



**Smithsonian Institution**

*Archives Center - NMAH*

## **Leo Baekeland Diary Volume 4, 1909**

Extracted on Sep-13-2014 10:42:07

**The Smithsonian Institution continues to research information on its collections and is thankful to the digital volunteers who helped to transcribe this material. We look forward to using the work they created to further enrich our collections.**

- Before you incorporate this material into a for-profit publication or online project, please contact the Archives Center - NMAH;
- Please leave source and copyright information as is and avoid obscuring these details in the material;
- Do not post this document as a whole to a social media site, such as a blog, Facebook page, Twitter feed, etc;
- Researchers: if you deposit this material, please let Archives Center - NMAH know where the material is deposited so that we can guide the community members to it.

Contact the Smithsonian Institution for the current status of this project and related material. To see this project online - or other transcription projects - please visit [here](#).

4 Apr 7 1909  
Aug 20 1909

B

Record



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

AC 0005  
Diary 4

[[end page]]  
[[start page]]

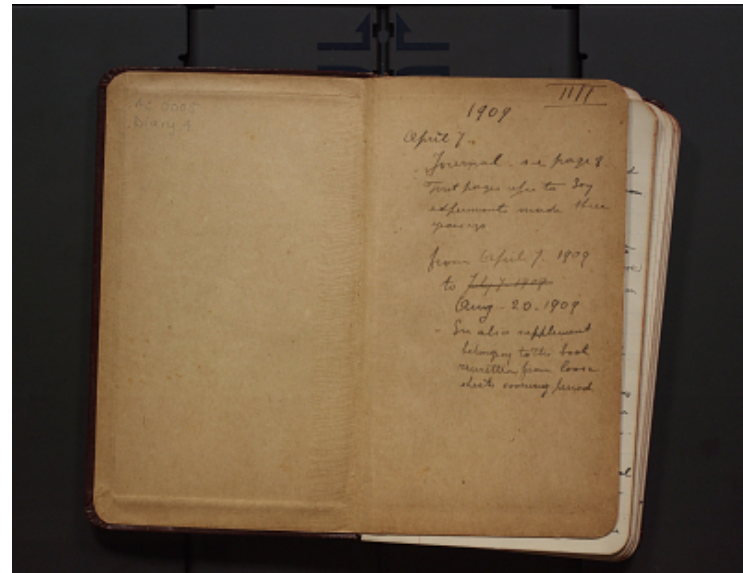
IIII

1909

April 7

Journal see page 8 First pages refer to Soy experiments made three years ago

From April 7. 1909 to ~~July 7. 1909~~ Aug. 20. 1909  
See also supplement belonging to this book rewritten from loose sheets covering period



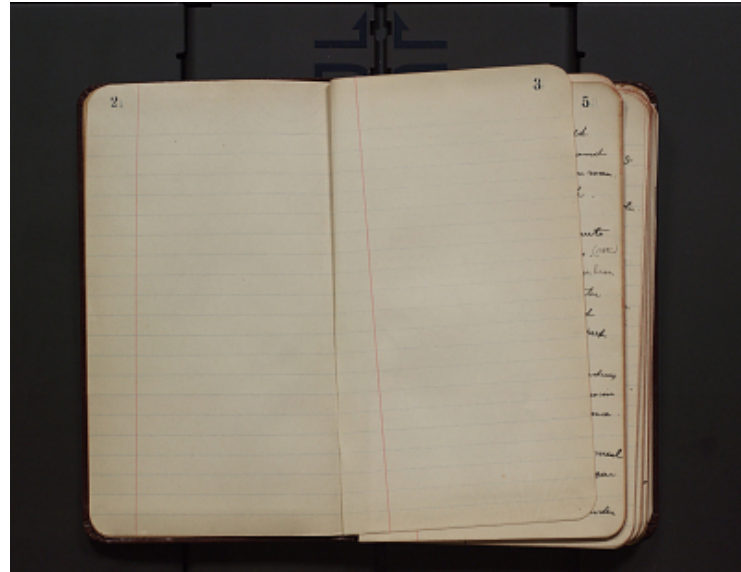
Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[blank page]]  
[[end page]]  
[[start page]]  
[[preprinted]] 1 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 2 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 3 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

4

5

5

5

notes in this book

1) Ground soy (green) boiled. then add after working - pamesan cheese and keep in open glass bottle in warm room.

X

2) Ground soy. roasted. boiled with salted yeast.

Program for Soy Bean Research X

3) Ground soy roasted digested in autoclave with salt yeast. at 3 Atm. (135°C) for 30 minute

X Ditto. plain bean

X " ground green bean

x neg.

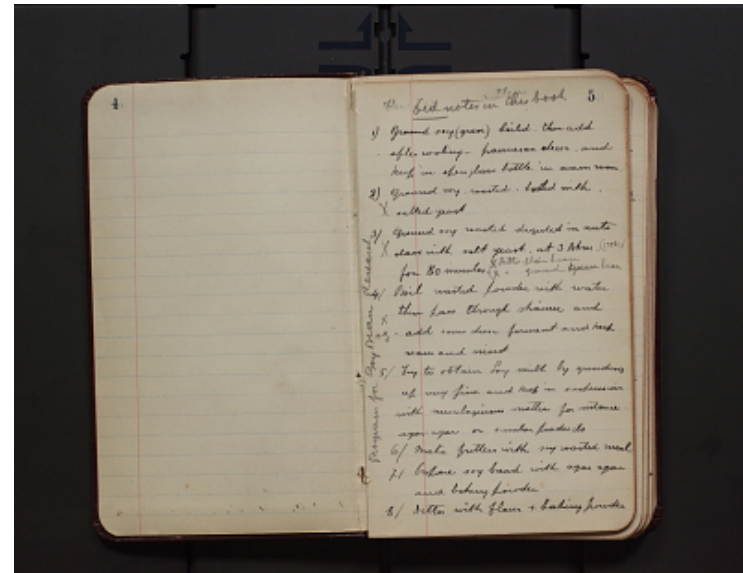
4) Boil roasted powder with water then pass through strainer and add some cheese ferment and keep warm and moist.

5) Try to obtain Soy milk by grinding up very fine and keep in suspension with mucilaginous matter for instance. agar agar or similar products

6) make fritters with soy roasted meal

7) Prepare soy bread with agar agar and baking powder

8) Ditto with flour + baking powder



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 6 [[/preprinted]]

9/ Ditto with roasted soy meal and custard powder

10/ Extract oil from green ground soy (CCl<sub>4</sub> or pressure) and try to make a peptonized extract from residue

1) with pepsin

2) " papain

3) " yeast

It may be well to cook the residue before peptonizing so as to soften and drive off any volatile matters left by CCl<sub>4</sub> bake liquid afterwards filter and evaporate either on water bath or in vacuo.

Modify taste by [[?]] leaves small addition of cheese etc.

11) Digest 3 Atm. (135°C) soy beans in digester with water

[[end page]]

[[start page]]

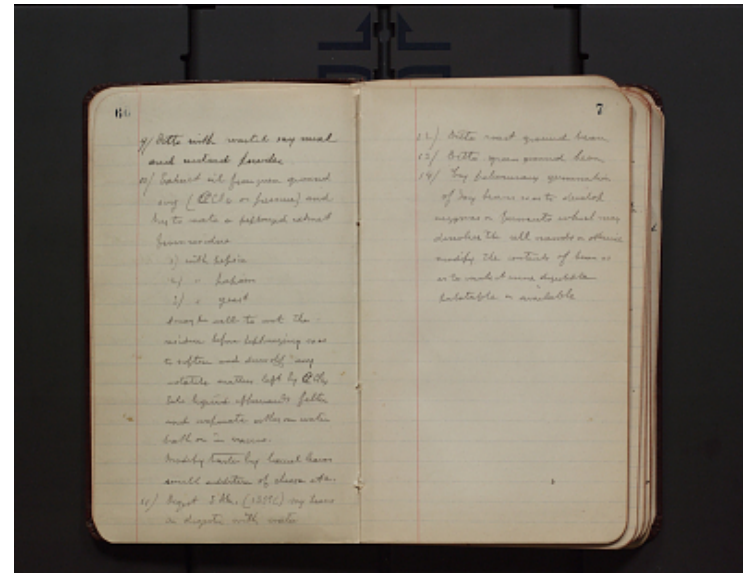
[[preprinted]] 7 [[/preprinted]]

12) Ditto roast ground bean

13) Ditto green ground bean

14) by preliminary germination of Soy beans so as to develop enzymes or ferments which may dissolve the cell wands or otherwise modify the contents of bean so as to make it more digestible palatable or amilable

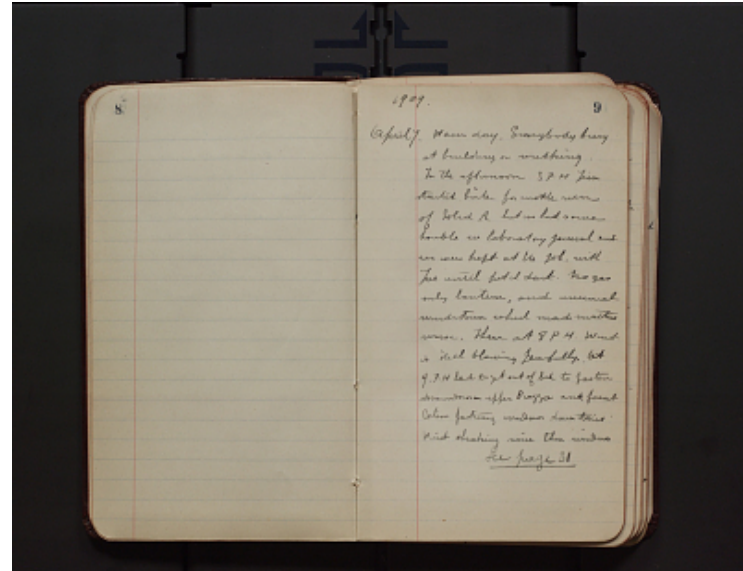
[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 8 [[/preprinted]]  
[[end page]]  
[[start page]]

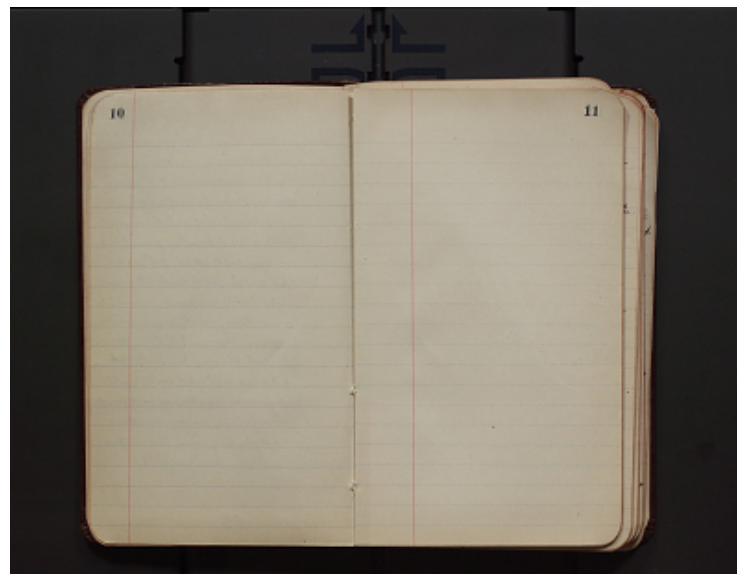
[[preprinted]] 9 [[/preprinted]]  
[[margin]] 1909 April 7 [[/margin]]  
Warm day. Everybody busy at building or wrecking.  
In the afternoon 3 P.M. Jim started boiler for another run of Solid A but we had some trouble in laboratory journal but we were kept at the job with Joe until pitch dark. No gas only lantern, and unusual windstorm which made matters worse. Then at 8 P.M. wind is still blowing fearfully. At 9 P.M. had to get out of bed to fasten stormwindows on upper Piazza and found Celina fastening windows downstairs. Wind shreaking noise noise thru windows  
See page 31



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

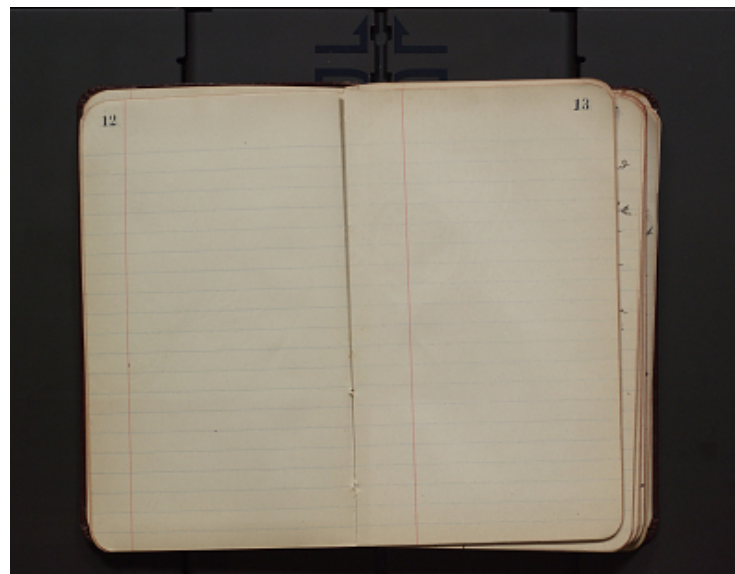


[[preprinted]] 10 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 11 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 12 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 13 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 14 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 15 [[/preprinted]]



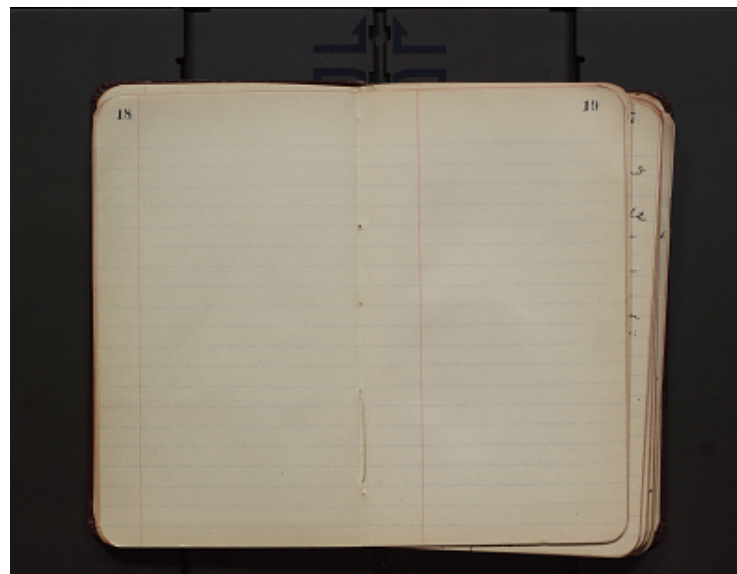
Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 16 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 17 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 18 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 19 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 20 [[/preprinted]]

May 23/1907

I ~~finally~~ ground in sausage grinder sample of roasted soy bean (soaked first in salted water) incompletely ~~deconticated?~~ by hand. I was unable to obtain desired fineness and a better grinding contrivance ought to be used. I ground some further in a porcelain mortar and obtained some more homogeneity. All these ground materials have been stored in small bottles for future observation.

I notice that they have a palatable taste.

That boiled with water they give a sort of brown soup quite palatable which filtered lets pass a light brown liquid of good taste and which an addition of water

[[end page]]

[[start page]]

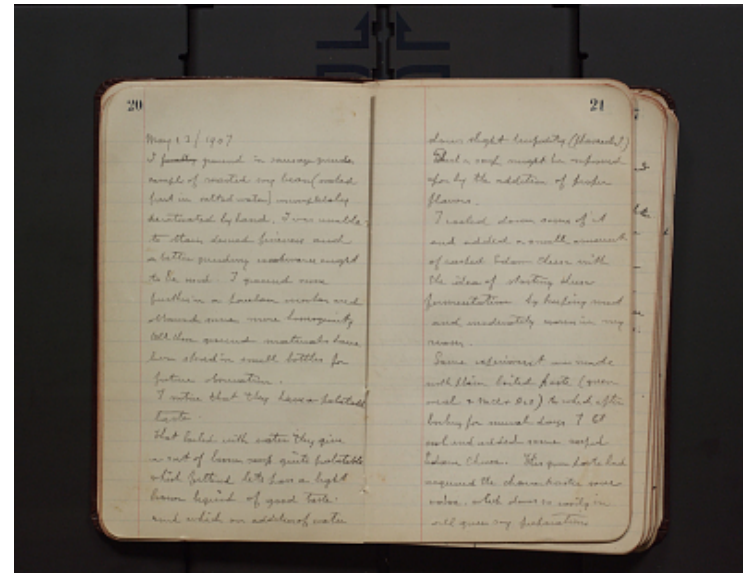
[[preprinted]] 21 [[/preprinted]]

shows slight turbidity (phaseolin?) Such a soup might be improved upon by the addition of proper flavour.

I cooled down some of it and added a small amount of rasped Edam Cheese with the idea of starting cheese fermentation by keeping moist and moderately warm in my room.

Same experiment was made with plain boiled paste (green meal + NuCl + H<sub>2</sub>O) to which after boiling for several days I let cool and added some rasped Edam Cheese. This green paste had acquired the characteristic sour odor which shows so easily in all green soy preparations

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

22  
May 24. 1000 c.c. ordinary soy beans weight 715 grams.

1 hectoliter = 71 1/2 kilos

and one quart (450 cc) should thus weight 320 grams

I.S. I took some soy beans just as they are and digested them in digester with water in a jam bottle.

Kept temperature at 135C = 3 Atm. for about one hour. The next day the beans had retained their shape but were very soft and ^ floating in a thick transparent liquid. I decided to heat 3 hours more at 130C with some salt. By mistake it went up to 146C for about 45 minutes. See below. May 25

2S I started extracting a larger amount of ground green soy with CCl<sub>4</sub> in Soxhlet - after two days. I took the dark green liquid containing fat and evaporated on water bath. I also dried the residue which has become much paler on account of loss of chlorophyl. (See further page 26)

end page

start page

23

May 25. By inadvertence the digester went up to 145C

1S I am afraid the mass will be rather brown. & also ~~one~~ two hours at 130C - 135C (I intend to repeat this experiment at lower temperature and longer digestion in presence of salt and in presence of salt and yeast.)

On opening found the beans had swollen much but had kept their shape and were very very soft. Brown thick liquid around of a burnt smell. Has to be repeated see 6S

3S Digestion of green soy with yeast + salt.

Green soy shredded 70 gr.

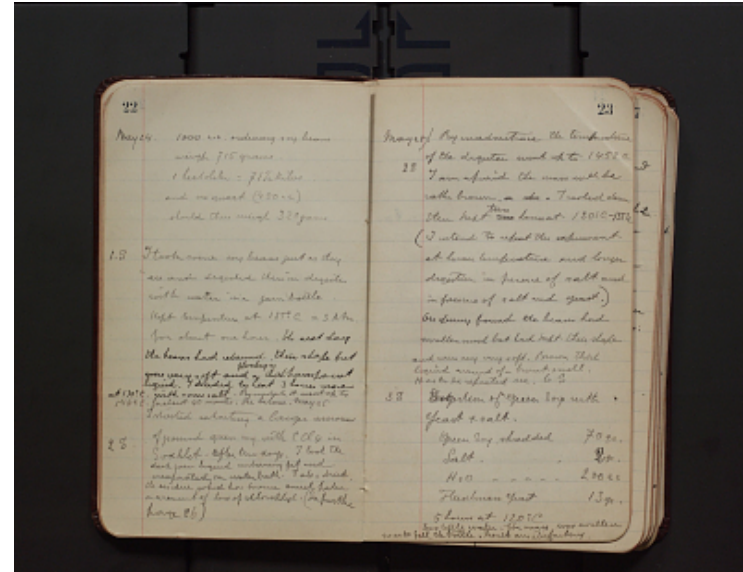
Salt 2 gr.

H<sub>2</sub>O - - - - 200 cc.

Fleischman Yeast 13 gr.

5 hours at 120C

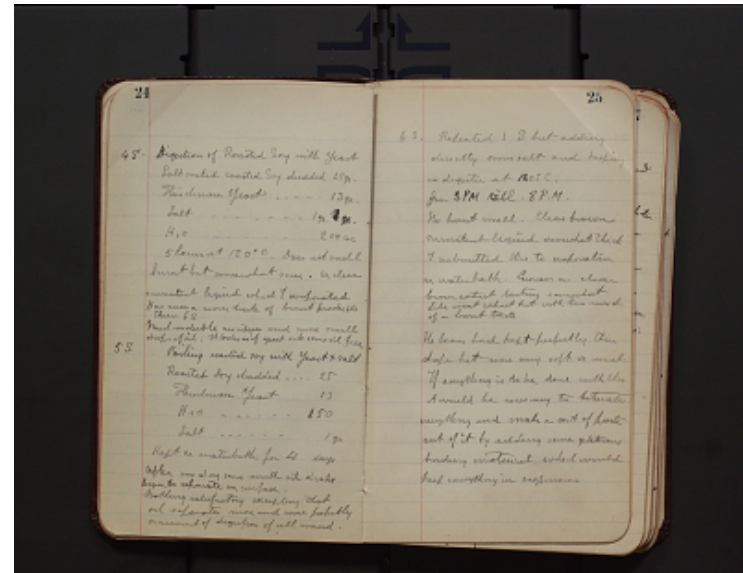
Too little water. The mass was swollen so as to fill the bottle. Result unsatisfactory.



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 24 [[/preprinted]]  
 [[margin]] 4S [[/margin]]  
 Digestion of Roasted Soy with yeast  
 Salt soaked roasted Soy shredded 25 gr.  
 Fleischman Yeast --- 13 gr.  
 Salt ----- 1 gr. ~~[[?]] gr~~  
 H2O ----- 200 cc  
 5 hours at 120C Does not smell burnt but somewhat sour. A clear ~~[[?]]~~  
 liquid which I evaporated. Has even a worse taste of burnt products  
 than 6S  
 Much insoluble residue and some small drops of oil. It looks as if yeast  
 sets some oil free.  
 [[margin]] 5S [[/margin]] Boiling roasted soy with yeast + salt  
 Roasted Soy shredded . . . . 25  
 Fleischman Yeast 13  
 H2O ----- 150  
 Salt ----- 1 gr  
 Kept on waterbath for 4 days  
 After one day some small oil drops begin to separate on surface.  
 Nothing satisfactory excepting that oil separates more and more  
 probably on account of digestion of cell ~~[[?]]~~.

[[end page]]  
 [[start page]]  
 [[preprinted]] 25 [[/preprinted]]  
 [[margin]] 6 S. [[/margin]]  
 Repeated 1 S but adding directly some salt and keeping in digester at  
 120C. from 3PM till 8 P.M. No burnt smell. Clear brown ~~[[?]]~~  
 somewhat thick I submitted this to evaporation in waterbath. Leaves a  
 clear brown extract tasting somewhat like meat extract but with too  
 much of a burnt taste  
 The beans had kept perfectly their shape but were very soft as usual. If  
 anything is to be done with this it would be necessary to ~~[[saturate?]]~~  
 everything and make a sort of paste out of it by adding some gelatinous  
 binding material which would keep everything in suspension.



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07



[[preprinted]] 26 [[/preprinted]]

[[margin]] May 28/ [[/margin]] Continuation of 2 S

I notice that all fat has not been extracted. I submitted the residue to slow dessicate and evaporated the dark green brownish fat solution. I finally obtained a dark green oil which does not ~~smell~~ any further longer ~~possess anymore CCl<sub>4</sub> smell~~ but has however a somewhat rancid smell similar to linseed oil. It looks as if this oil was non drying because samples kept for more than a month on a watch glass showed no signs of hardening. It looks to me as if this oil would be of better quality if expressed by mechanical means from the bean

[[end page]]

[[start page]]

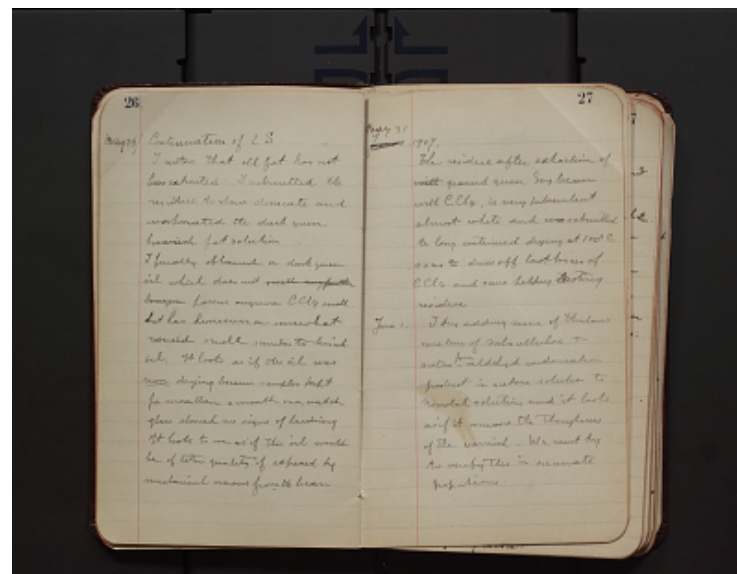
[[preprinted]] 27 [[/preprinted]]

[[margin]] ~~June 1~~ May 31, 1907

[[/margin]]

The residue after extraction of ~~with~~ ground green Soy bean with CCl<sub>4</sub> is very ~~almost~~ almost white and was submitted to long continued drying at 100 C so as to drive off last traces of CCl<sub>4</sub> and some peppery tasting residue

[[margin]] June 1. [[/margin]] I try adding some of Thurlows mixture of nitrocellulose + acetone-<sup>aldehyde</sup> form aldehyd condensation product in acetone solution to Novolak solution and it looks as if it increases the toughness of the varnish. We must try to verify this in accurate proportions.



