DONE FOR AGRICULTURE.

The various agricultural shows held last autumn in different parts of the country cannot fail to impress all who visited them with the extraordinary developments made in recent years in mechanical appliances for agriculture... The farmer has now, with the help of machinery, a hundred men with greater ease than at one time he could feed himself alone...

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NEW BRUNSWICK RAILWAY COMPANY.

Letters patent have been issued incorporating Stephen, Montreal, Hon Isaac Burpee, St John, J. R. Burpee, Fredericton, J. Thorne, New York, J. Kennedy, T. J. Baker, H. O. Northey, Lockport, New York, under the name of the "New Brunswick Land and Lumber Company," with a capital of \$1,000,000... They are granted the power of purchasing or acquiring, settling, improving and cultivating lands and hereditaments in Canada...

OLD FOGYISM IN THE HARDWARE TRADE.

We find in the hardware trade two kinds of dealers—one is a leaguer behind the times, the other is up with the times... The former thinks it is better to sell an old style article, if he can make a little more profit on it, than to introduce the latest styles... The latter dealer, on the other hand, is up with the times, and he is not content with selling the latest styles, but he is also selling the old styles...