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Archives Center - NMAH

Leo Baekeland Diary Volume 18, 1915

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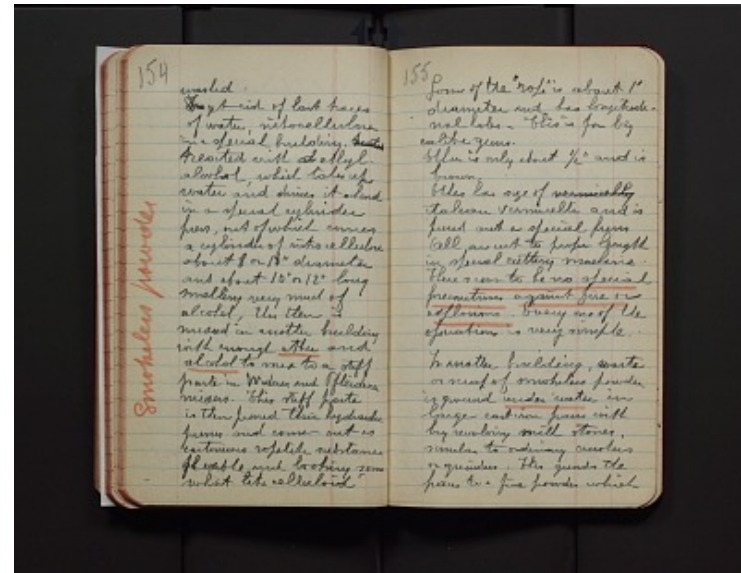
[Note written vertically in red in left hand margin: Smokeless powder]
 washed.
 to get rid of last traces of water nitrocellulose in a special building.
~~[[?]]~~ treated with diethyl-alcohol which
 takes up water and dries it ahead in a special cylinder press, out of
 which comes a cylinder of nitro cellulose about 8 or 10" diameter and
 about 10" or 12" long smelling very much of alcohol this then is mixed in
 another building with enough ether and alcohol to mix to a stiff paste in Widerer's and
 Pfeleiderer mixers. This stiff paste is then pressed thru hydraulic presses
 and comes out as continuous ropelike substance flexible and looking
 somewhat like celluloid

[[end page]]

[[start page]]

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Some of the "rope" is about 1" diameter and has longitudinal holes. This
 is for big calibre guns. Other is only about 1/2" and is brown.
 Other has size of ~~[[?]]~~ vermicelli ~~[[?]]~~ italian
 vermicelli and is pressed out a special press. All are cut to proper length
 in special cutting machine. There seem to be no
precautions against fire or explosions. Every one of the
 operations is very simple.
 In another building waste or scrap of smokeless powder is ground under water
in large cast iron presses with
 big revolving mill stones similar to ordinary crushers or grinders. This
 grinds the pieces to a fine powder which



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