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 28 [[/preprinted]]

June 2. (Sunday) Soy beans.  
I find that residue of extraction (C Cl<sub>4</sub>) has still a peppery after taste and as I have been heating this residue during several days at 100C it looks as if it will be difficult to get rid of it. Perhaps steam may drive it off.  
I ground the dry white powder in a mortar so as to give it uniform fineness.

Some of it was put to digest with dilute NaOH. about 0.2%. afterwards I filter through paper

it filters clear) and precipitate with dilute acetic acid.

[[end page]]

[[start page]]

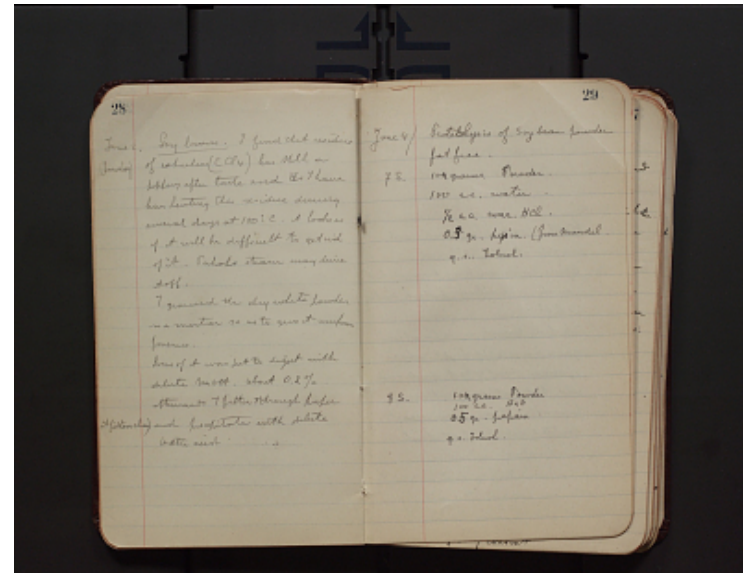
[[preprinted]] 29 [[/preprinted]]

June 4/ Protolysis of soy bean powder fat free.

7 S  
10 ~~grams~~ 0 ~~grams~~ Powder  
100 c.c. water  
1/2 cc. conc. HCl  
0.3 gr. pepsin (from Mandel.  
g.s.. Toluol

[[margin]] 8 S [[/margin]]

10 ~~grams~~ 0 ~~grams~~ Powder  
100 c.c. H<sub>2</sub>O  
0.5 gr. papain  
g.s. Toluol



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

30  
9 S  
~~0~~ gr. powder  
100 c.c. H<sub>2</sub>O  
2 gr. Fleischman Yeast  
9 s. Toluol  
~~[[?]]~~ kept three days and nights at 40 - 50C.

Give easily settling liquids but much undissolved protein matter is left. The clear liquid on evaporation gave residue of light color of some meat extract taste and odor but nothing much more favorable than plain yeast digested with NuCl at high temperatures.

[[end page]]

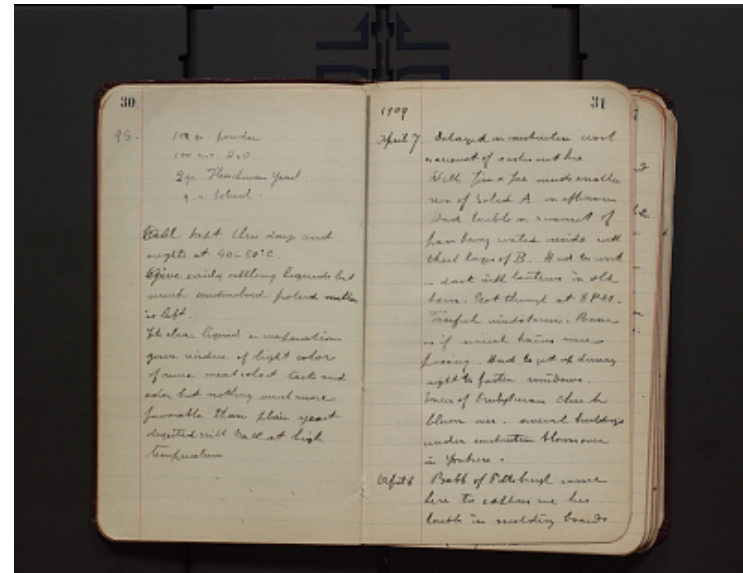
[[start page]]

31

1909

April 7 Delayed on construction work on account of sashes not here. With Jim & Joe made another run of Solid A in afternoon. Had trouble on account of pan being coated inside with thick layer of B. Had to work in dark with lanterns in old barn. Got through at 8 P.M. Fearful windstorm. Roar as if several trains were passing. Had to get up during night to fasten windows. Tower of Presbyterian Church blown over. several buildings under construction blown over in Yonkers.

April 8 Babb of Pittsburgh came here to explain me his troubles in molding boards



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 32 [[/preprinted]]  
with Bakelite. I gave him notes of Thurlow with additional letter of instruction from me (see correspondence) He says he got good results with the fracking Seems very enthusiastic remained here for lunch and left at 3 PM for Greystone Station.

[[margin]] April 9. [[/margin]] The morning meeting at Chemists Club of Am. Chem. Society. NY Section. I presided. Several papers. Main paper Bancroft very interesting and well delivered. Subject: Solarization. Afterwards went with Babb to University Club. Rather cold.

[[margin]] April 10. [[/margin]] Frames have arrived. In afternoon came Cohoe and Dr. Van der Linde his partner to talk about exploitation

[[end page]]

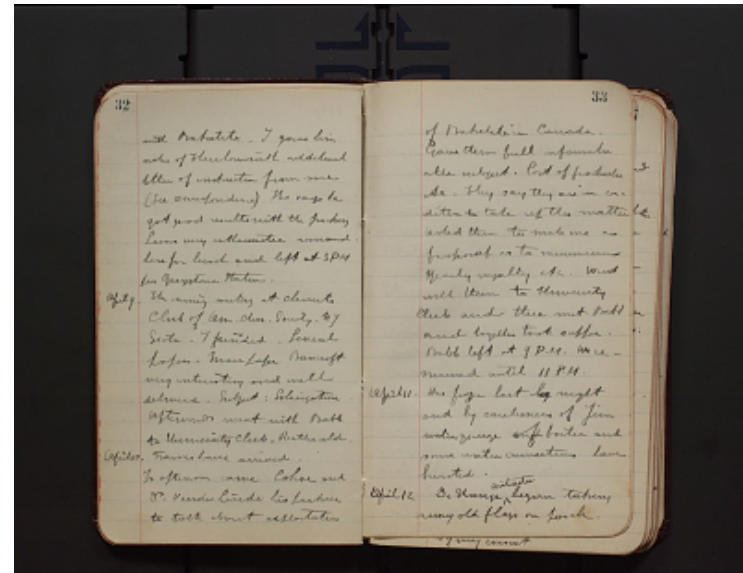
[[start page]]

[[preprinted]] 33 [[/preprinted]]  
of Bakelite in Canada.

Gave them full information on the subject. Cost of production etc. They say they are in condition to take up this matter. asked them to make me a proposal as to minimum yearly royalty etc. Went with them to University Club and there met Babb and together took supper. Babb left at 9 P.M. We remained until 11 P.M.

[[margin]] April 11. [[/margin]] Has frozen last ~~night~~ by ~~carelessness~~ of Jim water gauge of boiler and some water connections have bursted.

[[margin]] April 12 [[/margin]] De Stanza <sup>^</sup>[[insertion]] contractor ~~^~~ began taking away old flags on porch.



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 34 [[/preprinted]]

Window frames arrived finally. Beautiful weather things progressing nicely. Visit of a certain Mr. Briquet? of Paris who wants to use Bakelite for portable batteries instead of celluloid. Told him celluloid is better.

Nina has sore throat and stiff neck since several days.

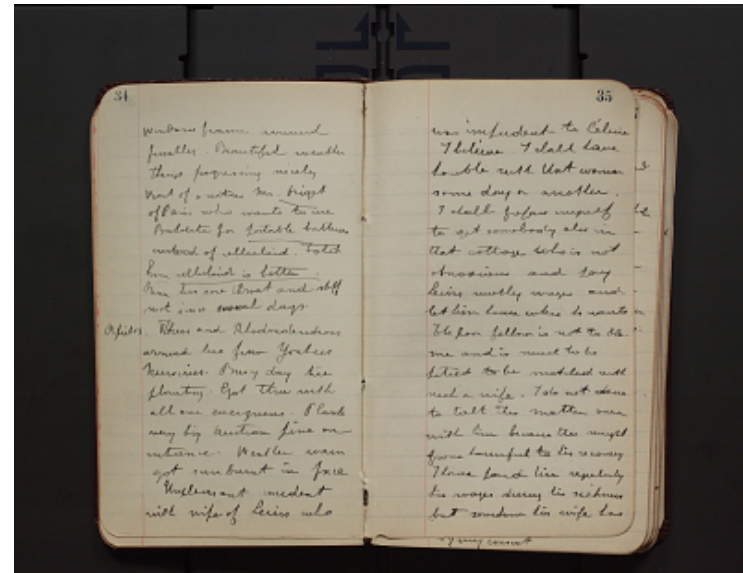
[[margin]] April 13. [[/margin]] Trees and Rhododendrons arrived here from Yonkers Nurseries. Busy day tree planting. Got thru with all our evergreens. Planted very big Austrian pine on entrance. Weather warm got sunburnt in face Unpleasant incident with wife of Lewis who

[[end page]]

[[start page]]

[[preprinted]] 35 [[/preprinted]]

was impudent to Céline. I believe I shall have trouble with that woman some day or another. I shall prepare myself to get somebody else in that cottage who is not obnoxious and pay Lewis weekly wages and let him house where he wants. The poor fellow is not to blame and is much to be pitied to be matched with such a wife. I do not desire to talk this matter over with him because this might prove harmful to his recovery. I have paid him regularly his wages during his sickness but somehow his wife has



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 36 [[/preprinted]]  
seen fit not to pay his seven Dollars a week wages to the hospital and probably spent everything like usually on bunting and feathers. In the afternoon Lewis came back from hospital and was well enough to walk around. He still looks pale but otherwise has good appearance. I told him to take life easy for awhile and not to make any efforts as long as his wound is not entirely healed. In the evening I had a conversation with his father on the subject of his wife.  
Visit of Cohoe relative to Canadian License. We reached a provisional agreement

[[end page]]

[[start page]]

[[preprinted]] 37 [[/preprinted]]

[[very pale and mostly illegible entry written vertically in red in the margin]]

that they should pay me a royalty of 6 cents a pound or seven cents a pound on every lb. of Bakelite manufactured by them. Restriction in exportation. The latter to occur only by my consent. [[Compulsory?]] use of word Bakelite by them and their customers. Minimum monthly:

[[curly bracketed]]

1st year 500 \$

2d year 2000 \$

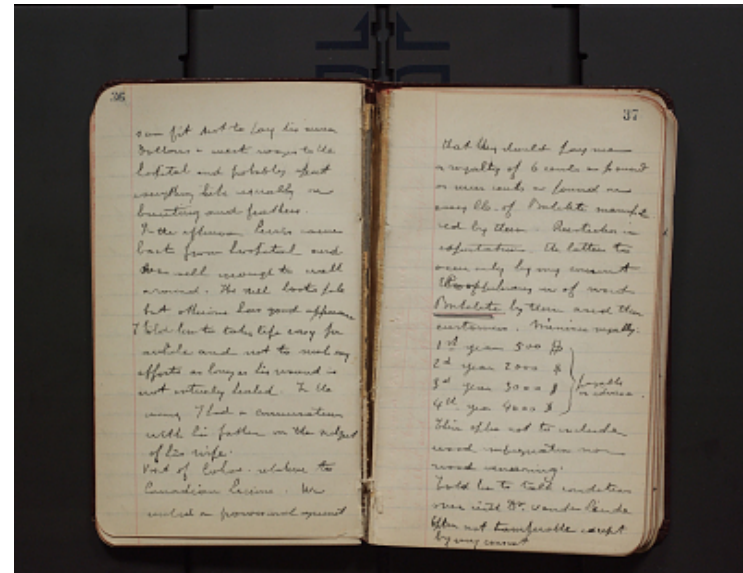
3d year 3000 \$

4th year 4000 \$

[[/curly bracketed]] Payable in advance.

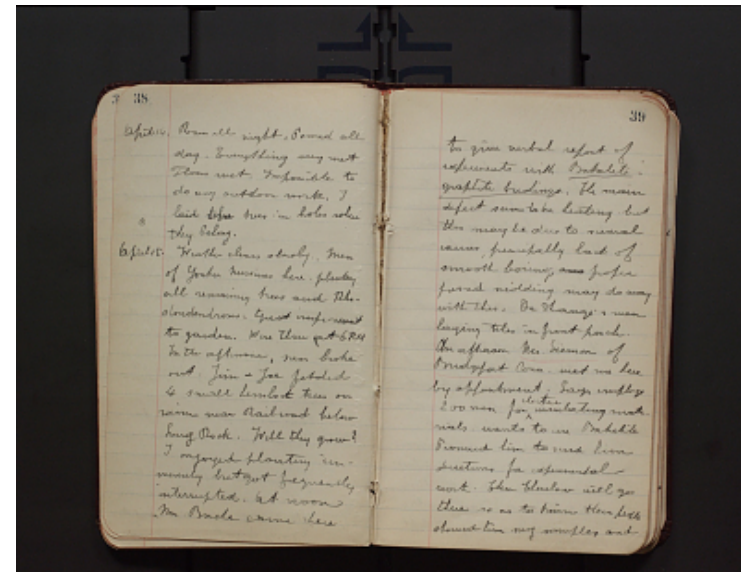
Their option not to include wood impregnation nor wood veneering.

Told him to talk conditions over with Dr. van der Linde Option not transferable except by my consent



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 38 [[/preprinted]]  
 [[margin]] April 14. [[/margin]] Rain all night: Poured all day. Everything very wet Floors wet. Impossible to do any outdoor work. I laid the trees in holes where they belong. [[margin]] [[circle with a dot in center]]  
 [[/margin]]  
 [[margin]] April 15. [[/margin]] Weather clears slowly. Men of Yonkers Nurseries here planting all remaining trees and Rhododendrons. Great improvement do garden. Were thru at 6 P.M.  
 In the afternoon, sun broke out. Jim & Joe fetched 4 small hemlock trees on ravine near Railroad below Snug Rock. Will they grow? I enjoyed planting immensely but got frequently interrupted. At noon Mr. [[Buche?]] came here  
 [[end page]]  
 [[start page]]  
 [[preprinted]] 39 [[/preprinted]]  
 to give verbal report of experiments with Bakelite-graphite bushings. The main defect seems to be heating but this may be due to several causes, principally lack of smooth boring; ~~and~~ proper pressed molding may do away with this. De Stanza's men laying tiles in front porch. In afternoon Mr. Siemon of Bridgeport Conn. met me here by appointment. Says employs 200 men for <sup>electric</sup> insulating materials. wants to use Bakelite. Promised him to send him directions for experimental work. Then Thurlow will go there so as to train their people showed him my samples and



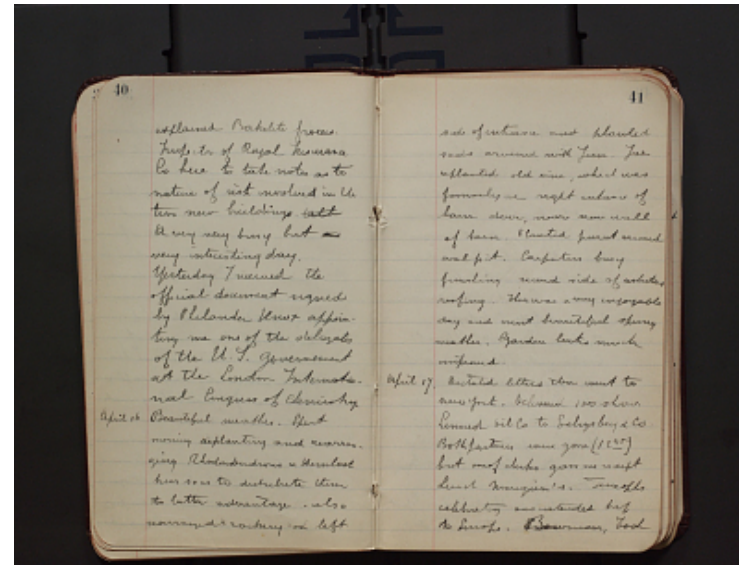
Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

explained Bakelite process. Inspector of Royal Insurance Co here take notes as to nature of risk involved in the two new buildings. A very very busy but a very interesting day.

Yesterday I received the official document signed by Philander Knox appointing me one of the delegates of the U.S. Government at the London International Congress of Chemistry.

April 16 Beautiful weather. Spent morning replanting and rearranging Rhododendrons & Hemlock trees so as to distribute them to better advantage. also rearranged rockery on left side of entrance and planted seeds around with Jim. Joe replanted old vine, which was formerly on right entrance of barn door, near new wall of barn. Planted privet around oval pit. Carpenters busy finishing second side of asbestos roofing. This was a very enjoyable day and most beautiful spring weather. Garden looks much improved.

April 17 Dictated letters then went to New York. Delivered 100 shares Linseed Oil Co to Selysberg & Co Both partners were gone (12:45) but one of clerks gave me receipt Lunch Mouquin's. Thereafter celebrating our intended trip to Europe. Bowman, Toch



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07



and Giffordson were there. The latter just back from Siberia where he is a mining engineer. In the evening at 7 PM went to Brooklyn Polytechnic where I was guest at annual Banquet of Chemists and made an address on Bakelite. Much success. Present. Dr. Atkinson Atkinson president of the Polytechnic, Dr. Olsen, Fay, Whipple etc. Explained them process of applying veneer. Present also Doerflinger and Langmuir of Max & Ravolle, Shellac importers. Joe carried my valises. Came home by 12:30 train.

April 18. Beautiful restful day. Spent morning pruning trees and

[[end page]]

[[start page]]

[[preprinted]] 43 [[/preprinted]]

planning alterations. Took nap in afternoon.

[[written vertically in margin]] Armstrong started digging foundation on March 15. Building begun on March 24 [[/written in margin]]

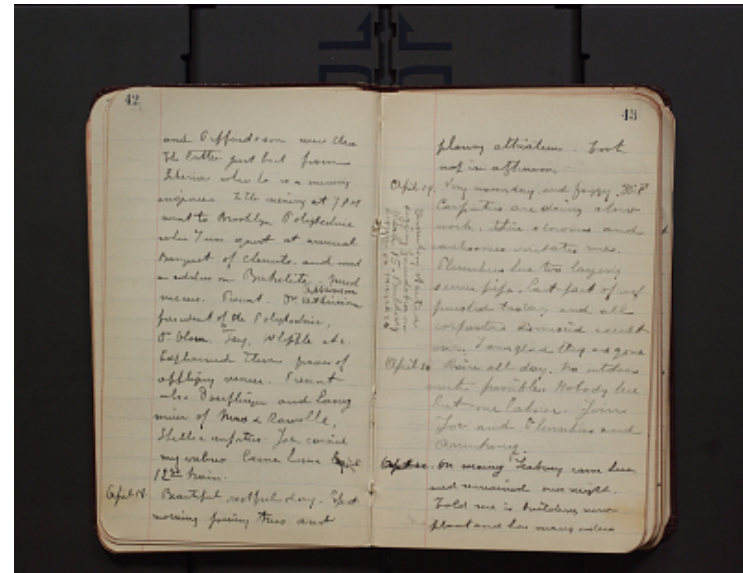
[[margin]] April 19. [[/margin]] Very warm day and foggy. 80F

Carpenters are doing slow work. Their slowness and carelessness irritates me. Plumbers here too laying sewer pipe. Last part of roof finished today and all carpenters dismissed except one. I am glad they are gone

[[margin]] April 20 [[/margin]] Rain all day. No outdoor work possible. Nobody here but one laborer. Jim Joe and Plumbers and Armstrong.

[[margin]] ~~April 22~~ [[/margin]]

In evening Seabury came here and remained over night. Told me is building new plant and has many orders



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

44

for Bakelite in sight.

April 22 Beautiful mild weather. Sewer pipes tested trench and connected. Gutter of new bdg put up. railing to cottage put up. Trench for 1" water pipe dug. Got letter from Hyatt saying Bakelite makes better billard balls than Ivory.

Another letter from Jefferson telling about defects of Bakelite for grindstones.

In afternoon visit of Mr. [Dolfch?] relative to impregnation of dynamos. Showed him my samples and explained what I have done and intend to do. He showed me his resinous matter, some copal

[end page]

[start page]

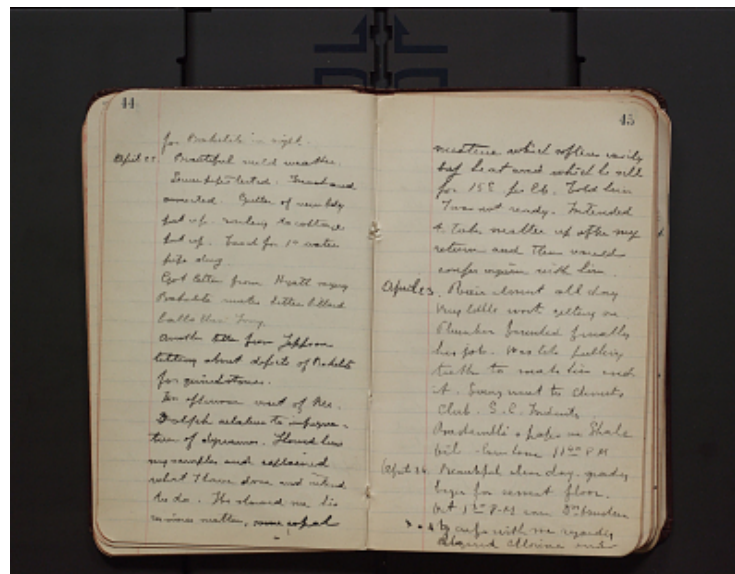
45

mixture which softens easily by heat and which he sells for 15c per lb.

Told him I was not ready. Intended to take matter up after my return and then would confer again with him.

April 23. Rain almost all day. Very little work getting on. Plumber finished finally his job. Was like pulling teeth to make him end it. Evening went to Chemists Club. S.C. Industry. Baskerville's paper on Shale Oil. Came home 11:40 PM

April 24. Beautiful clear day. grading began for cement floor. At 1:30 P.M came Dr. [Brustein?] to confer with me regarding liquid chlorine and



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 46 [[/preprinted]]

[[margin]] 1/2X [[/margin]]

Acetic anhydride.

Charge 1/2 day to D. & F Co.

At 4 P.M came Ladow who brought me a little gramophone  
[[~~matrix~~]] and [[~~matrix~~]] (called [[~~Sonora?~~]]) and another  
matrix. Told me that Seaman and he are working in common. Tried our  
gramophone records made before the fire. Got them out the ruins they  
were all dirty greasy and black and it required much scrubbing with  
Sapolis and gasoline to clean them somewhat. They had been exposed  
to rain & wet over and over again

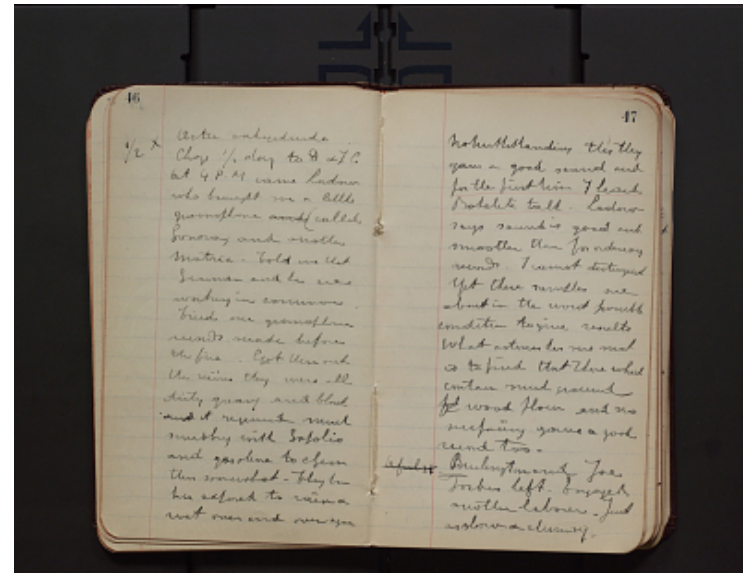
[[end page]]

[[start page]]

[[preprinted]] 47 [[/preprinted]]

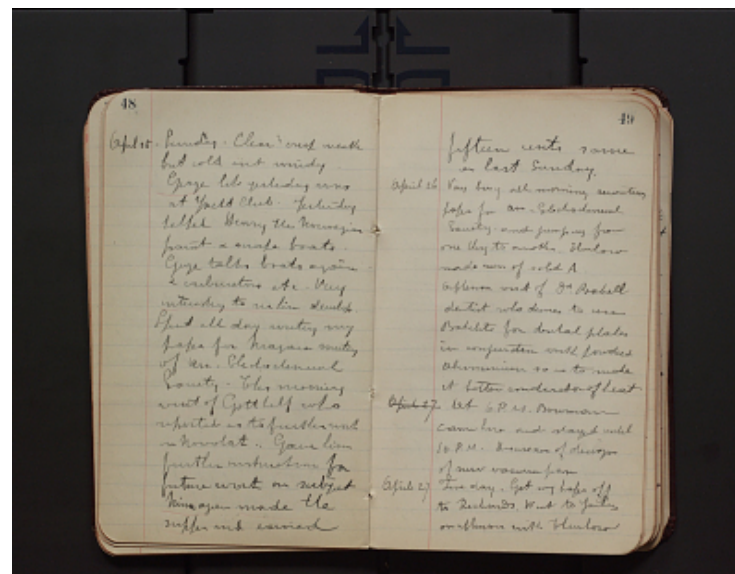
notwithstanding this they gave a good sound and for the  
first time I heard Bakelite talk for the first time. Ladow says sound is good  
and smoother than for ordinary records. I cannot distinguish yet these  
samples are about in the worst possible condition to give results. What  
astonishes me most is to find that those which contain much ground  
[[~~wood flour~~]] f [[~~wood flour~~]] wood flour and no surfacing gave a  
good sound too.

[[margin]] [[~~April 25~~]] [[/margin]] Burlington  
and Joe Forbes left. Engaged another laborer. Just as slow & clumsy



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

48  
[[preprinted]] 48 [[/preprinted]]  
[[margin]] April 25. [[/margin]] Sunday. Clear crisp weather but cold out windy. George like yesterday was at Youth Club. Yesterday helped Henry the Norwegian paint & scrape boats. George talks boats again & carburetors etc. Very interesting to notice develop. Spent all day writing my paper for Niagara Meeting of Am. Electrochemical Society. This morning went to Gotthelf who reported as to further work in Novolak. Gave him further instructions for future work on subject. Nina again made the supper and earned  
[[end page]]  
[[start page]]  
[[preprinted]] 49 [[/preprinted]]  
fifteen cents same as last Sunday.  
[[margin]] April 26 [[/margin]] Very busy all morning rewriting paper for Am. Electrochemical Society. and jumping from one thing to another Thurlow made run of solid A. Afternoon visit of Dr. Prabell dentist who desires to use Bakelite for dental plates in conjunction with powdered aluminium so as to make it better conductor of heat.  
[[margin]] ~~April 27~~ [[/margin]]  
At 6 P.M. Bowman came here and stayed until 10 P.M. Discussion of design of new vacuum pan.  
[[margin]] April 27 [[/margin]] Fine day. Got my paper off to Richards. Went to Yonkers in afternoon with Thurlow



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

50

to swear or signatures on joint patent: Finishing wood  
April 28 Another beautiful day With Joe and Jim  
made a run of Solid A in morning and immediately afterwards a run of  
Liquid A and made further material for shipping to Boonton First  
shipment of 100 lbs. for Protal Mfg. Co. (Wiechman)

April ~~28~~ got impatient because De Stranza does not lay cement floor which  
retards all my work. Sent Lewis all day hunting for him.

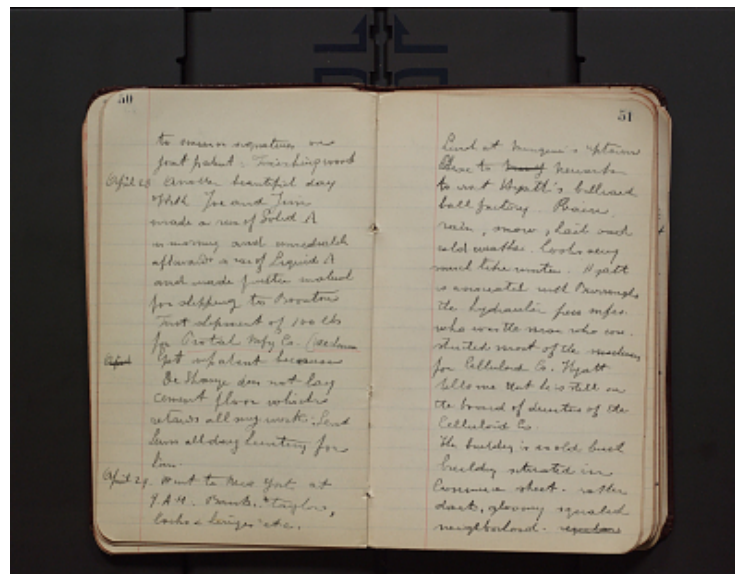
April 29. Went to New York at 9 A.M. Bank, taylor,  
locks & hinges etc.

end page]

start page]

51

Lunch at Mouquin's uptown Thence to ~~New Y~~  
~~Newark~~ to visit Hyatt's billiard ball factory. Rain, rain,  
snow, hail and cold weather. Looks very much like winter. Hyatt is  
associated with Burroughs the hydraulic press mfrs. who was the man  
who constructed most of the machinery for Celluloid Co. Hyatt tells me  
that he is still on the board of directors of the Celluloid Co.  
The building is an old brick building situated in Commerce Street. rather  
dark, gloomy squalid neighborhood. regular



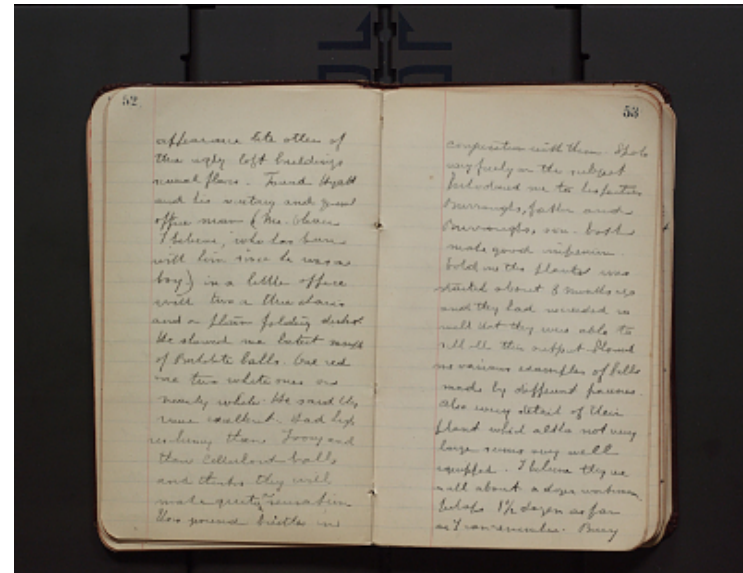
Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 52 [[/preprinted]]  
appearance like others of these ugly loft buildings several floors. Found Hyatt and his secretary and general office man (Mr. Ohner I believe, who has been with him since he was a boy) in a little office with two or three chairs and a plain folding desk. He showed me latest sample of Bakelite balls. One red one two white ones or nearly white. He said they were excellent. Had high resiliency than Ivory and than Celluloid balls and thinks they will make quite a sensation. Uses ground bristles in

[[end page]]

[[start page]]

[[preprinted]] 53 [[/preprinted]]  
conjunction with them. Spoke very freely on the subject Introduced me to his partners, Burroughs, father and Burroughs son. both made good impression. Told me this plants was started about 8 months ago and they had succeeded so well that they were able to sell all their output. Showed me various examples of balls made by different processes. Also every detail of their plant which altho not very large seems very well equipped. I believe they use in all about a dozen workmen. Perhaps 1 1/2 dozen as far as I can remember. Buy



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

celluloid from Celluloid Co. same is shredded ground and dried mixed with ground Ivory 100 mesh. H. says bone does not work as well as ground ivory. This mass is introduced in a special filling mixture devised by Burroughs where it is introduced under slight pressure in powder form from a tube conduit, directly in mold. (This would be excellent for general molding purposes, specially for grindstones). This I believe is pressed further on press molds for balls are as follows so that ball is not spherical but with flat

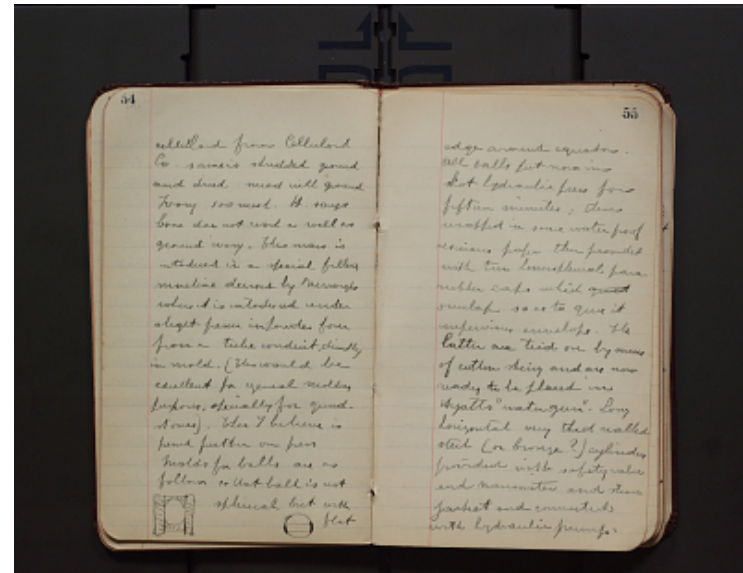
[[end page]]

[[start page]]

[[preprinted]] 55 [[/preprinted]]

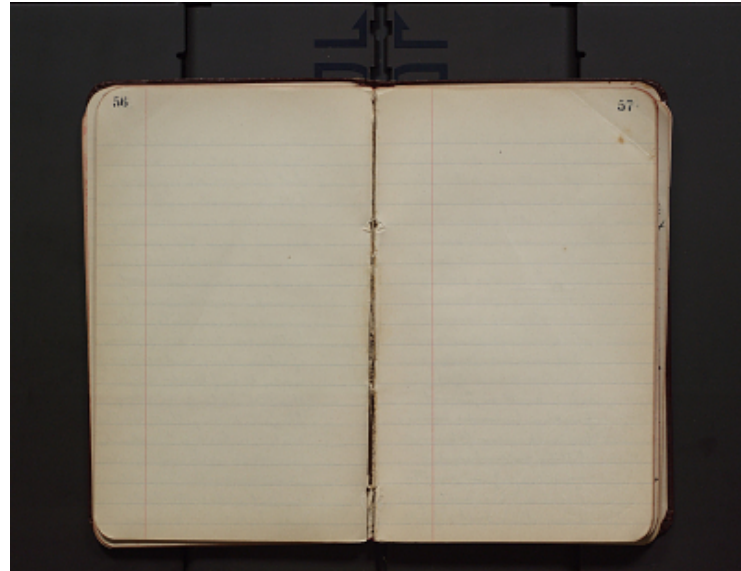
edge around equator. All balls put now in hot hydraulic press for fifteen minutes; then wrapped in some waterproof resinous paper then provided with two hemispherical pararubber caps which ~~give it~~ overlap so as to give it impervious envelope.

The latter are tied on by means of cotton string and are now ready to be placed in Hyatts "water-gun". Long horizontal very thick walled steel (or bronze?) cylinder provided with safety valve and manometer and steam jacket and connected with hydraulic pump.



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

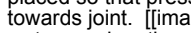
[[preprinted]] 56 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 57 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07



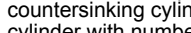
58

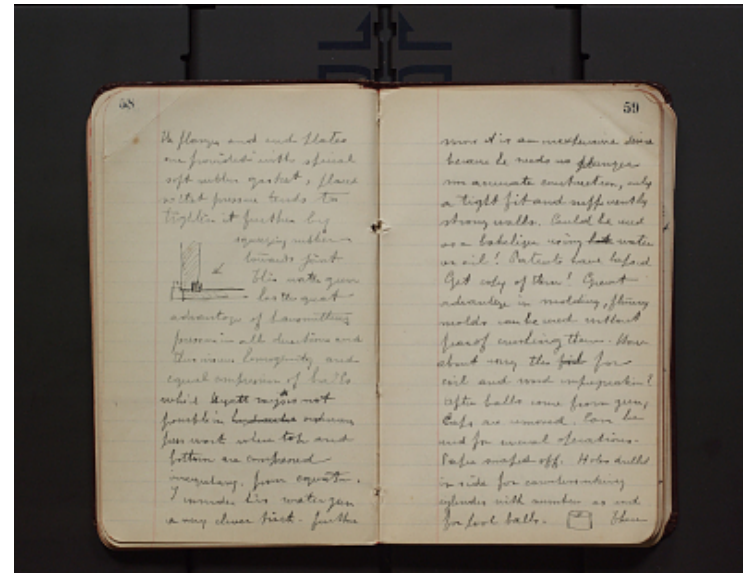
The flanges and end plates are provided with special soft rubber gasket, placed so that pressure tends to tighten it further by squeezing rubber towards joint.  This water gun has the great advantage of transmitting pressure in all directions and thus insures homogeneity and equal compression of balls which Hyatt says is not possible in ~~hydraulic~~ ordinary press work where top and bottom are compressed irregularly from equator. I consider his water gun a very clever trick. further

[[end page]]

[[start page]]

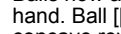
59

more it is an inexpensive device because he needs no plunger nor accurate construction, only a tight fit and sufficiently strong walls. Could be used as a bakelizer using ~~hot~~ water or oil! Patents have lapsed. Get copy of them! Great advantage in molding, flimsy molds can be used without fear of crushing them. How about using this ~~for~~ ~~coil and wood~~ impregnation? After balls come from gun; caps are removed. Can be used for several operations. Paper scraped off. Holes drilled in side for countersinking cylinder with numbers as used for pool balls . These



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 60 [[/preprinted]]

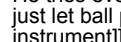
little cylinders are molded separately. I believe they are introduced before ball goes in gun. after they come from ordinary hydraulic press. Balls now are turned on lathe. Seems easy operation altho' done by hand. Ball  held by two concave revolving holder. Tool revolves so as to swing it in curve. then ball is replaced so as to curve off other sides. Hyatt says, all efforts to mold true directly have failed and it is cheaper to do this in lathe which involves very little work. After workman is here he strikes

[[end page]]

[[start page]]

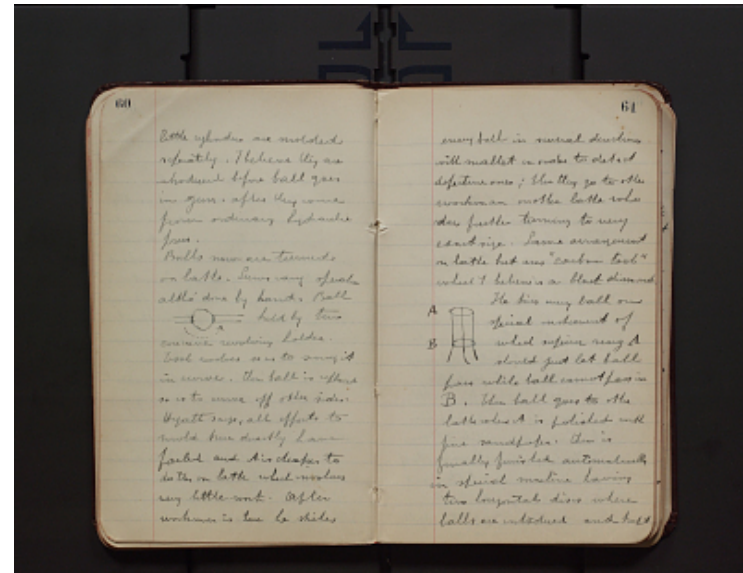
61

every ball in several directions with mallet in order to detect defective ones; then they go to other workman on other lathe who does further turning to very exact size. Same arrangement on lathe but uses "carbon tool" which I believe is black diamond.

He tries every ball on special instrument of which superior ring A should just let ball pass while ball cannot pass in B. 

Then ball goes to other lathe where A is polished with fine sandpaper. then is finally finished automatically in special machine having two horizontal discs where balls are introduced and kept

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

62

revolving. Hyatt says they are finally polished there with mixtures containing gasoline. But the latter leaves greasy film which is detrimental to billiard balls on account of effect of grease. Says with Bakelite can use alcohol which is much better for that reason. Showed me two experiments with Bakelite balls, Ivory and his celluloid balls the latter differ from Albany Hyatt ball because they are homogeneous while Albany balls have core of coarse stuff (celluloid waste + filler) and envelope of celluloid composition. By putting balls

[[end page]]

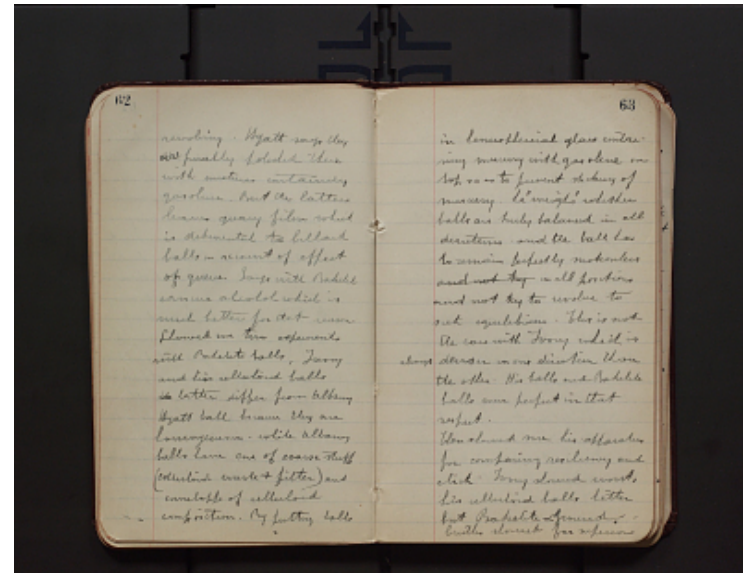
[[start page]]

63

in hemispherical glass containing mercury with gasoline on top so as to prevent sticking of mercury he "weighs" whether balls truly balance in all directions and the ball has to remain perfectly motionless ~~and not try~~ in all positions and not try to revolve to seek equilibrium. This is not the case with Ivory which is always denser in one direction than the other. His balls and Bakelite balls were perfect in that respect.

Then showed me his apparatus for comparing resiliency and click. Ivory showed worst, his celluloid balls better but Bakelite and ground bristles showed far superior

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

64

bouncing much higher and longer. While Ivory balls only bounce 4 1/2 seconds Bakelite bounces 9 seconds. But H. says Bakelite is specially superior on account of excellent touch of queue which is far superior to Ivory and specially to

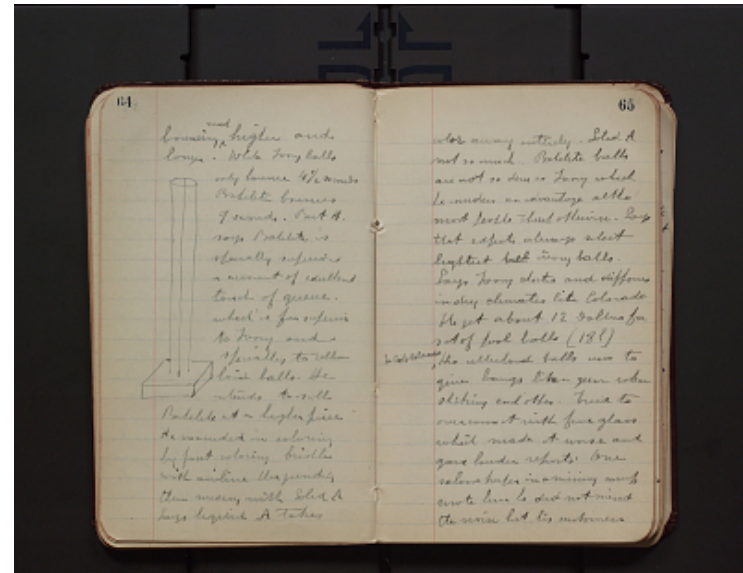
[[image on left of very tall cylinder on square block]] celluloid balls. He intends to sell Bakelite at a higher price. He succeeded in coloring by first coloring bristles with aniline then grinding them mixing with Solid A

Says liquid A takes  
[[end page]]  
[[start page]]

65

color away entirely. Solid A not so much. Bakelite balls are not so dense as Ivory which he considers an advantage altho most people think otherwise. Says that experts always select lightest ~~ball~~ ivory balls. Says Ivory checks and diffuses in dry climates like Colorado. He get about 12 dollars for set of pool balls (18?) In ~~Col~~ Colorado His celluloid balls uses to give bangs like gun when striking each other.

Tried to overcome it with fine glass which made it worse and gave louder reports. One saloon keeper in a mining camp wrote him he did not mind the noise but his customers  
[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

66

everytime got ^nervous and^ excited and filled their revolvers whenever they heard that bang. He now finds that ground bristles are the very best thing in conjunction with Bakelite Solid A. Grinding of bristles was difficulty until he stuck the machine with which wallpaper mfrs grind mica and this does the work.

I left Newark in drenching rain took supper at Mouquin then went home 10:45. Cold slushy pouring rain. When I arrived at Snug Rock, roofs and fields covered with several inches snow!

Wintry look of landscape and during night noise of

[[end page]]

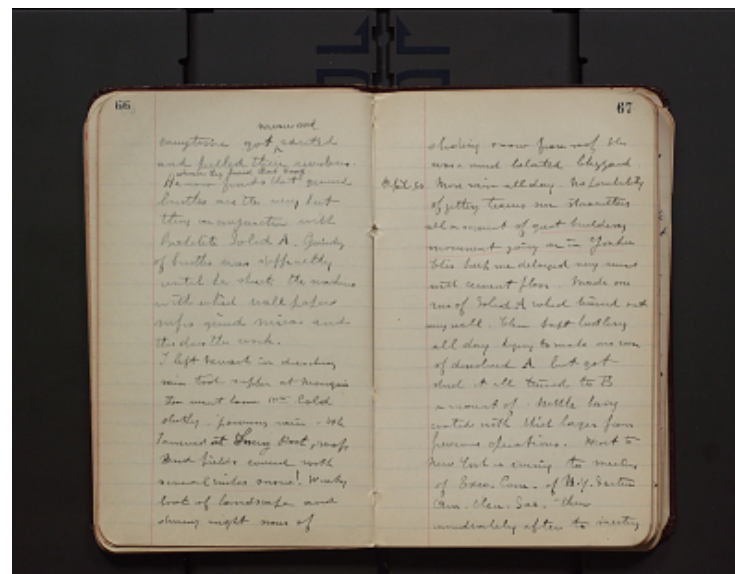
[[start page]]

67

sliding snow from roof. This was a much belated blizzard.

April 30. More rain all day. No possibility of getting teams nor stonecutters all on account of great building movement going on in Yonkers. This keep me delayed very much with cement floor. Made one run of Solid A which turned out very well. Then kept hustling all day trying to make one run of dissolved A but got stuck it all turned to B on account of kettle being coated with thick layer from previous operations. Went to New York in evening to meeting of Exec. Com. of N.Y. Section of Am. Chem. Soc. then immediately after to meeting

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

68

of Trustees of Chemists Club in order to consider whether they should ask Loeb to advance money for buying site in 41 Str. behind Belmont Hotel. Hasslacher & Boquet were the only one who seemed skeptical. P. McIlheney? presided. Loeb ~~buy in~~ and Stone & Evans being all abroad.

Russell Moore for once was rather optimistic on this subject McKenna was another optimist, so were McIlheney? and myself. I felt very very tired, remained until 12 P.M.

May 1. Rain, rain, rain, very

[[end page]]

[[start page]]

69

little work done. Very depressing

~~May 1~~

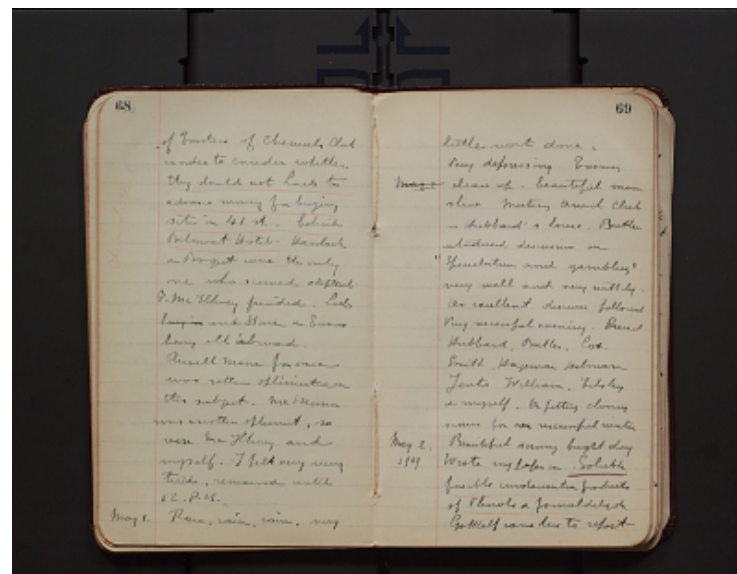
Evening clears up. Beautiful moonshine Meeting Anvil Club in Hubbard's house. Butler introduced discussion on "speculation and gambling" very well and very wittily. An excellent discussion followed. Very successful evening. Present Hubbard, Butler, Cox, Smith, Hageman Kelman Jenks William Tilsley & myself. A fitting closing session for our successful winter.

May 2

1909 Beautiful sunny bright day Wrote my paper on Soluble fusible condensation products of Phenols & formaldehyde.

Gotthelf came here to report

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

70

on his work. Same bashful timid person. Never met any body who was as bashful and timid; yet he is a well informed studious man. I noticed before he is very sensitive. Yesterday I had a good talk with Thurlow on the fact that his stubborn tendencies are very often ~~and~~ and preconceived ideas hinder successful work. I do not want to offend him I know his good qualities yet I do not think it right that he should always be in a spirit of opposition if I suggest him some line of research work. Gotthelf is too much the opposite. I suppose that both of them

[[end page]]

[[start page]]

71

can be made to do their best in their respective directions if handled properly.

Celine did not appear for lunch and went to bed complaining of violent headache a rather unusual complaint from her who since the last few years has always been in excellent health. In the afternoon she had recovered.

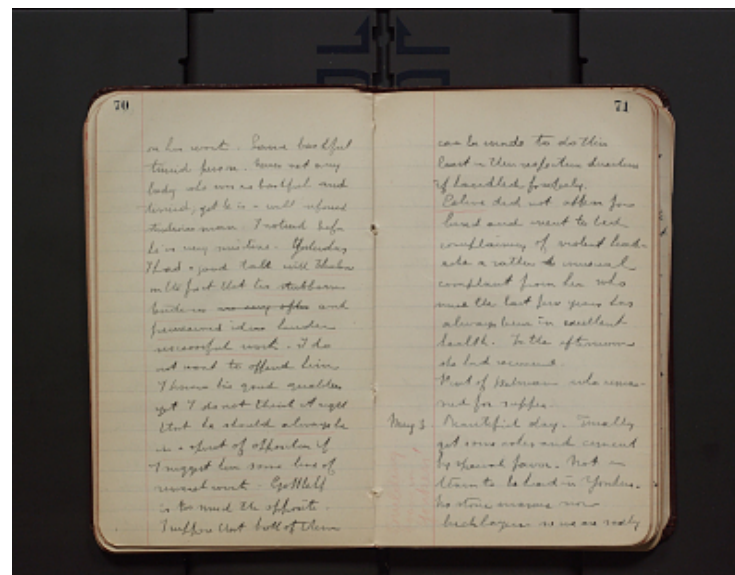
Visit of Kelman who remained for supper.

May 3 Beautiful day. Finally got some ashes and cement by special favor. Not a team to be had in Yonkers. No stone masons nor bricklayers so we are sadly

[[written vertically in red in margin]] Building boom in Yonkers!

[[/marginal entry]]

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

72

handicapped in our work in finishing laboratory building Three carpenters working on old barn. Painter starting varnishing facade with Bakelite varnish. This is the first time this is used on such a large! scale and otherwise than for experimental purposes. Jim with his head and body in manhole of vacuum pan, his legs sticking out spent all day getting B out of pan!

In afternoon visit of <sup>^</sup>Elmer<sup>^</sup> Sperry and of Eberhardt from Am. Can Co. whom I gave copy of the paper I shall read in Niagara

[[end page]]

[[start page]]

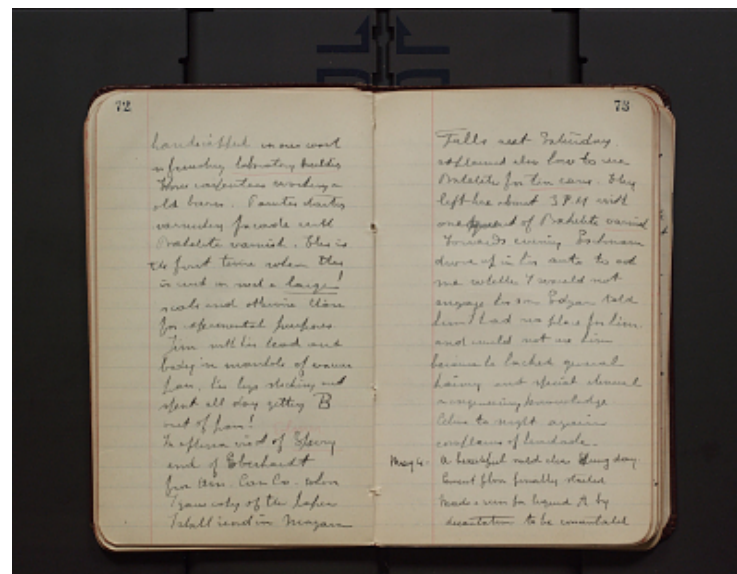
73

Falls next Saturday. explained also how to use Bakelite for tin cans. They left here about 3 P.M with one quart of Bakelite varnish Towards evening Eichman drove up in his auto to ask me whether I would not engage his son Edgar told him I had no place for him. and could not use him because he lacked general training and special chemical or engineering knowledge.

Celine tonight again complains of headache.

May 4. A beautiful mild clear Spring day. Cement floor finally started Made a run for liquid A by decantation to be concentrated

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07



74

afterwards for dissolved A Lewis for first time ran the boiler altho' his wound is still open. Much headway made on buildings. Asbestos lumber arrived finally. Things begin to look more encouraging. At noon Wiechman came here to talk over arrangement for Protal. remained for lunch. I dictated letter on subject after dinner which I shall write to morrow. Afternoon visit of Mr. Harrison a patent attorney who came in relation to Mr. Finney who wrote me from London. showed him samples & article for Saturday. Offered services for introducing patents in Europe which I declined. At noon came Dr. Wiechman

[[end page]]

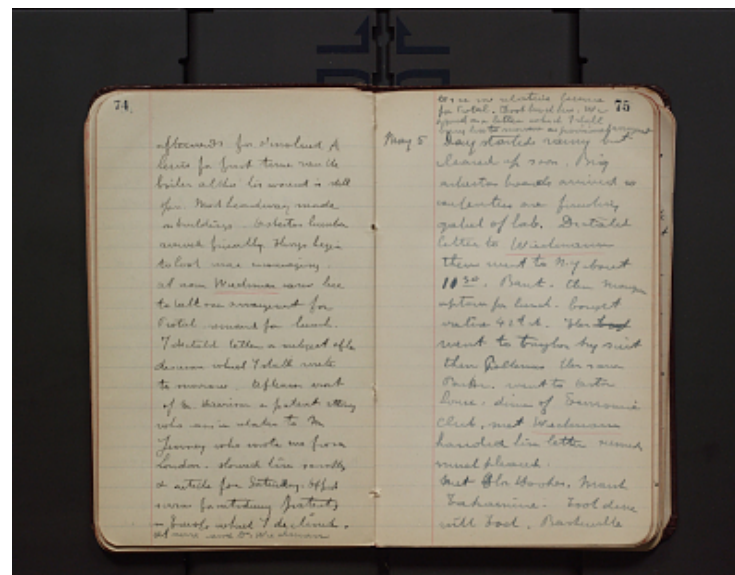
[[start page]]

75

to see me relative license for Protal. took lunch here. We agreed on a letter which I shall bring him to morrow as provisional arrangement May 5 Day started rainy but cleared up soon. My asbestos boards arrived so carpenters are finishing gabel of lab. Dictated letter to Wiechmann then went to N.Y. about 11:30. Bank. then Mouquin uptown for lunch. bought valise 42nd St. Then ~~[[?]]~~ went to taylor try suit then ~~[[?]]~~ then saw Parker. went to Astor House. dinner of Economic Club. met Wiechman handed him letter seemed much pleased.

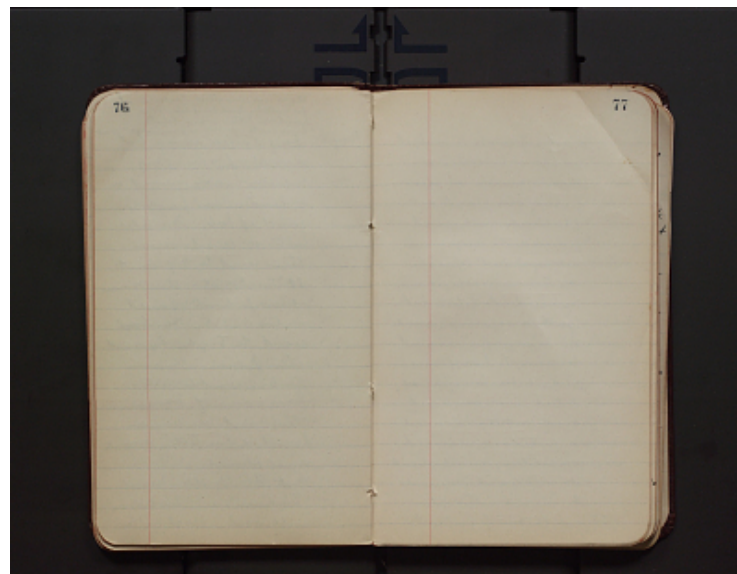
Met Elon Hooker. Marsh, Takamine. Took drive with Toch. Baskerville

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 76 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 77 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

78

and a few others. Subject tariff & protection. Shonts made a speech full of old played out platitudes and weak protectionistic arguments a very weak speech. Mr. Towne's speech was somewhat better but just as soporific. wants to organize permanent bureau of tariff revision. A speech by Kenyon Cox, artist was excellent said artists wanted no protection artists wanted competition, could stand it. invited it, deemed it would educate art taste of people to

[[end page]]

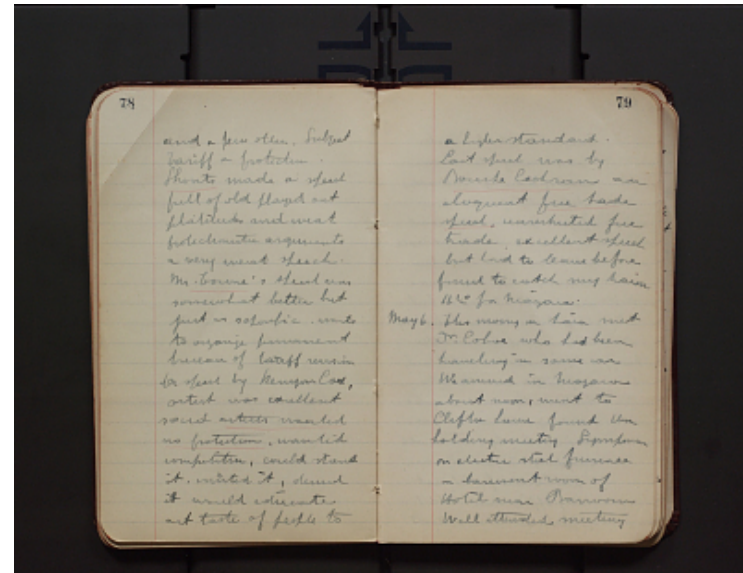
[[start page]]

79

a higher standard. Last speech was by Bourke Cochran an eloquent free trade speech, unrestricted free trade. excellent speech but had to leave before finish to catch my train 11:20 for Niagara.

May 6. This morning on train met Dr. Cohoe who had been traveling in same car. We arrived in Niagara about noon, went to Clifton house found them holding meeting. Symposium on electric steel furnace in basement room of Hotel near Barroom. Well attended meeting

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

80

Evening excellent smoker Good singing then afterwards session of Section 9 and reading of parodies of scientific paper. Got my little roast on Bakelite and Velox together with many other members All very witty, very clever and tactful. One of the best things I ever witnessed. Ledbury the moving spirit of all this.

May 7. I find that notwithstanding my protests and the letters I have written and published declining election, I have been elected by a considerable majority. In fact I have been elected for almost any office since I told I preferred a less important

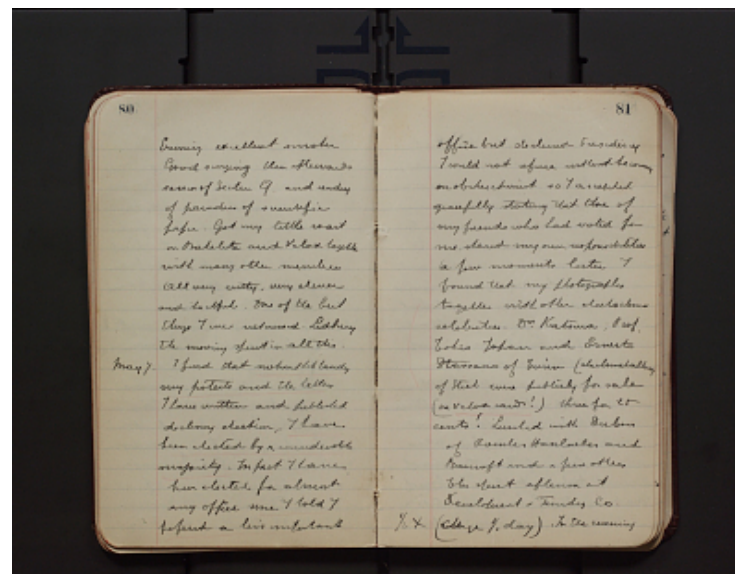
[[end page]]

[[start page]]

81

office but declined considering I would not refuse without becoming an obstructionist so I accepted gracefully stating that those of my friends who had voted for me shared my own responsibilities A few moments later I found that my photographs together with other with other electrochemic celebrities Dr. Katsura, Prof. [[Takis?]] Japan and Ernesto Strassano of Turin (electrometalling of steel were publicly for sale on Velox cards!) Three for 25 cents! Lunched with Dubois of Roessler Haslach and Bancroft and a few others Then spent afternoon at Development & Funding Co. [[1/2 X in margin]] (charge 1/2 day). In the evening

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

82

my formal banquet in big room. My speech. The near future gave me a chance to make some complimentary remarks to Acheson who seemed to be overcome by emotion and wept. Many ladies present good speeches, cheerful spirit a great success. Best function of the kind we ever had. Afterwards dancing in ballroom until 1 P.M. I did not dance nor attempt to do it. Tahamine and Mrs. Tahamine here. Also Cohoe of Toronto. went to bed at 1 P.M!! "The boys of Section 9" had invented a new song singing the

[[end page]]

[[start page]]

83

[[vertical red line length of left margin]]

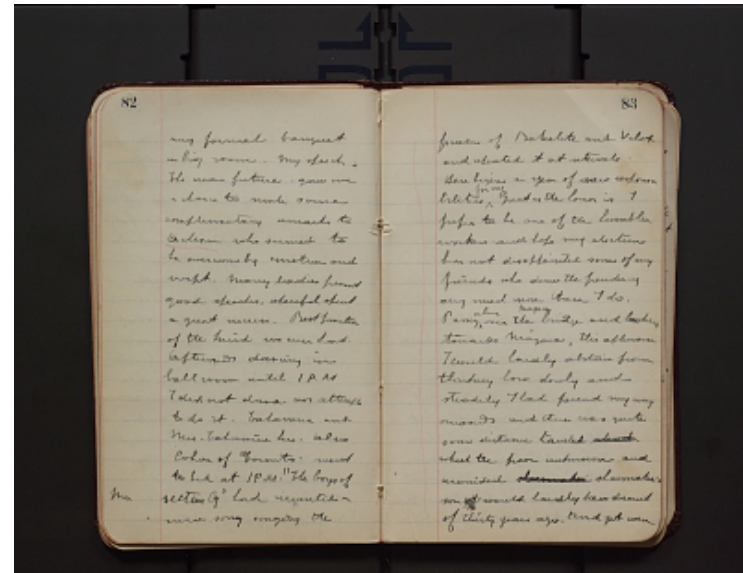
praises of Bakelite and Velox and repeated it at intervals.

Here begins a year of new responsibilities ^for me^ Great as the honor is I prefer to be one of the humbler workers and hope my election has not disappointed some of my friends who deserve the presidency very much more than I do.

Passing ^alone^ over the ^Niagara^ bridge and looking towards Niagara, this afternoon I could hardly abstain from thinking how slowly and steadily I had found my way onwards and there was quite some distance traveled ~~alread~~ which the poor unknown and ~~unconsidered?~~ shoemaker

~~shoemaker's son~~ of ~~the~~ would hardly have dreamt of thirty years ago. And yet even

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

84

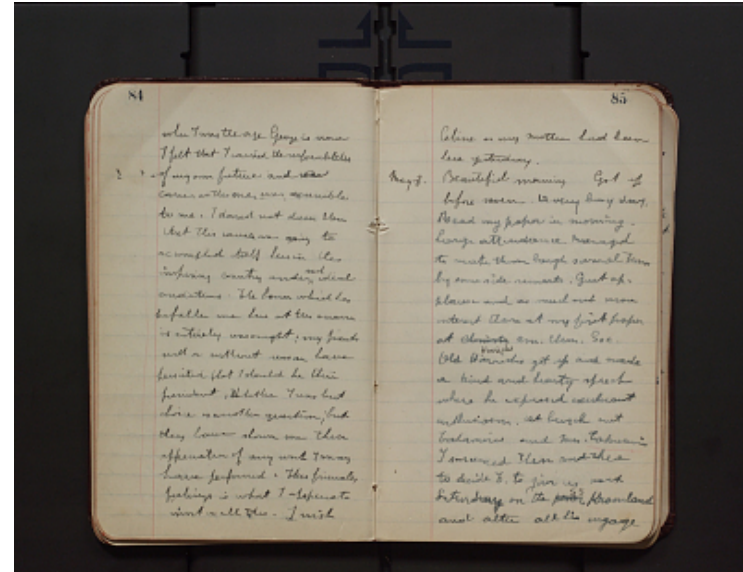
when I was the age George is now I felt that I carried the responsibilities of my own future and ~~[[?]]~~ ~~[[?]]~~ career as this one was accessible to me. I dared not dream then that this career was going to accomplish itself here in this inspiring country under <sup>such</sup> ideal conditions. The honor which has befallen me here at this occasion is entirely unsought; my friends with or without reason have persisted that I should be their president. Whether I was best choice is another question; but they have shown me their appreciation of any work I may have performed. Their friendly feelings is what I appreciate most in all this. I wish

[[end page]]  
[[start page]]

85

[[underlined]] Celine ~~[[?]]~~ or my mother had been here yesterday.

May 8. Beautiful morning. Got up before seven. A very busy day. Read my paper in morning. Large attendance. Managed to make them laugh several times by some side remarks. Great applause and as much and more interest than at my first paper at ~~[[?]]~~ Chemists ~~[[?]]~~ Am. Chem. Soc. Old Hinrichs got up and made a kind and hearty speech where he expressed exuberant enthusiasm. At lunch met Tahamine and Mrs. ~~[[?]]~~ Tahamine ~~[[?]]~~. I succeeded then and there to decide T. to join us next Saturday on the ~~[[?]]~~ ~~[[?]]~~ SS Kroonland and alter all his engage  
[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

86

ments for his contemplated trip to Arizona and Mexico.  
Afternoon went to D. & F. Co. and took group of fellow members thru the works.

At 6 P.M. M. Cahoe of Toronto who was here since yesterday finally submitted draft for Canadian agreement. I indicated some changes to which he readily acquiesced. so that settles the matter. Took supper with Seabury then in evening went to smoker of Niagara Club.

Uproarious, jolly, good natured gathering.

Dr. Katsura of Japan

[[end page]]

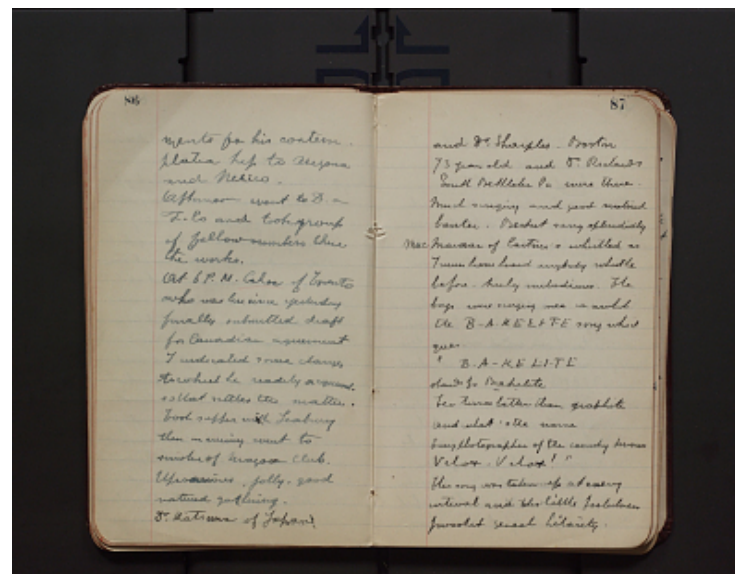
[[start page]]

87

and Dr. Sharples Boston 73 years old and Dr. Richards South Bethlehem Pa were there. Much singing and good natured banter. Becket sang splendidly MacMauran of Cartier's whistled as I never have heard anybody whistle before. truly melodious. The boys were singing once in awhile the B-A-K-E-L-I-T-E song which goes "B.A - K E L-I-T E stands for Bakelite Ten times better than graphite and what's the name Every photographer of the country knows Velox - Velox!"

This song was taken up at every interval and this little foolishness provoked general hilarity.

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

88

When I went to the station I was escorted by the whole bunch -- about thirty. marching like soldiers and singing their Bakelite song. While waiting for the train the same song went on uninterrupted. Took the midnight train which gave me in Buffalo transfer to train which arrived here next day in Yonkers at about 1 P.M.

May 9

Things had grown very much since I was away and I found all trees and shrubs green and some of the Rhododendrons in blossom. this is indeed a beautiful restful spot. Armstrong

[[end page]]

[[start page]]

89

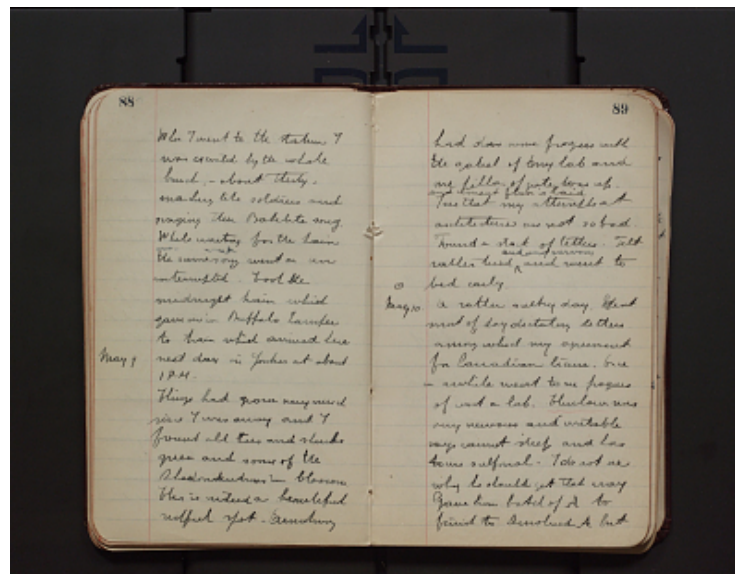
had done some progress with the gabel of my lab and one pillar of gate was up and cement floor is laid. I see that my attempts at architecture are not so bad.

Found a stack of letters. Felt rather tired ^and very nervous^ and went to bed early.

[[circle with a dot in center in margin]]

May 10 A rather sultry day. Spent most of day dictating letters among which my agreement for Canadian license. Once in awhile went to see progress of work in lab. Thurlow was very nervous and irritable says cannot sleep and has some sulfonal. I do not see why he should get that way. Gave him batch of A to finish to dissolved A but

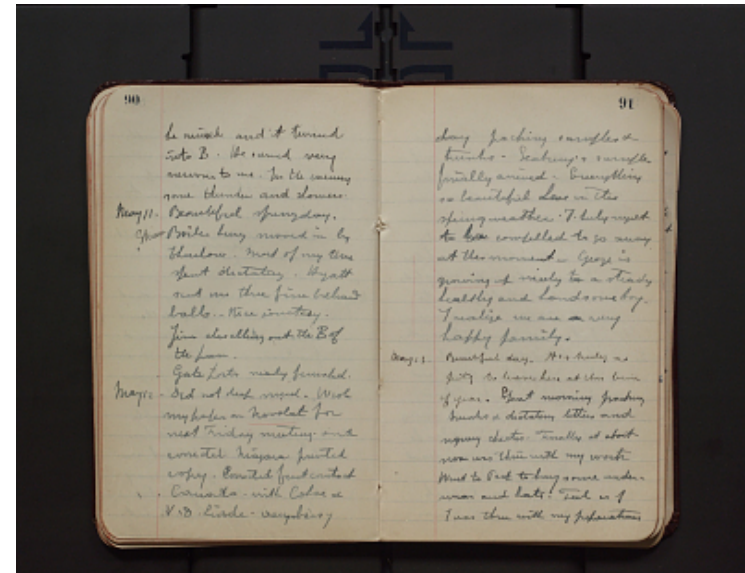
[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07



[[preprinted]] 90 [[/preprinted]]  
 he mixed and it turned into B. He seemed very nervous to me. In the evening some thunder and showers.  
 May 11. Beautiful spring day. Steam Boiler being moved in by Thurlow. Most of my time spent dictating. Hyatt sent me three fine billiard balls. Nice courtesy. Jim chiselling out the B of the pan. Gate posts nearly finished.  
 May 12. Did not sleep much. Wrote my paper on Novolak for next Friday meeting and corrected Niagara printed copy. Corrected first contract Canada with Cohoe & V. D. Linde. very busy  
 [[end page]]  
 [[start page]]  
 [[preprinted]] 91 [[/preprinted]]  
 day packing samples & trunks. Seabury's samples finally arrived. Everything so beautiful here in this spring weather. I truly regret to be compelled to go away at this moment.  
 George is growing up nicely to a steady healthy and handsome boy. I realize we are a very happy family.  
 May 13 Beautiful day. It is truly a pity to leave here at this time of year. Spent morning packing trunks & dictating letters and signing checks. Finally at about noon was thru with my work. Went to Peck to buy some underwear and hats. Feel as if I was thru with my preparations



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

92

Many of the newly planted Rhododendrons look as if they were dying, yet there has been no lack of moisture until now.

May 14 Signed some more checks a short look at new bldgs handshakes with everybody and took trolley car to N.Y. Children kissed me but controlled well their emotion. Lovely children, lovely house lovely Snug Rock and lovely very lovely Celine.

lovely

How she has changed during these late years and how she has become really my dearest and best friend!

Went to University Club. Very warm weather near

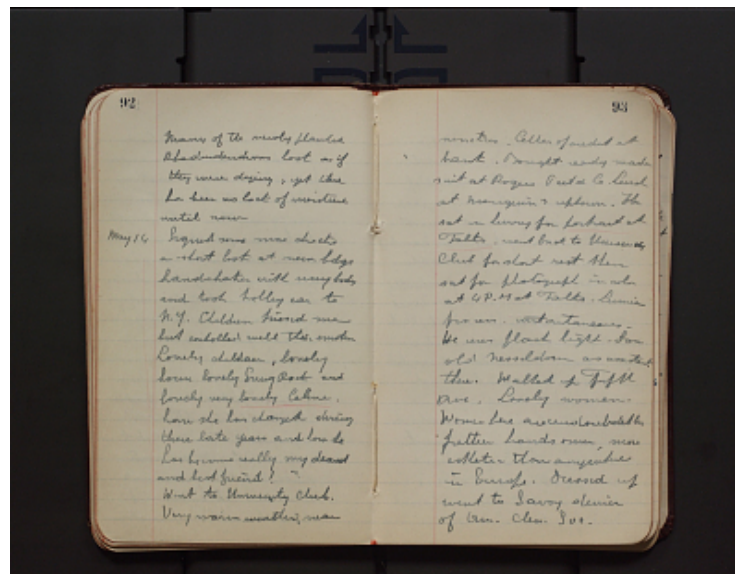
[[end page]]

[[start page]]

93

nineties. Letter of credit at bank. Bought ready made suit at Rogers Peet & Co. Lunch at Mouquin's uptown. then sat in hurry for portrait at Talts?. went back to University Club for short rest then sat for photograph in color at 4 P.M at Talts?. Lumiere process. instantaneous. He uses flash light. Same old Nesseldorn? as assistant there. Walked up Fifth Ave. Lovely women. Women here are undoubtedly prettier handsomer, more esthetic than anywhere in Europe. Dressed up went to Savoy dinner of Am. Chem. Soc.

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

94

Schweitzer and acolytes there. Wondered whether he was out for mischief. Very much filled program everything went smooth. Read my paper on Novolak Made a little formal address. Everything ran very smoothly. Richards was there. went with me to University Club business matters relative Am. Electrochemical Society. He is an earnest hard working chap of fine ideals and aspirations. very happy in his work and verily believe great success of A.E.C.S is due to his own personal efforts.

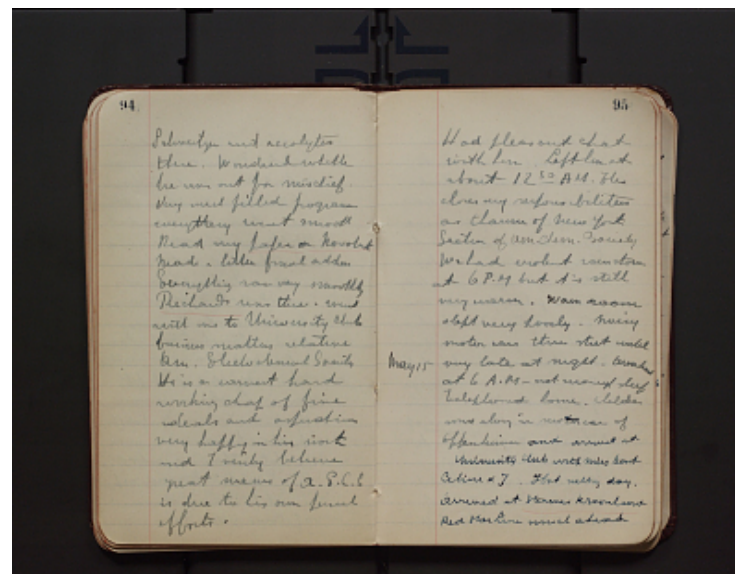
[[end page]]

[[start page]]

95

Had pleasant chat with him. Left at about 12:30 AM. This closes my responsibilities as Chairm of New York Section of Am. Chem Society We had violent rainstorm at 6 P.M but it is still very warm. Warm room slept very poorly. Noisy motor cars thru street until very late at night. Awakened at 6 A.M. - not enough sleep Telephoned home. Children came along in motor car of Oppenheimer and arrived at University Club with Miss Kent Celine & J. Hot sultry day. Arrived at Steamer Kroonland Red Star Line much ahead

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

96

of time. Two nice connecting cabins were given to us. Mrs. Baskerville had to stay home with her little daughter who was ill. Several fellow chemists going to London Congress are here. Dr. Wiley Dr. Clarke, wife & young lady Taylor of Penn Yan with Mrs. T. & Miss T. Max Toch with wife and their children Dr. Baskerville and his boy Charles Dr. Bowman. Mr. Wimpelmeyer of California. Dr. Guderman wife children and nurse of Chicago. Prof Smith ~~^~~ of Cleveland ~~^~~ & wife of Syracuse University. Dr. Elliot of the Consolidated Gas Co. Mr. Clayton of Manchester England fellow

[[end page]]

[[start page]]

97

member of S.C.I. Dr. Takamine Mr. Wesson (Collier Seed Oil Co) Mrs. Wesson & Miss Wesson Dr. Byrnes and Mrs. Byrnes.

We are all seated at one of the head tables with Wiley at head. About one or two dozen other passengers. Smooth sea in afternoon weather became colder. Spent day getting again acquainted and pleasant conversations. Went to bed at about 9 and slept well all night.

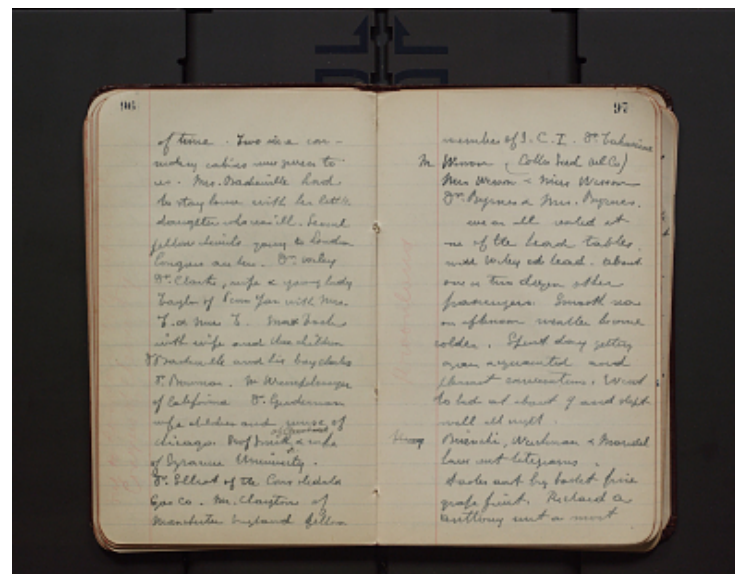
[[Kroonland written in red vertically in margin]]

[[~~strickethrough~~] May ~~^~~]]

Bianchi, Weichman & Maridel have sent telegrams.

Hooker sent big basket five grapefruit. Richard A Anthony sent a most

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

98

generously furnished basket of exquisitely selected fruit. Flowers and ~~peanuts?~~ from others.

May 16 Beautiful calm weather everybody seems to be happy and cheerful.

Sent a Marconigram to Thurlow asking to mail me a sample of Townsend caustic to London. Elmer Sperry was with me. This is my first Marconi message

Operator was a man from Ostend. Said SS Amerika was communicating with shore and therefore had to wait. His receiver was a telephone receiver as used by telephone operators. Reading was by sound. Source of flashes same as for Morse

My first Marconi message

end page

start page

99

Kroonland written in red vertically in margin

code. I listened to it. could be distinctly heard. Finally got connection with Cape Cod or Nantucket (I do not know exactly which) message was rapidly delivered. Charges for following Baekeland Yonkers. Thurlow

mail sample Townsend caustic London cost \$3.90 Charge to Development & Funding with \$9.00 paid at Niagara Falls for dinner

holets. Ornstein Marsh & Reily. the ~~sparkling~~ flashing of the sparks and

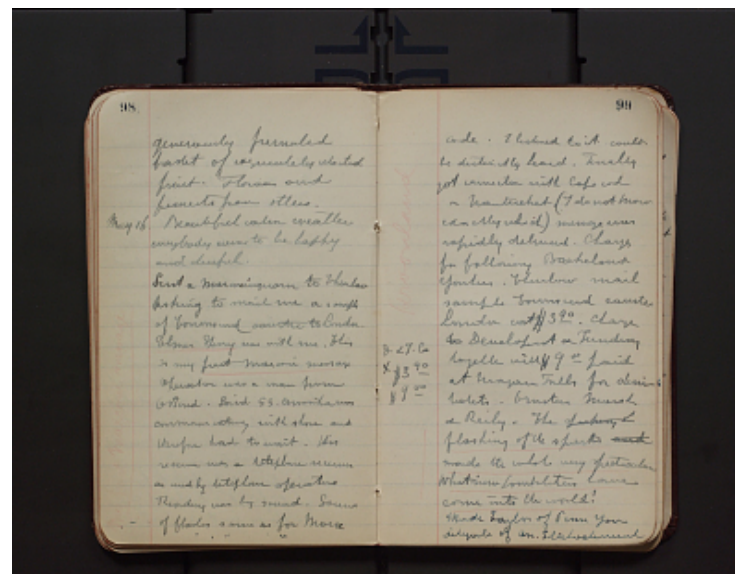
~~made the whole very spectacular. What new~~

possibilities have come into the world!

M? Taylor of Penn Yan delegate of Am. Electrochemical

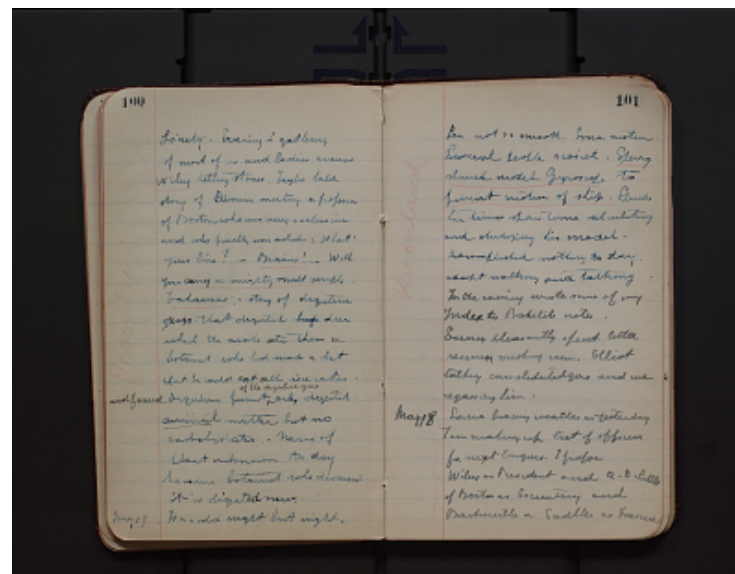
D & F Co. X \$3.90 \$9.00 written in left margin

end page



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

100  
 Koonland  
 Society. Evening - gathering of most of us and ladies around  
Wiley telling stories. Taylor told story of  
 meeting a professor of Boston who was very exclusive and  
 who finally was asked: What's your line? - Brains!  
 - Well you carry a mighty small sample.  
 Takamine's story of digestive grass that digested  
~~beef~~ ~~deer~~ which the ~~?~~ ate then a  
 botanist who had made a bet that he could eat all rice cakes ~~of~~  
 and found ~~digestive~~ ~~ferment~~ <sup>^</sup> ~~animal~~  
 of the digestive gas ~~only~~ digested animal  
 matter but no carbohydrates. Name of plant unknown  
 today because botanist who discovered it is digested now.  
 May 17 Was a cold night last night.  
 end page  
 start page  
 101  
 Koonland  
 Sea not so smooth. Some motion Several people seasick.  
Sperry showed model Gyroscope to prevent motion of  
 ship. Spends his ~~time~~ spare time calculating and studying his model. Accomplished nothing to  
 day except walking and talking.  
 In the evening wrote some of my Index to Bakelite notes. Evening  
 pleasantly spent little reunion smoking room. Elliot talking consolidated  
 gas and we regassing him.  
 May 18 Same bracing weather as yesterday I am  
 making up list of officers for next Congress. I propose Wiley as  
 President and A. B. Little of Boston as Secretary and Baskerville or  
 Sadler as Treasurer



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

102

We must by all means avoid that this whole thing should degenerate in a General Chemical-[[Elberfeld?]]-commercialized affair.

~~Yesterday~~ Yesterday I won the pool on the run of the ship.

(Takamine started it) to day I won it again.

Spent morning writing up conditions for european licenses. Submitted to Toch who thinks prices too low and advised me to add 50% which I did.

May 17 I won the ~~poof~~ pool for the second time. Wiley yells "robber" whenever he sees me. Elliot calls me "brigand". Jolly roasting going on all the time

[[Kroonland written in red vertically in margin]]

[[end page]]

[[start page]]

103

Some pitching - several seasick.

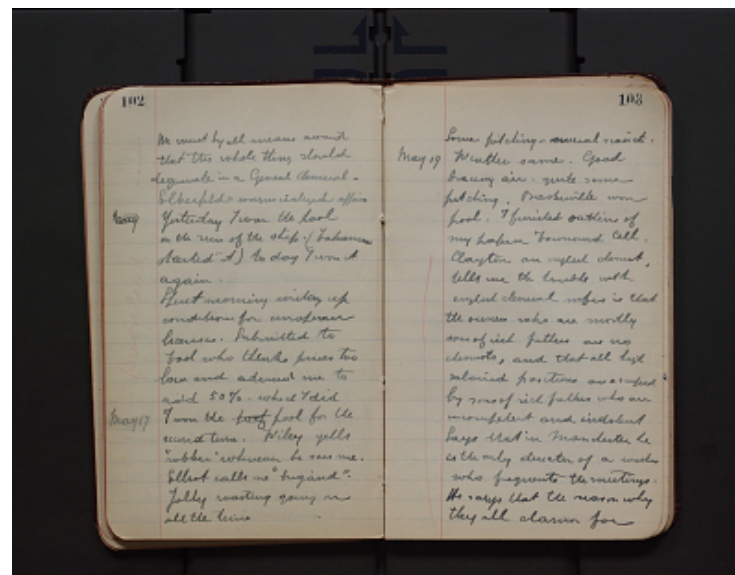
May 19 Weather same. Good bracing air. quite some pitching.

Baskerville won pool. I finished outline of my paper on Townsend Cell.

[[red line vertically in margin]]

Clayton an english chemist, tells me the trouble with english chemical mfrs is that the owners who are mostly sons of rich fathers are no chemists, and that all high salaried positions are accepted by sons of rich fathers who are incompetent and indolent. Says that in Manchester he is the only director of a ~~factory~~ who frequents the meetings. He says that the reason why they all clamor for

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

104

Kroonland

protection!

May 20 Bright weather. Some rolling. Some seasick. Spent morning on my paper Townsend Cell. Sperry went over it and we curve in pencil under some difficulties: ship rolling

~~Baskerville~~ Wesson got the pool.

May 21 Beautiful weather again. Toch & Baskerville made our group. Almost all people recovered from seasickness.

Sperry this afternoon explained his gyroscope before assembled saloon passengers with his operating small model. A rather complicated

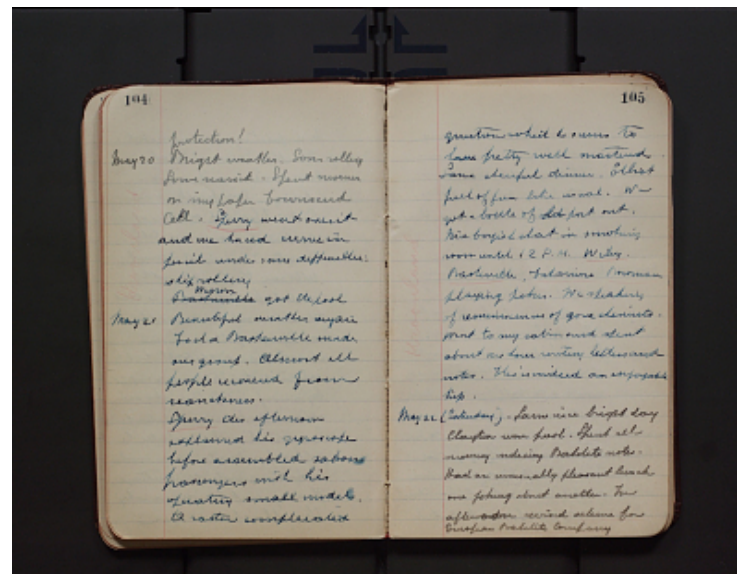
question which he seems to have pretty well mastered. Same cheerful

dinner. Elliot full of fun like usual. We got a bottle of old port out. Nice

boyish chat in smoking room until 12 P.M. Wiley, Baskerville, Takamine, Borman

playing poker. We speaking of reminiscences of gone chemists. Went to my cabin and spent about one hour writing letters and notes. This is indeed an enjoyable trip.

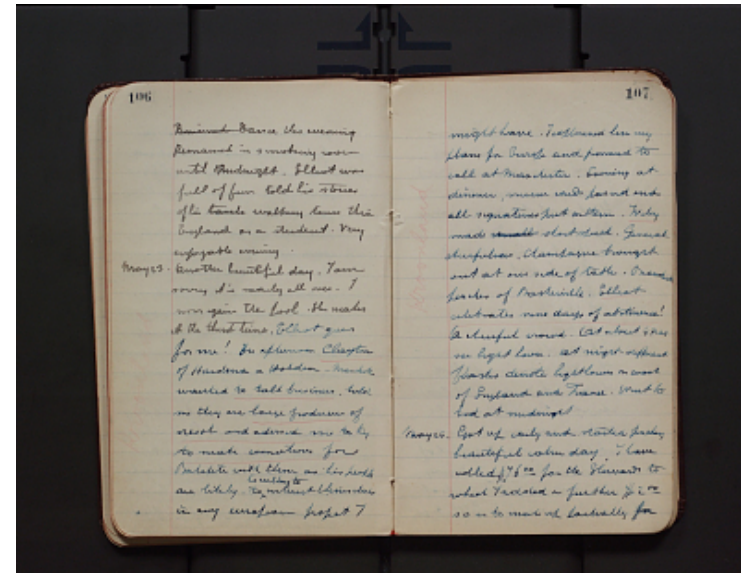
May 22 (Saturday). Same nice bright day. Clayton won pool. Spent all morning indexing Bakelite notes. Had an unusually pleasant lunch one joking about another. In afternoon revised scheme for European Bakelite Company



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

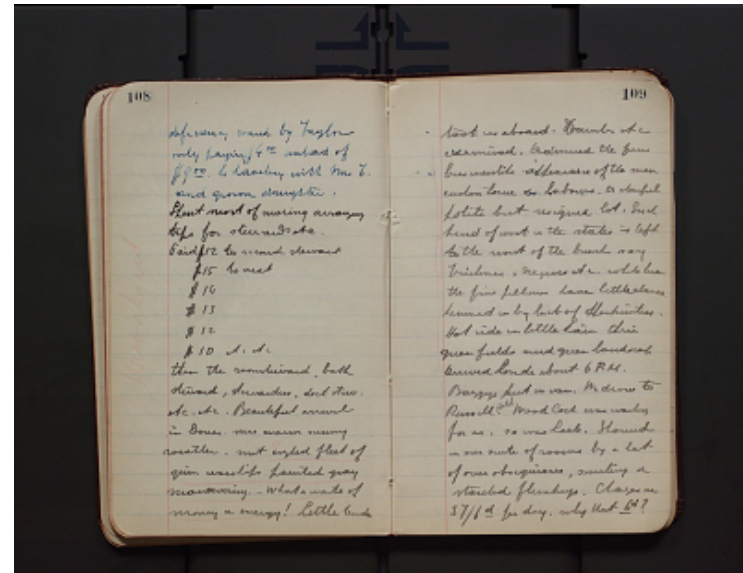


106  
 Remained in smoking room until midnight. Elliot was full of fun told his stories of his travels walking tours thru England as a student. Very enjoyable evening.  
 May 23  
 Kroonland  
 Another beautiful day. I am sorry it's nearly all over. I won again the pool. This makes it the third time. Elliot goes for me! In afternoon Clayton of Hardman & Holden - Manchester wanted to talk business. Told me they are large producers of cresol and advised me to try to make connections for Bakelite with them as his people are likely to be willing to interest themselves in any european project!  
 May 24  
 Got up early and started packing, beautiful calm day. I have collected \$76.00 for the Stewards to which I added a further \$2.00 so as to make up partially for



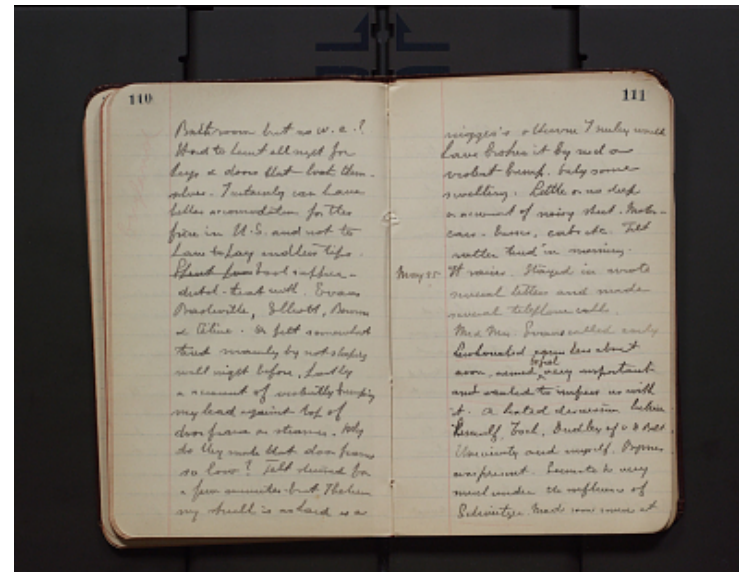
Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

108  
 Kronland  
 deficiency caused by Taylor only paying \$4.00 instead of \$9.00. he traveling with Mrs. T. and grown daughter.  
 Spent most of morning arranging tips for stewards etc.  
 Paid \$12 to second steward  
 \$15 to next  
 \$14  
 \$13  
 \$12  
 \$10 etc etc  
 then the roomsteward, bath steward, stewardess, deck stew. etc. etc.  
 Beautiful arrival in Dover. nice warm sunny weather. met English fleet of grim warships painted gray maneuvering. What a waste of money & energy! Little tender  
 took us aboard. Documents? etc. examined. Admired the fine businesslike appearance of the men custom house & laborers. A cheerful polite but resigned lot. Such kind of work in the states is left to the worst of the bunch say Irishmen, Negroes etc. while here the fine fellows have little chance. Hemmed in by lack of opportunities. Hot ride in little train thru green fields and green landscape. Arrived about 6 P.M. Baggage put in van. We drove to Russell Hotel. Woodcock was waiting for us. So was Loeb. Showed us our suite of rooms by a lot of over obsequious, smiling & starched flunkeys. Charges are 37/6 <sup>d</sup> per day. why that 6 <sup>d</sup>?



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

110  
 England  
 Bathroom but no w.c.? had to hunt all night for keys & doors that lock themselves. I certainly can have better accommodation for this price in U.S. and not to have to pay endless tips. ~~Spent for~~ Took supper - dutch treat with Evans Baskerville, Elliott, Bowman & Celine. I felt somewhat tired mainly by not sleeping well night before. Partly on account of violently bumping my head against top of door frame on steamer. Why do they make that door frame so low? Felt stunned for a few minutes. but I believe my skull is as hard as a  
 end page  
 start page  
 111  
 nigger's otherwise I surely would have broken it by such a violent bump. Only some swelling. Little or no sleep on account of noisy street. Motorcars - busses, cabs etc. Felt rather tired in morning.  
 May 25 It rains. Stayed in wrote several letters and made several telephone calls.  
 Mr & Mrs Evans called early Lewhourtich? came here about noon, seemed <sup>^</sup> to feel <sup>^</sup> very important and wanted to impress us with it. A heated discussion between himself, Toch, Dudley of V. D. Bilt University and myself. Byrnes was present. Seems to be very much under the influence of Schweitzer. Made some sneers at



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

112

[[illegible entry written vertically in margin]]

small importance of NY. Section and how much money it takes etc Defied us to withdraw and "quand même!" sneered at Journal of Am. chem. Society. Dealt out some more patronage then left. At 4:30 meeting (in room of Wiley) of delegates. Nichols, Toch, Loeb, Wiley, Dudley Baskerville present. Elected Wiley our president. Question was raised whether invitation meant N.Y or Washington. It was decided that the question we were unauthorized to present altho' Nichols seemed to favor New York. Decided to call at Ambassador Whitelaw Reid on Thursday at 11 A.M. Took supper with Celine at Hotel.

May 26. At 10:30 Meeting of Society Chemical

[[end page]]

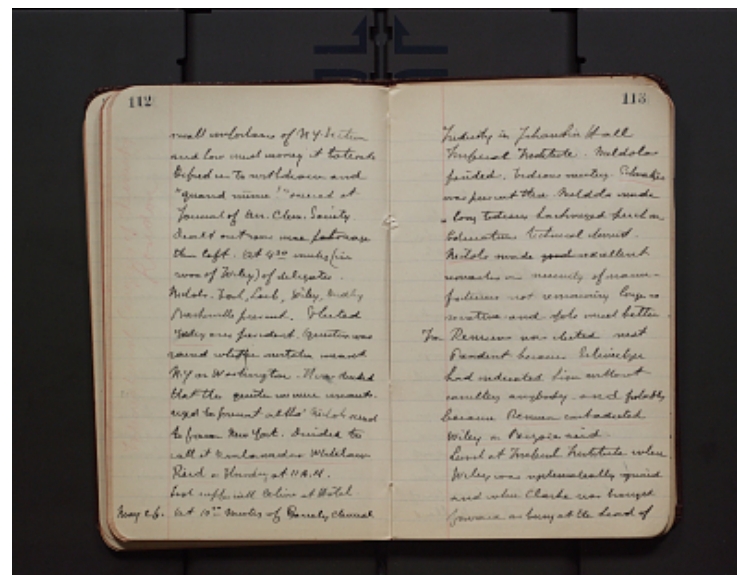
[[start page]]

113

Industry in Jehandrir Hall Imperial Institute. Meldola presided. Tedious meeting. Schweitzer was present there. Meldola made a long tedious hackneyed speech on education technical chemist. Nichols made ~~good~~ excellent remarks on necessity of manufacturers not remaining longer so secretive and spoke much better. Jim? Remsen? not elected next President because Schweitzer had inducted him without consulting anybody and probably because Remsen? contradicted Wiley on Benzoic acid. Wiley on Benzoic acid.

Lunch at Imperial Institute where Wiley was systematically ignored and where Clarke was brought forward as being at the head of

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

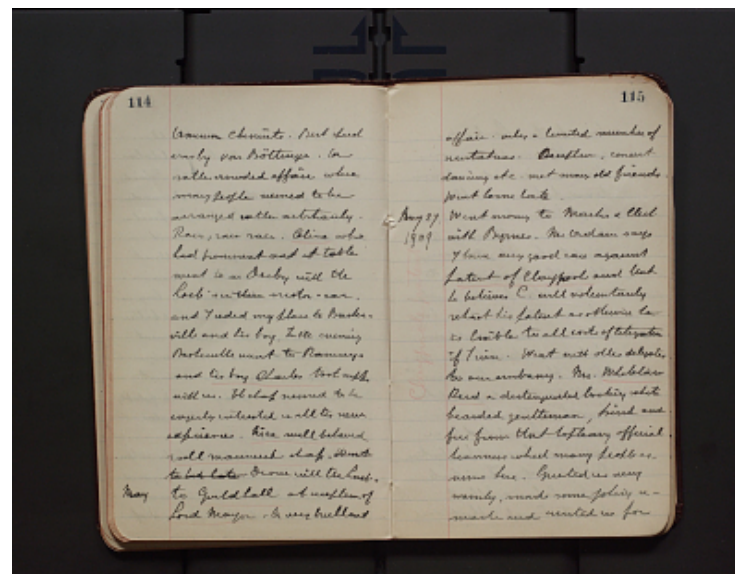
114  
American Chemists. Best speech was by von Böttinger. A rather crowded affair where many people seemed to be arranged rather arbitrarily. Rain, rain rain. Celine who had prominent seat at table went to see Derby with the Loeb's in ~~their~~ motor car and I ceded my place to Baskerville and his boy. In the evening Baskerville went to Ramseys and his boy Charles took supper with us. The chap seemed to be eagerly interested in all his new experiences. Nice well behaved well mannered chap. ~~Went to bed late.~~ Drove with the Loeb's ~~May~~ May to Guildhall at reception of Lord Mayor. A very brilliant

[[end page]]  
[[start page]]

115  
affair. only a limited number of invitations. Reception, concert dancing etc. met many friends. Went home late.

May. 27 1909

Claypool patent  
Went morning to Martin & Clark with Byrnes. Mc Adam says I have very good case against patent of Claypool and that he believes C. will voluntarily retract his patent as otherwise he is liable to all costs of litigation if I win. Went with other delegates to our embassy. Mr. Whitelaw Reid a distinguished looking white bearded gentleman, kind and free from that official which many people assume here. Greeted us very warmly, made some joking remark and invited us for



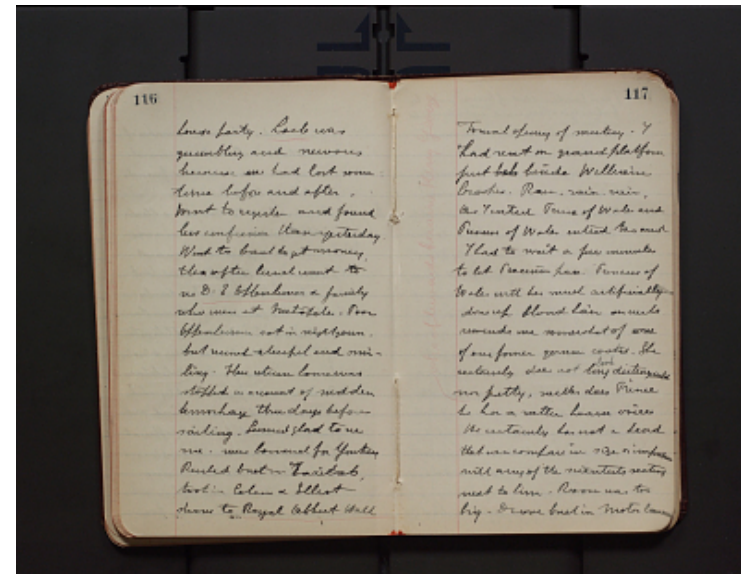
Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 116 [[/preprinted]]  
large party. Loeb was grumbling and nervous because we had lost some time before and after. Went to register and found less confusion than yesterday. Went to bank to get money, then after lunch went to see D.E. Oppenheimer & family who were at Metropole. Poor Oppenheimer sat in night gown, but seemed cheerful and smiling. His return home was stopped on account of sudden hemorrhage three days before sailing. Seemed glad to see me. Were homesick for Yonkers. Rushed back in taxicab. Took in Celine & Elliot drove to Royal Albert Hall

[[end page]]  
[[start page]]

[[preprinted]] 117 [[/preprinted]]  
Formal opening of meeting. I had seat on grand platform just ~~beh~~ beside William Brookes. Rain, rain, rain. As I entered Prince of Wales and Princess of Wales entered too and I had to wait a few minutes to let procession pass. Princess of Wales with her much artificially done up blond hair in curls reminds me somewhat of ~~the~~ of our former german cook. She certainly does not look distinguished nor pretty, neither does Prince

[[written vertically in red in margin]] who afterwards became King George  
he has a rather hoarse voice He certainly has not a head that can compare in size or impression with any of the scientists seating next to him. Room was too big. Drove back in Motor Car



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

118 I am positive that if he was not the future heir of England nobody would notice him. and we laid down for some much desired rest. Wiley spoke very well. and made the only speech that did not contain platitudes and had some individuality. His enemies afterwards tried to misconstrue the meaning of his speech. Professor Witt <sup>^</sup> of Berlin made a very artificial flowery speech ending with a platitude of <sup>servility?</sup> which even disgusted the Germans. After all was over when going out I met <sup>^</sup> Sir William Ramsay who was just entering his carriage and kindly stopped to shake hands and inquire about Bakelite and by some questions he asked me convinced that he was unusually interested in the subject and had read my papers. Celine & Elliot & myself drove back

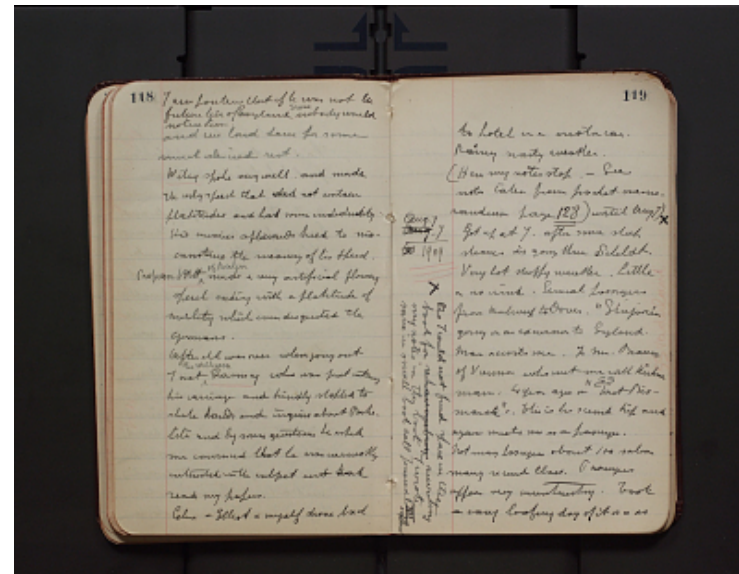
119

Aug 7 ~~Aug.~~ ~~7~~ (2) ~~1909~~

X As I could not find space in the book for ~~rehanu?~~ rewriting my notes in this book I wrote same in small book call Journal IIII supplement

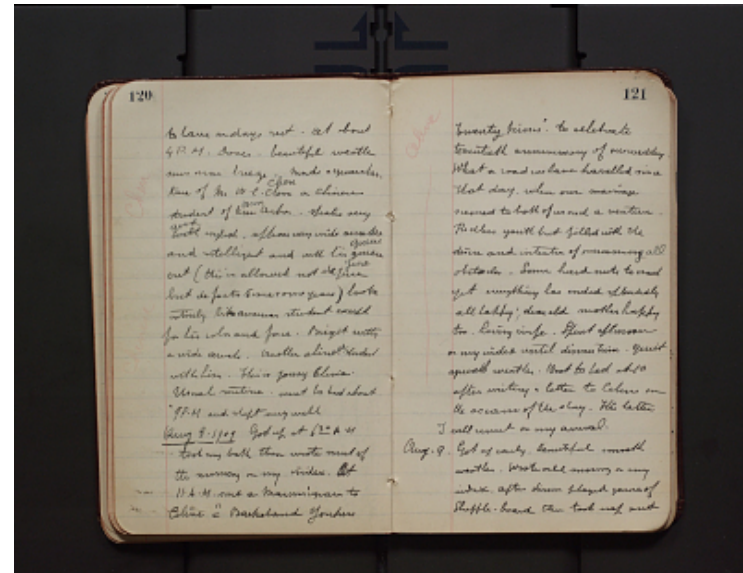
to hotel in a motorcar. Rainy nasty weather. (Here my notes stop. - See notes taken from pocket memorandum page 128 until Aug 7) x

Got up at 7. after some sleep steamer is going thru Scheldt. Very hot stuffy weather. Little or no wind. Several passengers from Antwerp to Dover. "Sinporien?" going on an excursion to England. Man accosts me. Is Mr. Braun? of Vienna who met me with Kühneman. 4 years ago on "SS Forst Bismarck." This is his second trip and again meets me as a passenger. Not many passengers about 100 saloon many second class. Passengers appear very uninteresting. Took ~~a~~ <sup>an</sup> ~~loafing~~ <sup>loafing</sup> day of it so as ~~SS~~ <sup>SS</sup> ~~Vaderland~~ <sup>Vaderland</sup>



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

to have a days rest. At about 4 P.M. Dover. beautiful weather some more breeze. Made acquaintance of Mr. W. C. Chen a Chinese student of Ann Arbor. speaks very ~~well~~ good english. appears very wide awake and intelligent and with his queue cut (this is allowed not de jure but de facto since some years) looks entirely like american student except for his color and face. Bright witty and wide awake. Another chinese student with him. This is young China. Chinese  
 Usual routine. went to bed about 9 P.M. and slept very well  
Aug 8 1909 Got up at 6:30 A.M took my bath then wrote most of the morning in my index. At 11 A.M. sent a Marconigram to Celine " " "  
 Baekeland Yonkers  
 [end page]  
 [start page]  
 [preprinted] 121 [preprinted]  
 [Celine followed by vertical red line in margin]  
 twenty kisses". to celebrate twentieth anniversary of our wedding. What a road we have travelled since that day when our marriage seemed to both of us such a venture. Reckless youth but filled with the desire and intention of overcoming all obstacles. Some hard nuts to crack yet everything has ended splendidly all happy; dear old mother happy too. Loving wife. Spent afternoon on my index until dinner time. quiet agreeable weather. Went to bed at 10 after writing letter to Celine on the occasion of the day. This letter I will remit on my arrival.  
 [margin] Aug 9. [margin] Got up early. beautiful smooth weather. Wrote all morning on my index. After dinner played game of Shuffle-board then took nap and



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07



122

SS Chinese

wrote in my notes until Supper. Went to bed at 10.. Rather warmer & damp weather.

Aug 10. Beautiful smooth seas. Up early. Wrote all morning index. Ditto afternoon. Very dull uninteresting company on this ship. Gives me a chance to work. To bed at 10.

Aug 11. Rained during night. More sultry but calm weather. Up at 6. Worked all ~~day~~ morning at my notes. Some fog. Rainy foggy weather all day. Worked on Index this afternoon until I got tired. Wang the chinese student came in my room. We talked philosophy & sociology and I was surprised at the broadness of his views. I see no difference between Wang and Chen and the best wholesome cheerful american boys of same age. And all this shows once more how we

end page

start page

123

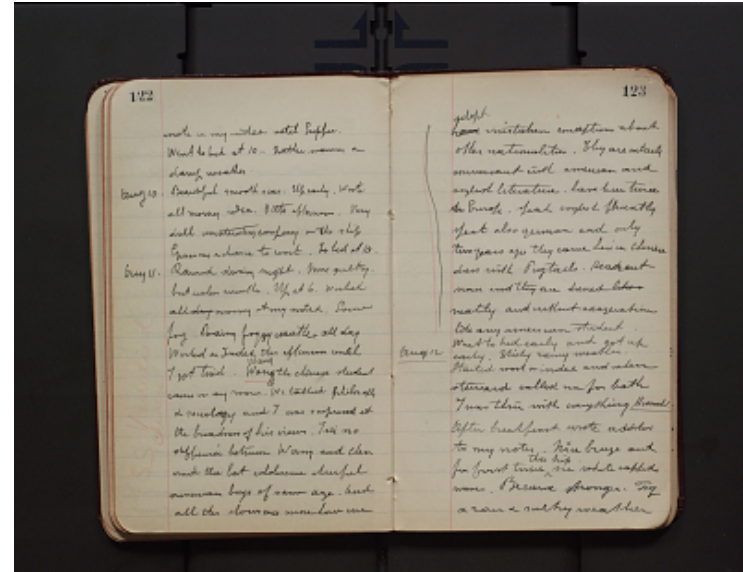
black and red lines down side of left margin

~~have~~ adopt mistaken conceptions about other nationalities. They are entirely conversant with american and english literature. have been twice to Europe. speak english fluently speak also german and only two years ago they came here in Chinese dress with Pigtails. ~~now~~ now and they are dressed like a ~~neatly~~ neatly and without exaggeration like any american student.

Aug 12

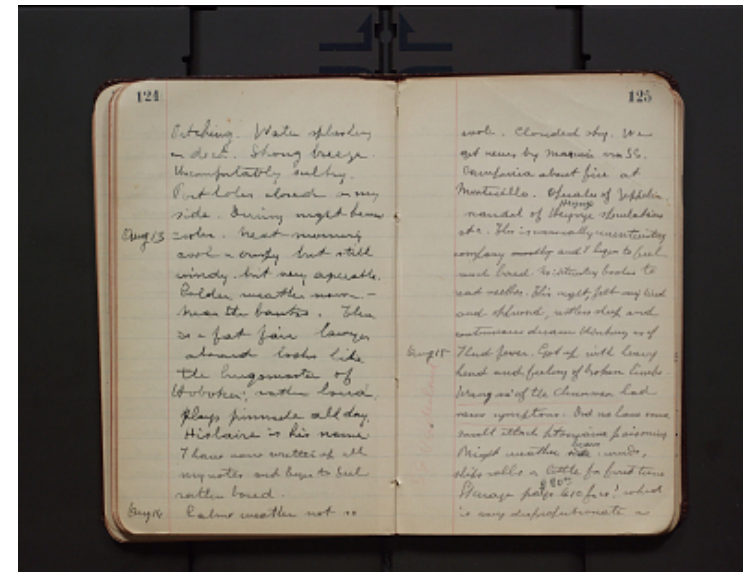
Went to bed early and got up early. Sticky rainy weather. Started work on index and when steward called me for bath I was thru with everything. Hurrah!

After breakfast wrote addition to my notes. Nice breeze and for first time this trip see white capped waves. Became stronger. Fog & rain & sultry weather



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 124 [[/preprinted]]  
Pitching. Water splashing on deck. Strong breeze. Uncomfortably sultry. Portholes closed on my side. During night became cooler.  
[[margin]] Aug. 13 [[/margin]] Next morning cool & crispy but still windy, but very agreeable. Colder weather now - near the ~~banks~~. There is a fat fair lawyer aboard looks like the burgomaster of Hoboken, rather loud plays pinnocle all day. Hislaire is his name. I have now written up all my notes and begin to feel rather bored.  
[[margin]] Aug 16 [[/margin]] Calmer weather not so  
[[end page]]  
[[start page]]  
[[preprinted]] 125 [[/preprinted]]  
cool. Clouded sky. We get news by Marconi via SS. Compania about fire at Monticello. Operator of Zeppelin scandal of Heynze speculations etc. This is unusually uninteresting company ~~mostly~~ and I begin to feel much bored. No interesting books to read neither. This night, felt very tired and oppressed, restless sleep and continuous dream thinking as if I had fever.  
[[margin]] Aug 15 S.S. Vaderland [[/margin]]  
Got up with heavy head and feeling of broken limbs. Wang one of the Chinamen had same symptoms. Did we have some small attack ptomaine poisoning Bright weather ~~side~~ beam winds, ship rolls a little for first time. Steerage pays \$80.00 410 frs? which is very disproportionate as



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

126

compared to 1st class. One of the Russian Jews who goes back to Armenia gets bad food and bad lodging and pays for all the good things of 1st class. I think the man is right, and that's the way it goes in our civilization. The two young Chinamen are married and have each four children at home! No race suicide there! After lunch felt better and took a refreshing nap. Nantucket light ship -- some fishing schooners. Wrote a few more letters then went to bed.

Aug 16. Got up at 5:45 AM. packed my trunks. Gray morning, then rain. more rain. much rain when at 9 A.M. arrived at Pier. Celine not there. Very very rainy weather! Got thru customs formalities longer than at 10:15 AM. Drove in ~~drenching~~ drenching rain

127

to Belmont Hotel. Found there Celine had gone to dock. Shortly afterwards she came back. This is the rainiest day on record since 37 years. Nice room. Kept inside all day talking matters over. Celine looked prettier and younger than ever. Took lunch at hotel also supper then went to bed.

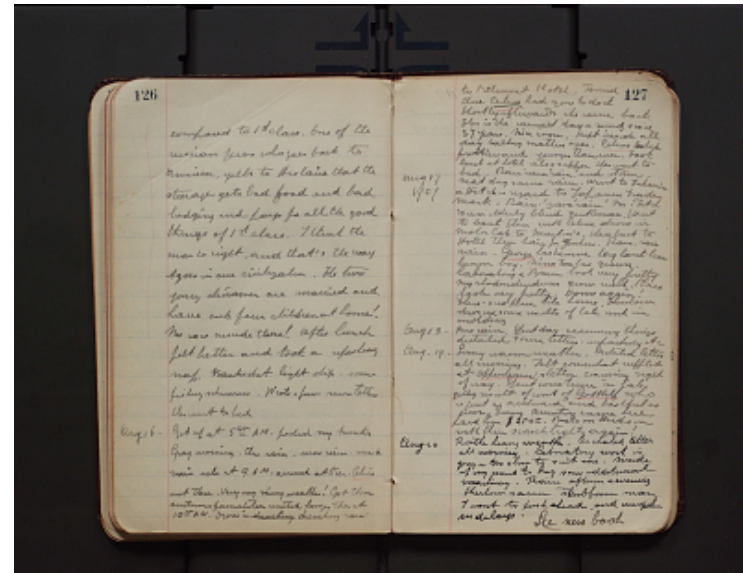
Aug 17 1909  
Rain rain rain and storm. Next day same rain. Went to Takamine & Hitch in regard to Japanese trade mark. Rain! rain! rain! Mr. Hitch is an elderly blind gentleman. Went to bank then with Celine drove in Motor Cab to Martin's then back to Hotel then train for Yonkers. Rain. rain rain. George has become elegant lean brown boy. Nina too has grown. Laboratory & Barn look very pretty. My rhododendrons grow well. Place looks very pretty. Home again! There's no place like home. Thurlow shows me some results of late work in molding.

Aug 18. More rain. Spent day examining things dictated some letters. unpacking etc

Aug 19. Sunny warm weather Dictated letters all morning. Felt somewhat ruffled at Oppenheimer's letter concerning right of way. Spent some time in lab getting result of work of Gotthelf who is just as awkward and bashful as ever. Evening Armstrong came here paid him \$250.00. Boats on Hudson with their search lights again!

Aug 20 Rather heavy weather. Dictated letters all morning. Laboratory work is going on too slow to suit me. Made up my mind to buy some additional machinery. Rain afternoon & evening Thurlow same stubborn man I want to push ahead and everywhere see delays.

See new book



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

[[preprinted]] 128 [[/preprinted]]  
See continuation of page 119. rewritten from a pocket memorandum covering period between May 28 1909 and Aug. 6 1909

May 28, 1909 (continued)  
Evening Banquet in Crystal Park. Quite a mix up for accommodation. Toch Mrs. B. Dr. & Mrs. Byrnes & Baskerville, Celine and myself tried to find place. Met Dr. Oscar Blank for first time. was not favorably impressed with his heavy watery pale head. Mixing up of our seats. Finally got all seats together near estrade. Schweitzer had managed to sit at extreme of estrade! Cheeky cunning fellow. Dinner was well served abundance of good food and more champagne and wine than necessary. Best served dinner of the kind I ever saw - 2000 members Same d.f. ~~Maste~~ "Toast master" with his cant face

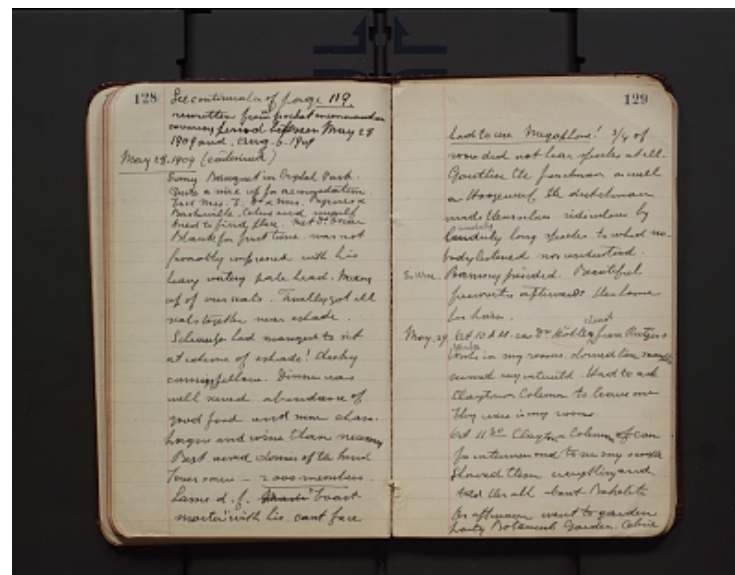
[[end page]]

[[start page]]

[[preprinted]] 129 [[/preprinted]]

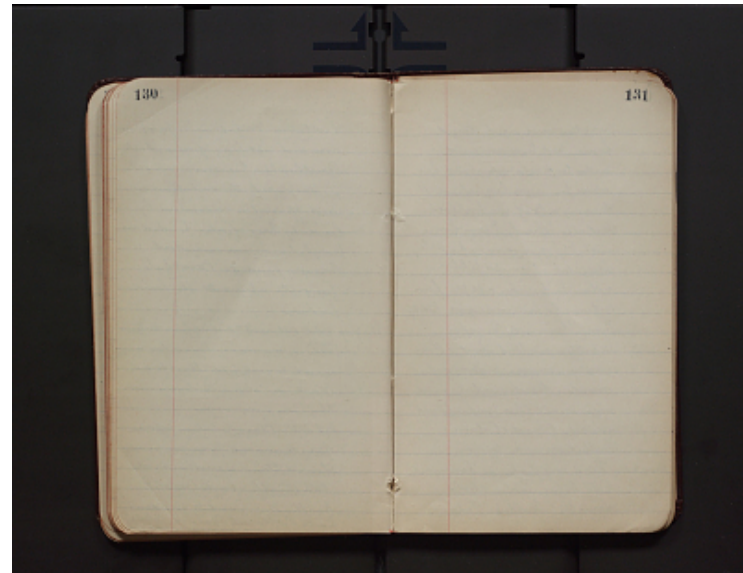
had to use Megaphone! 3/4 of room did not hear speeches at all. Gautlier the frenchman as well as Hoogewerf the dutchman made themselves ridiculous by unduly <sup>unduly</sup> long speeches to which nobody listened nor understood. Sir Wm. Ramsey presided. Beautiful fireworks afterwards then home by train.

[[margin]] May 29 At 10 AM. <sup>came?</sup> Dr. Köhler <sup>chemist</sup> from Reutgers Werke in my rooms. showed him samples seemed very interested. Had to ask Clayton & Coleman to leave me. They were in my rooms. At 11:30 Clayton & Coleman ~~of~~ came for interviews and to see my sample. Showed them everything and told them all about Bakelite. In afternoon went to garden party Botanical Garden. Celine



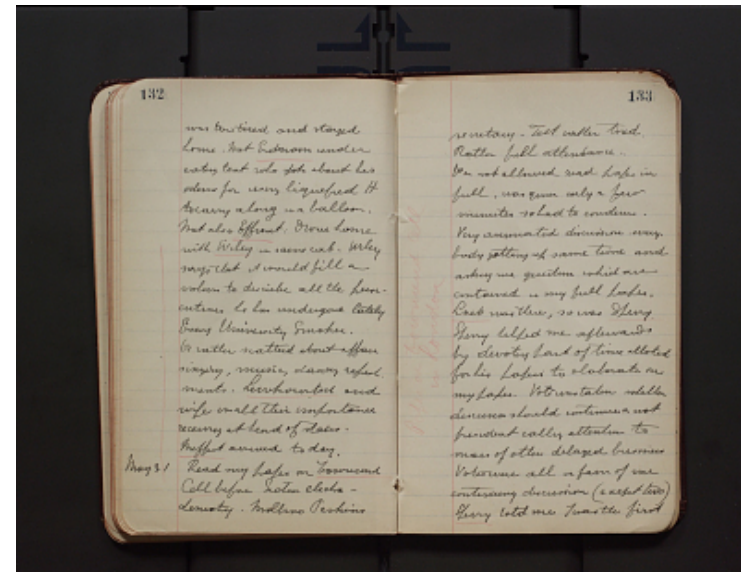
Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 130 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 131 [[/preprinted]]



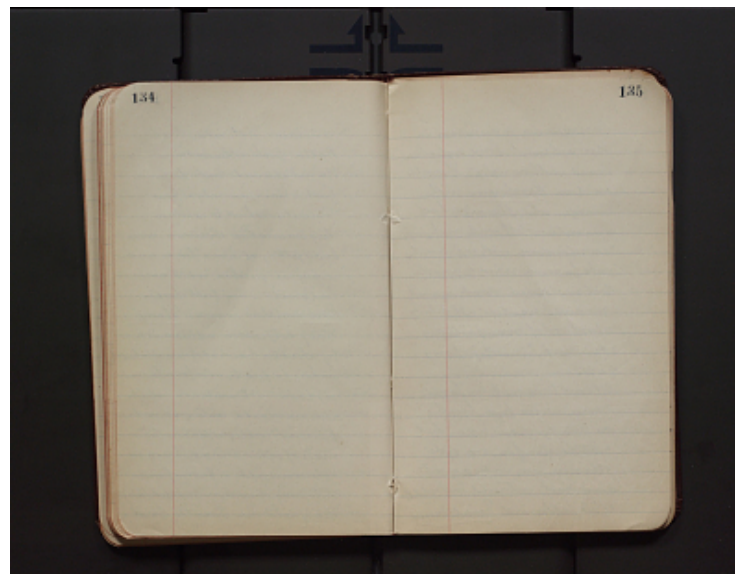
Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

132  
 was too tired and stayed home. Met Erdman under eating tent who spoke about his scheme for using liquefied H to carry along in a balloon. Met also Effrout? Drove home with Wiley in same cab. Wiley says that it would fill a volume to describe all the persecutions he has undergone lately  
 Every University Smoker.  
 A rather scattered about affair singing, music, dancing refreshments. Lewhorstael? and wife in all their importance receiving at head of stairs.  
Meffert? arrived today.  
 May 31 Read my paper on Townsend Cell before Section electro-chemistry. Mollivo Perkins  
 Paper on Townsend Cell in London  
 secretary. Felt rather tired. Rather full attendance. Was not allowed read paper in full, was given only a few minutes so had to condense. Very animated discussion. everybody getting up same time and asking me questions which are contained in my full paper. Loeb, was there, so was Sperry. Sperry helped me afterwards by devoting part of time allotted for his paper to elaborate on my paper. Vote was taken whether discussion should continue or not president calling attention to mass of other delayed business Votes were all in favor of me continuing discussion (except two) Sperry told me I was the first



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

[[preprinted]] 134 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[preprinted]] 135 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

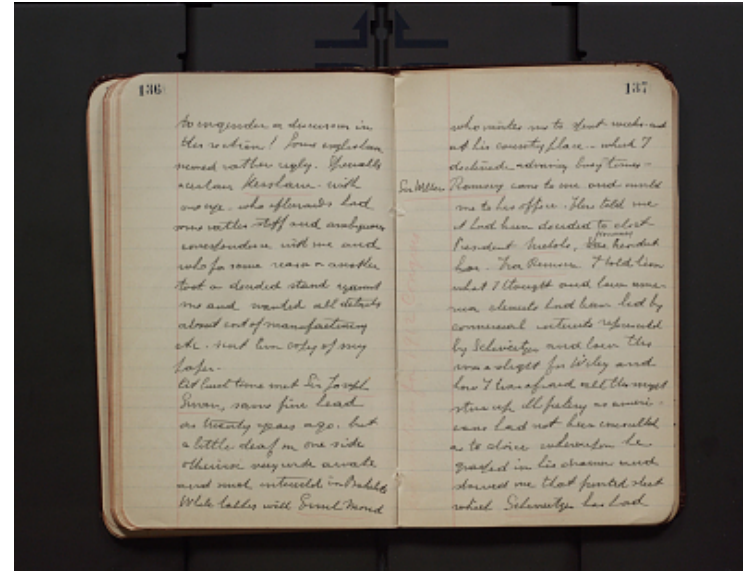
136  
to engender a discussion in this section! Some englishmen seemed rather ugly. Specially a certain Kershaw - with one eye - who afterwards had some rather stiff and ambiguous correspondence with me and who for some reason or another took a decided stand against me and wanted all details about cost of manufacturing etc. sent him copy of my paper.

At lunch time met Sir Joseph Swan, same fine head as twenty years ago but a little deaf on one side otherwise very wide awake and much interested in Bakelite. While talking with Emil Mond

137

[[written vertically in red in margin]] [?] for 1912 Congress

who invites me to spend week-end at his country place. - which I declined -- advancing busy times -- Sir William Ramsey came to me and invited me to his office. He told me it had been decided to elect President Nichols, ~~Vice~~ ~~Honorary President~~ hon Ira Remiro? I told him what I thought and how american chemists had been led by commercial interests represented by Schweitzer and how this was a slight for Wiley and how I was afraid all this might stir up ill feeling as americans had not been consulted as to choice whereupon he grasped in his drawer and showed me that printed sheet which Schweitzer has had



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07



138

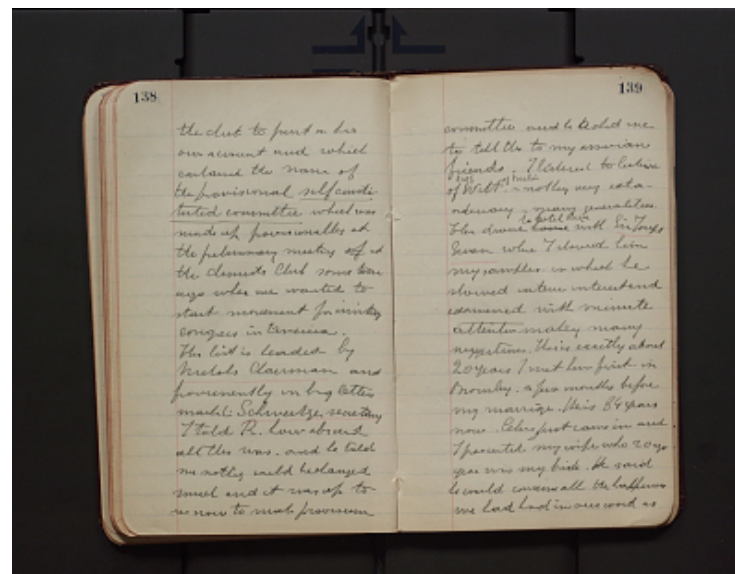
the sheet to print on his own account and which contained the name of the provisional self constituted committee which was made up provisionally at the preliminary meeting ~~of~~ at the Chemists Club some time ago when we wanted to start movement for inviting Congress in America. The list is head by Nichols Chairman and prominently in big letters marked: Schweitzer secretary. I told R. how absurd all this was and he told me nothing could be changed much and it was up to us now to make provisional

[[end page]]

[[start page]]  
139

committee and he asked me to tell this to my american friends. I listened to lecture of Prof. Witt of Berlin -- nothing very extraordinary -- many generalities. Then drove ~~home~~ to hotel with Sir Joseph Swan where I showed him my samples. in which he showed intense interest and examined with minute attention making many suggestions. This is exactly about 20 years I met him first in Bromley a few months before my marriage. He is 84 years now. Celine just came in and I presented my wife who 20 ago years was my bride. He said he could conceive all the happiness we had had in our work as

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

141

he had experienced a similar happiness. He then recited "Prometheus" of Longfellow and his visit made a profound impression on me. I felt this is a great reward for me coming from such a distinguished man. Invited us to his country house -- See Swan's letter but had to decline. Wants cylinder Bakelite & graphite largest proportions & some liquid Bakelite which I promised to send him.

~~June~~

In the evening I began to make list ~~for a~~ appointing Delegates as provisional committee so as to defeat the intrigues of Schweitzer

Schweitzer

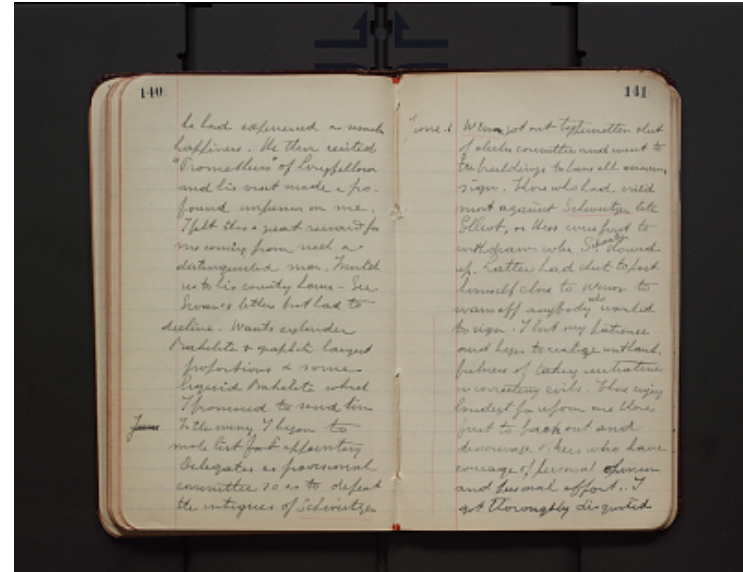
[[end page]]

[[start page]]

141

June 1. Wesson got out typewritten sheet of election committee and went to the buildings to have all answering sign. Those who cried most against Schweitzer like Elliot, or Hess were first to withdraw when Schweitzer showed up. Latter had to cheek to post himself close to Wesson to warn off anybody who wanted to

sign. I lost my patience and began to realize unthankfulness of taking initiative in correcting evils. Those crying loudest for reform are those first to back out and discourage others who have courage of personal opinion and personal effort. I got thoroughly disgusted



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

142

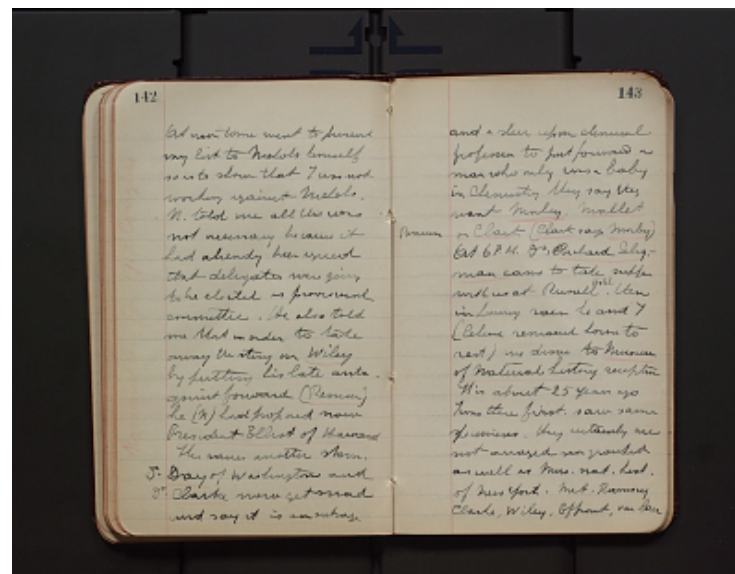
at noon time went to present my list to Nichols himself so as to show that I was not working against Nichols. N. told me all this was not necessary because it had already been agreed that delegates were going to be elected as provisional committee. He also told me that in order to take away the sting on Wiley by putting his late antagonist forward (Remsen) he (N) had proposed now President Elliot of Harvard. This means another storm. Dr. Day of Washington and Dr. Clarke now get mad and say it is an outrage

[[end page]]  
[[start page]]

143

and a slur upon chemical profession to put forward a man who only was a baby in Chemistry they say they want Morley Mallet Remsen or Clarke (Clarke says Morley) At 6 P.M. Dr. Richard Seligman came to take supper with us at Russell Hotel. Then in pouring rain he and I (Celine remained home to rest) we drove to Museum of Natural history reception It is about 25 years ago I was there first saw some specimens. they certainly are not arranged nor grouped as well as Mus. nat. hist. of New York. Met Ramsey Clarke, Wiley, Effort, van Lan

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

144

Drove home in rain rather tired.

International Congress

June 2. General meeting. Whitelaw Reid there made good speech So did Wiley inviting to next Congress. I observed face of Nichols who seemed to try to find some reason again for finding fault with what Wiley said. -- Business interests! Elected Nichols who seems petulant, and Morley as President of honor. Wiley behaves like a man and does not seem to be affected altho' I know that the brave man is very much disappointed

Evening went for supper to Trocadero restaurant

[[end page]]

[[start page]]

145

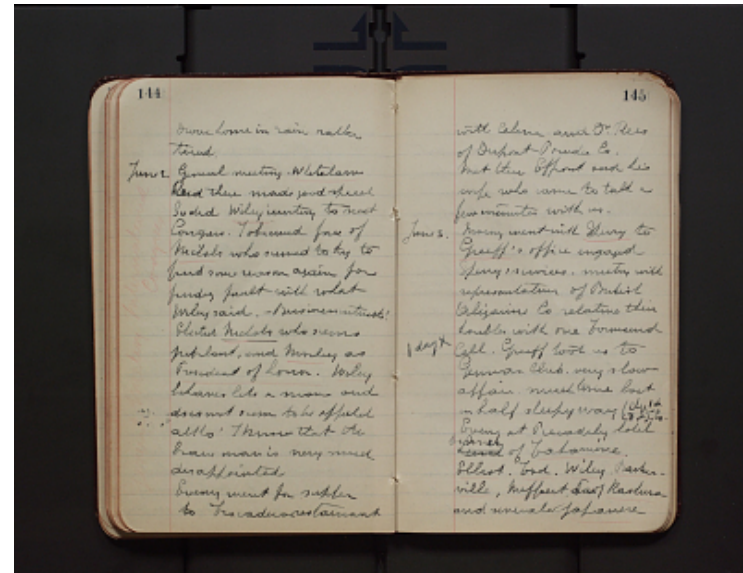
with Celine and Dr. Rees of Dupont Powder Co. Met there Effrout and his wife who came to talk a few minutes with us.

June 3. Morning went with Sperry to Greiff's office engaged Sperry's services. meeting with representative of British Olizarine? Co relative their troubles with one Townsend Cell.

[[1 day x in margin]]

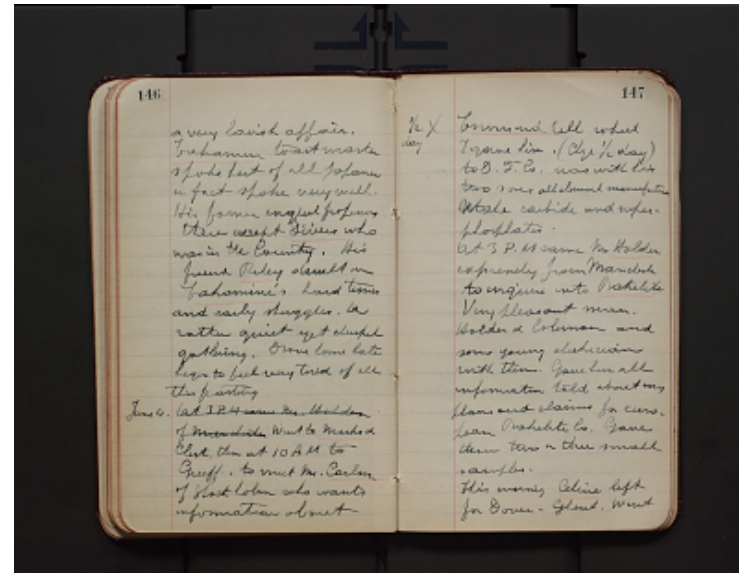
Greiff took us to German Club. very slow affair much time lost in half sleepy way (chge 1 day D. & F. Co. Evening at Piccadilly hotel Dinner of Takamine, Elliot, Toch, Wiley, Baskerville, Meffert Prof Rashura and several Japanese

[[end page]]



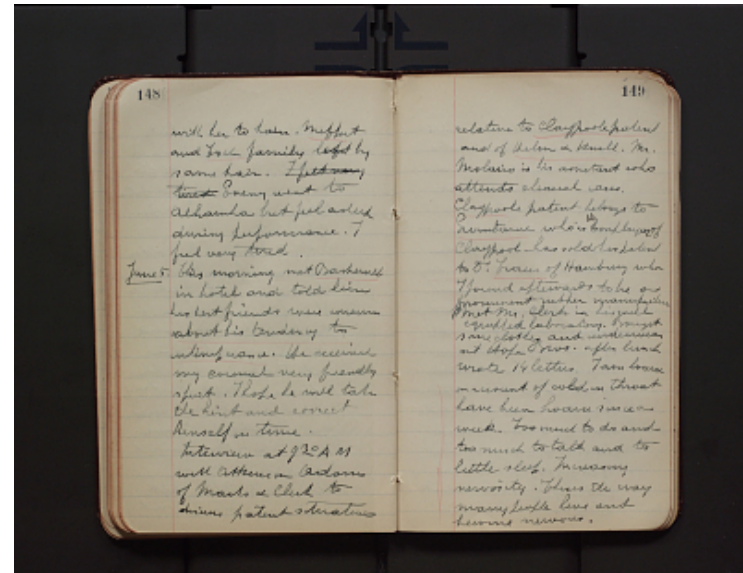
Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

146  
 a very lavish affair. Takamine toastmaster spoke best of all Japanese in fact spoke very well. His former english professors there except Diries? who was in the Country. His friend Riley dwelt on Takamine's hard times and early struggles. A rather quiet yet cheerful gathering. Drove home late Begin to feel very tired of all this feasting.  
 June 4. At 3 P.M. came Mr. ~~Holden of Manchester~~ Went to Marks & Clerk then at 10 AM to Grieff to meet Mr. Carlsen of Stockholm who wants information about  
 [end page]  
 [start page]  
 147  
 1/2 X day  
Townsend Cell which I gave him. (Chge 1/2 day) to D.F. Co. was with his two sons all chemical manufacturers Make carbide and super-phosphates.  
 At 3 P.M. came Mr. Holden expressly from Manchester to inquire into Bakelite Very pleasant man. Holden & Coleman and some young electrician with them. Gave him all information told about my plans and claims for european Bakelite Co. Gave them two or three small samples. This morning Celine left for Dover - Ghent. Went



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

[[preprinted]] 148 [[/preprinted]]  
 with her to train. Meffert and Toch  
~~Toch~~ family left by same train. I felt very  
 tired. Evening went to Alhambra but fell asleep during  
 performance. I feel very tired.  
 June 5. This morning met  
Baskerville in hotel and told him his best  
 friends were concerned about his tendency to  
 intemperance. He received my counsel very friendly spirit.  
 I hope he will take the hint and correct himself in time.  
 Interview at 9:30 AM with Atkinson Adams of Marks & Clerk to discuss  
 patent situation  
 [[end page]]  
 [[start page]]  
 [[preprinted]] 149 [[/preprinted]]  
 relative to Claypoole patent and of  
Helm & Knoll. Mr. Molaris is his assistant  
 who attends chemical cases. Claypoole  
 patent belongs to Swinburne who is  
 the employer of Claypool. has sold his patent to  
 Dr. Braun? of Hamburg who I found  
 afterwards to be a prominent rubber manufacturer. Met Mr. Clerk in his  
 well equipped laboratory. Bought some clothing and underwear at Hope  
 Bros. after lunch wrote 14 letters.   
 I am hoarse on account of cold in throat have been hoarse since a  
 week. Too much to do and too much to talk and to little sleep.  
 Increasing nervousity. This is the way many people live and become  
 nervous.



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

150

June 6. Sunday. wrote more letters. Up till noon have not seen von Vulinghoff nor heard of him. Has ~~he been Schweitzerized?~~ Schweitzer ~~he been Schweitzerized?~~ Took lunch with <sup>Dr.</sup> Dudley at Cafe de l'Europe. Spoke about Baskerville Dudley is a fine generous, level-headed fellow - a splendid man. excellent example of best type of american. We spent evening listening to concert in our Hotel. Since two days have taken simpler & less expensive quarters for myself. Instead of paying 37/6 I now pay only 8/ and like it better.

[[end page]]

[[start page]]

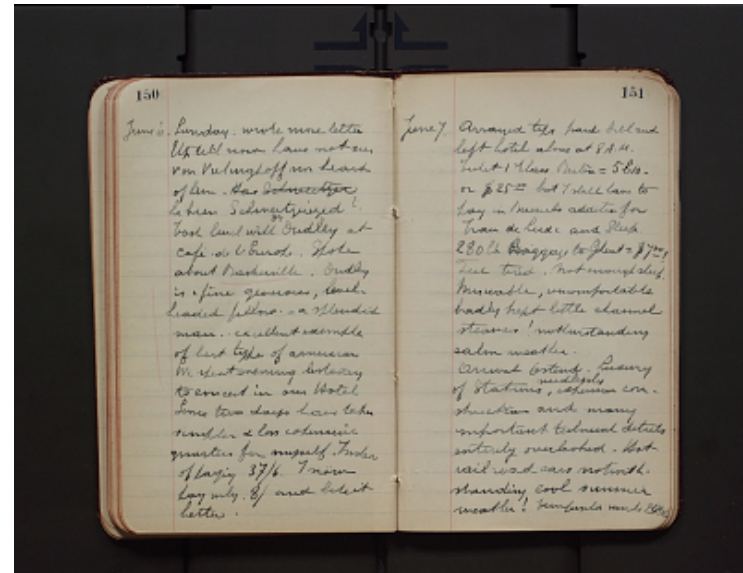
151

June 7. Arranged tips paid bill and left hotel alone at 8 A.M. Ticket 1st Class Berlin = 5£10 - or \$25.00 but I shall have to pay in Brussels addition for Train de Luxe and Sleeper. 280 lb Baggage to Ghent = \$7.00!

Feel tired. Not enough sleep. Miserable, uncomfortable badly kept little channel steamers! notwithstanding calm weather.

Arrival Ostend. Luxury of Stations, <sup>needlessly</sup> expensive construction and many important technical details entirely overlooked. Hot railroad cars notwithstanding cool summer weather! Temperature under 24C

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 152 [[/preprinted]]

Arrival in Ghent. Same sleepy city Drove to Celine's mother. She was glad to see me. Her sister looks very vulgar, heavy and without manners and conceit and arrogance equal her slovenliness Very awkward to meet. After some painful 20 minutes drove off with Celine to my mother. Glad meeting. Later on drove to Rocher de Cancale had a little feast all by ourselves. Crevettes. Sole meuniere and bottle of Tisane

[[end page]]

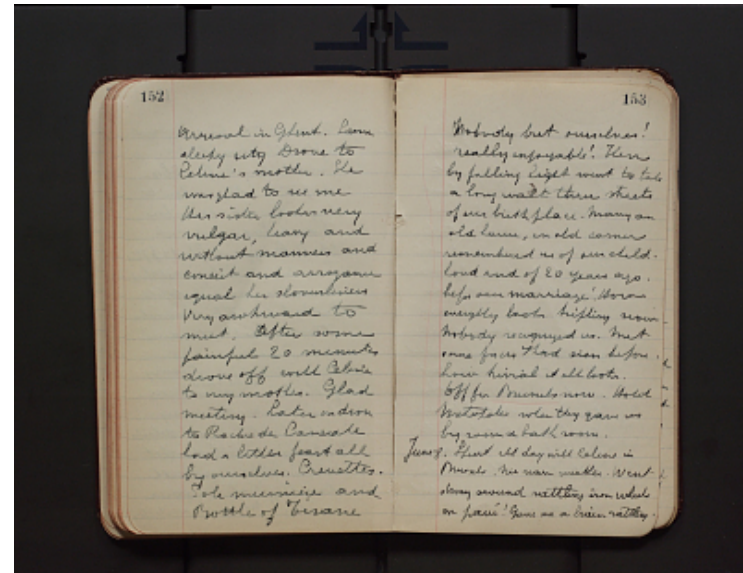
[[start page]]

[[preprinted]] 153 [[/preprinted]]

[[Vertical red line in margin to June 8 date]]

Nobody but ourselves! really enjoyable! Then by falling light went to take a long walk thru streets of our birthplace. Many an old house, an old corner remembered us of our childhood and of 20 years ago before our marriage! How everything looks trifling now Nobody recognized us. Met some faces I had seen before. how trivial it all looks. Off for Brussels now. Hotel Metropole where they gave us big room & bathroom.

[[margin]] June 8. [[/margin]] Spent all day with Celine in Brussels. Nice warm weather. Went driving around rattling iron wheels on pavé! Gave me a brain rattling.



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

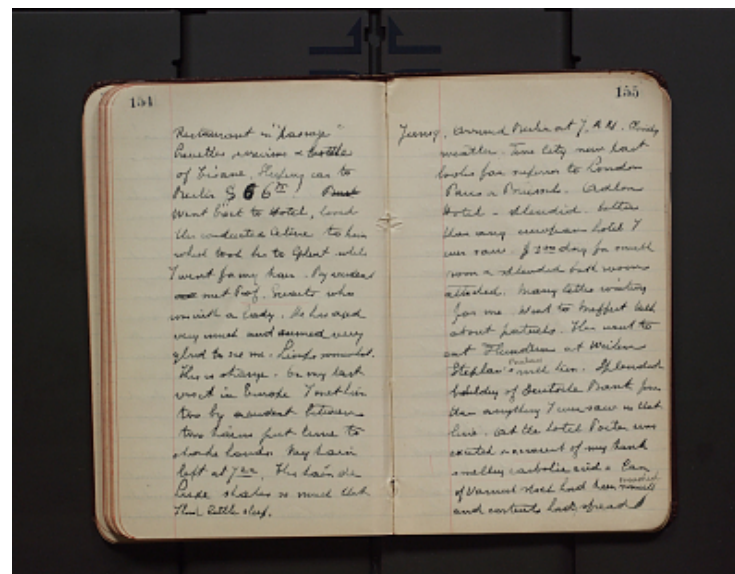


[[preprinted]] 154 [[/preprinted]]  
Restaurant in "passage" Crevettes, écrevisses & bottle Tisane.  
Sleeping car to Berlin \$66.75! ~~Back~~ ~~to~~  
Went back to Hotel, loved then conducted Celine to train which took her  
to Ghent while I went for my train. By accident ~~met~~ ~~met~~  
~~met~~ Prof. Swarts who was  
with a lady. He has aged very much and seemed very glad to see me.  
Limps somewhat. This is strange. On my last visit in Europe I met him  
too by accident between two trains first time to shake hands. My train  
left at 7:22. This train de Luxe shakes so much that I had little sleep.

[[end page]]

[[start page]]

[[preprinted]] 155 [[/preprinted]]  
[[margin]] June 9. [[/margin]] Arrived Berlin  
at 7 AM. Cloudy weather. Fine city new part looks far superior to  
London Paris or Brussels. Adlon Hotel - Splendid - better than any  
European hotel I ever saw. \$3.00 a day for small room & splendid  
bathroom attached. Many letter writing for me. Went to Meffert talk  
about patents. Then went to eat Flundern at Weihen Stephan's  
Bierhaus with him. Splendid building of  
Deutsche Bank finer than anything I ever saw in that line. At the hotel  
Porter was excited on account of my trunk smelling carbolic acid = Can of  
Varnish stock had been smashed and contents had spread



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

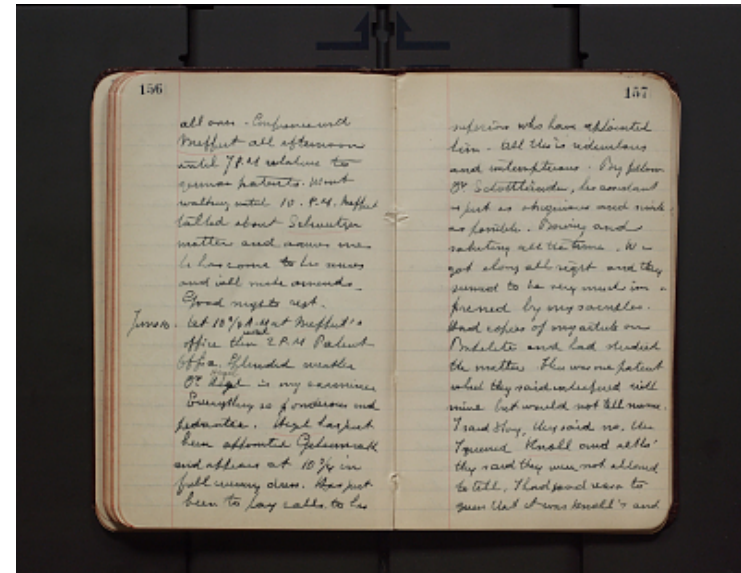
156  
all over. Conference with Meffert all afternoon until 7 P.M. relative to German patents. Went walking until 10 P.M. Meffert talked about Schweitzer matter and assures me he has come to his senses and will make amends. Good nights rest.

June 10

At 10 3/4 A.M. at Meffert's office then Hegel until 2 P.M. Patent Office. Splendid weather Dr. Hegl is my examiner Everything so ponderous and pedantic. Hegel has just been appointed Geheuserath and appears at 10 3/4 in full evening dress. Has just been to pay calls to his

157

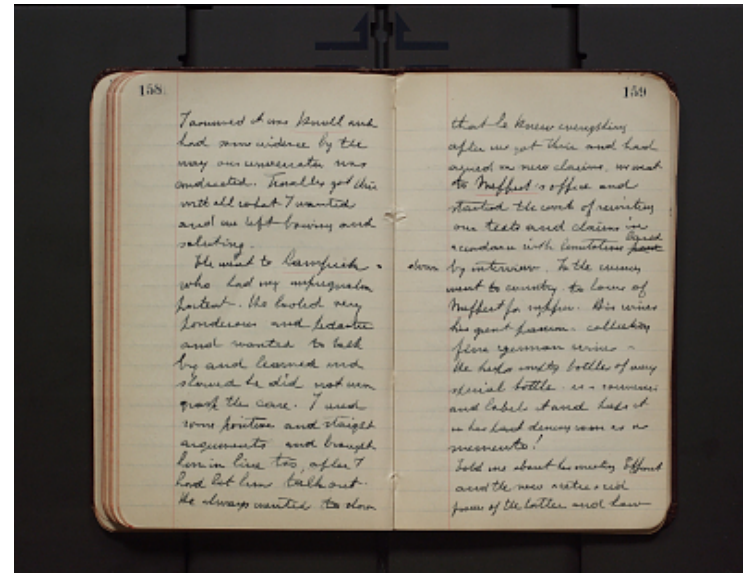
superiors who have appointed him. All this is ridiculous and contemptuous. My fellow Dr. Schottländer, his assistant is just as obsequious and servile as possible. Bowing and saluting all the time. We got along all right and they seemed to be very much impressed by my samples. Had copies of my article on Bakelite and had studied the matter. There was one patent which they said interfered with mine but would not tell name. I said Story, they said no, then I queried Knoll and altho' they said they were not allowed to tell, I had good reason to guess that it was Knoll's and



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

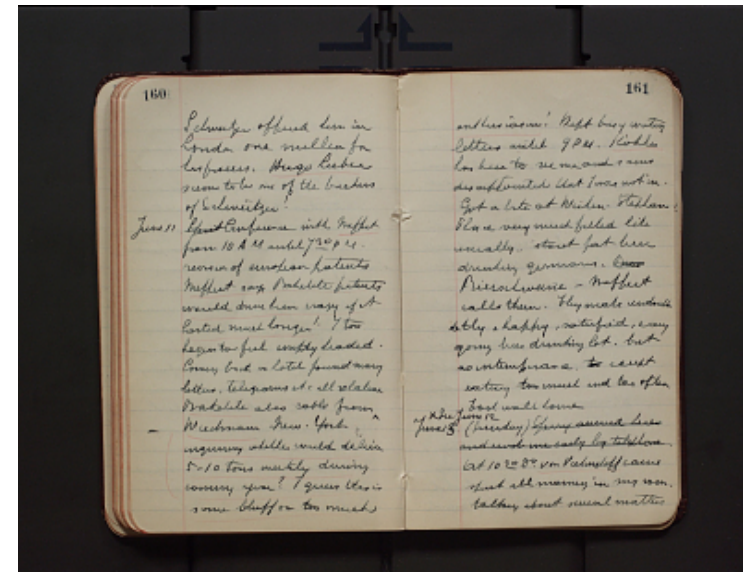
158  
I assumed it was Knoll and had some evidence by the way our conversation was conducted. Finally got thru with all what I wanted and we left bowing and saluting. Then went to Lamprich who had my impregnation patent. He looked very ponderous and pedantic and wanted to talk big and learned and showed he did not even grasp the case. I used some positive and straight arguments and brought him in line too, after I had let him talk out. He always wanted to show

159  
that he knew everything after we got thru and had argued on new claims we went to Meffert's office and started the work of rewriting our tests and claims in accordance with limitations ~~paid~~ laid down by interview. In the evening went to country to house of Meffert for supper. His wines his great passion - collecting fine german wines - He keeps empty bottles of every special bottle as a souvenir and labels it and keeps it in his ~~dining~~ dining room as a memento!  
Told me about his meeting Effort and the new acetic acid process of the latter and how



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 160 [[/preprinted]]  
 [[underlined]] Schweitzer [[/underlined]] offered him in London one million for his process. [[underlined]] Hugo Lieber [[/underlined]] seems to be one of the backers of Schweitzer!  
 [[margin]] June 11 [[/margin]] ~~Spent~~ Conference with Meffert from 10 AM until 7:30 PM. revision of european patents. [[underlined]] Meffert says Bakelite patents would drive him crazy if it lasted much longer! I too begin to feel empty headed. Coming back in hotel found many letters, telegrams etc all relative [[underlined]] Bakelite [[/underlined]] also cable from [[underlined]] Wiechman [[/underlined]] New York inquiry whether could deliver 5 - 10 tons weekly during coming year? I guess this is some bluff or too much  
 [[end page]]  
 [[start page]]  
 [[preprinted]] 161 [[/preprinted]]  
 [[underlined]] enthusiasm! Kept busy writing letters until 9 PM. Kohler has been to see me and seems disappointed that I was not in. Got a bite at Weißen - Stephan Place very much filled like usually stout fat beer drinking Germans. Bies Bierschweine - Meffert calls them. They make undoubtedly a happy, satisfied, easy going beer drinking lot. but no intemperance except eating too much and too often  
 Took walk home  
 [[margin]] June 13 X See June 12 (Sunday) Sperry arrived here and woke me early by telephone. At 10:30 Dr. von Vielinghoff came spent all morning in my room talking about several matters



Leo Baekeland Diary Volume 4, 1909  
 Transcribed and Reviewed by Digital Volunteers  
 Approved by Smithsonian Staff  
 Extracted Sep-13-2014 10:42:07

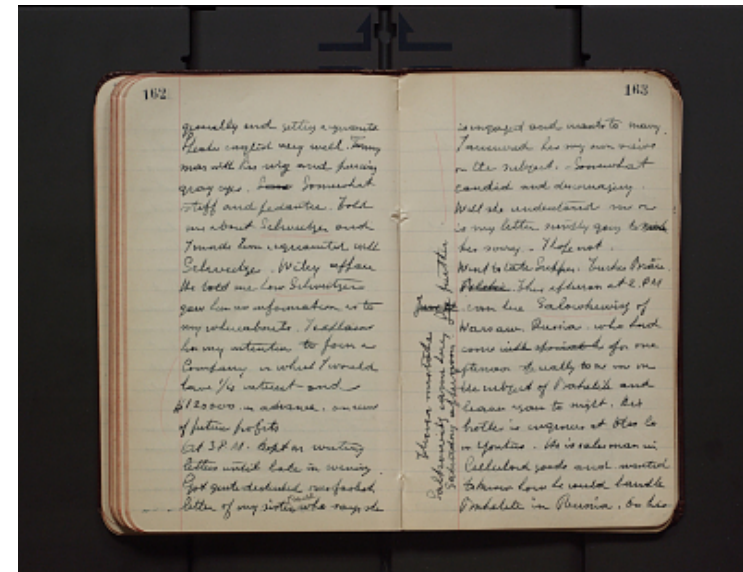
generally and getting acquainted. Speaks english very well. Funny man with his wig and piercing gray eyes. ~~Soms~~ Somewhat stiff and pedantic. Told me about Schweitzer and I made him acquainted with Schweitzer. Wiley affair He told me how Schweitzer gave him no information as to my whereabouts. I explained him my intention to form a Company in which I would have 1/4 interest and \$120000 in advance, on account of future profits  
At 3 P.M. kept on writing letters until late in evening. Got quite disturbed over foolish letter of my sister Rachel who says she

is engaged and wants to marry.

I answered her my own views on the subject. Somewhat candid and discouraging. Will she understand me or is my letter simply going to make her sorry. - I hope not.

Went to late Supper. ~~Tucher Bräu?~~ Polish

June 12  
This a mistake Salkowitz came here Saturday afternoon. See further  
This afternoon at 2 PM came here Salowkewisz of Warsaw, Russia. who had come with special for one afternoon specially to see me on the subject of Bakelite and leaves again to night. His brother is engineer at Otis Co in Yonkers. He is salesman in Celluloid goods and wanted to know how he could handle Bakelite in Russia. On his



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

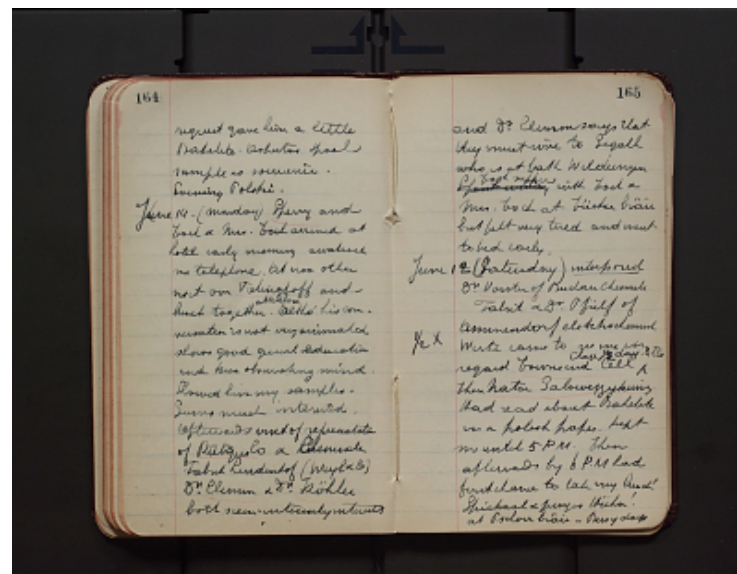
request gave him a little Bakelite. Asbestos spool sample as souvenir.  
Evening Polski.

June 14 (Monday) Sperry and Toch & Mrs. Toch arrived at hotel early morning awakened me telephone. At noon other visit von Vielinghoff and lunch together <sup>at Adlon</sup>. Altho' his conversation is not very animated shows good general education and keen observing mind. Showed him my samples. Seems much interested. Afterwards visit of representative of Rütgers Co. & Chemisch Fabrik? Lindendof (Weyl & Co) Dr. Clemin & Dr. Köhler both seem intensely interested

and Dr. Clemin says that they must wire to Segall who is at bath Wildungen

~~Spent evening~~ Took supper with Toch & Mrs. Toch at Tücher bräu but felt very tired and went to bed early

June 12 (Saturday) interposed. Dr. Vorster of Buchau Chemisch Fabrik & Dr. Pfülf of Aminendorf? electrochemisch 1/2X Werte came to see me in regard Townsend Cell ^ Chge 1/2 day D.F. Co Then Natan Saloweryzkewiz? Had read about Bakelite in a polish paper. kept me until 5 P.M. Then afterwards by 6 P.M had first chance to take my lunch! Spickaal & Hühn! at Tücher bräu - Busy day



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 166 [[/preprinted]]

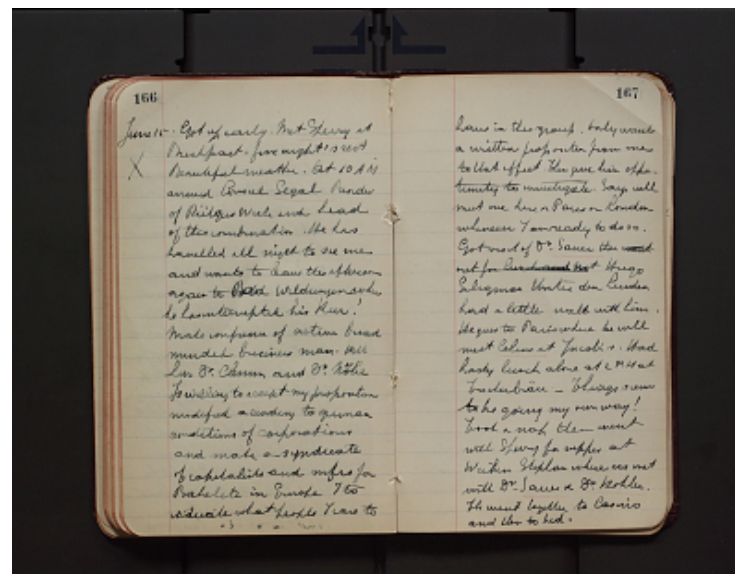
[[margin]] June 15 X [[/margin]]  
Got up early. Met Sperry at breakfast. fine night's rest Beautiful weather. At 10 AM arrived Consul Segal President of Rütgers Werke and head of this combination. He has travelled all night to see me and wants to leave this afternoon again to Bad Wildungen where he has interrupted his Kur! Made impression of active broad minded business man. With him Dr. Clemin and Dr. Nöhe Is willing to accept my proposition modified according to german conditions of corporations and make a syndicate of capitalists and mfrs for Bakelite in Europe I to indicate what people I care to

[[end page]]

[[start page]]

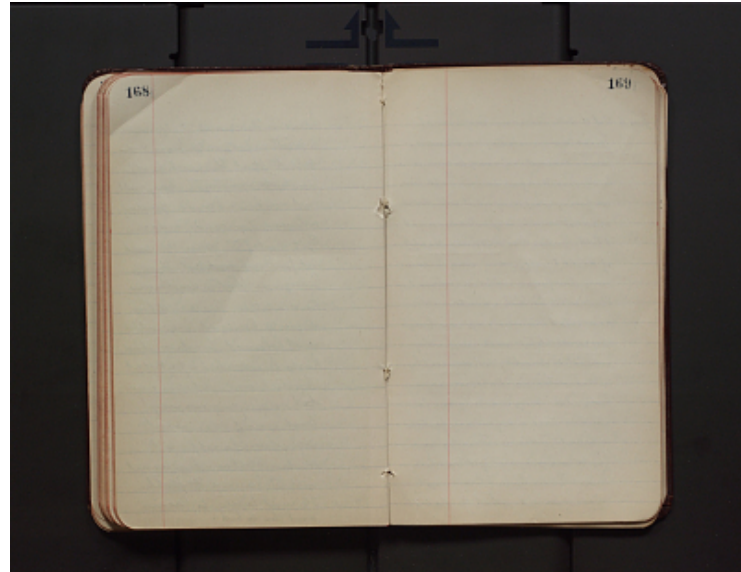
[[preprinted]] 167 [[/preprinted]]

have in this group. Only wants a written proposition from me to that effect. Then give him opportunity to investigate. Says will meet me here or Paris or London whenever I am ready to do so. Got visit of Dr. Sauer then ~~went out for lunch and~~ met Hugo Seligman Unter den Linden had a little walk with him. He goes to Paris where he will meet Celine at Jacob's. Had hasty lunch alone at 2 P.M at Tucherbräu - Things seem to be going my own way! Took a nap then went with Sperry for supper at Weißen Stephan where we met with Dr. Sauer & Dr. Kohler. Then went together to Casino and then to bed.



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 168 [[/preprinted]]  
[[end page]]  
[[start page]]  
[[/preprinted]] 169 [[/preprinted]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07



170

June 16.

At 11 A.M. Schroeder Engineer of Jaroslaw (insulating materials) came. showed my sample and gave him general information. Told him am forming company which will decide afterwards whether to give licenses or not

1 P.M. Enter Mr. Herman Hecht of Hecht Pfeiffer & Co with Sauer. Says was former active in Continental Rubber Co. is still a director in it. Now export business, says can busy me in relation with anybody interested directly or indirectly in Bakelite, quicker than any body else.

Says can bring me in relation with any manufacturer or bank I desire. Invites me for to morrow night in his house. Told him I have not decided yet what to do with

[end page]

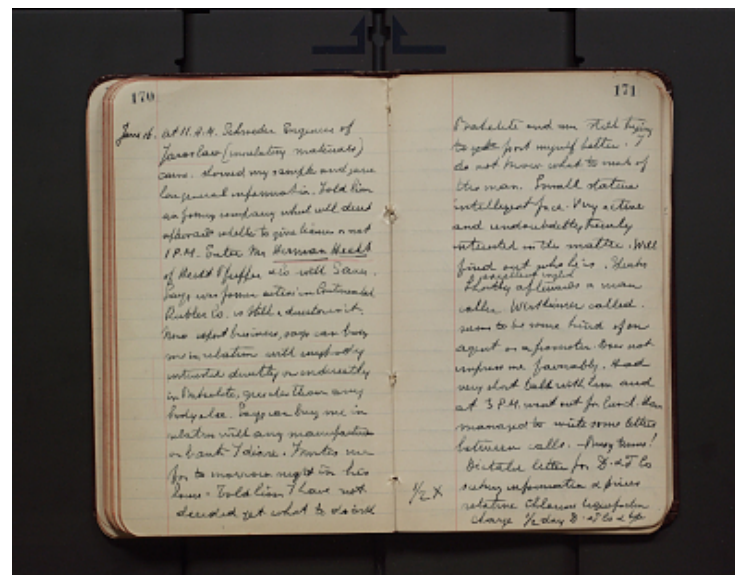
[start page]

171

Bakelite and am still trying to ~~get~~ post myself better. I do not know what to make of the man. Small stature intelligent face. Very active and undoubtedly keenly interested in the matter. Will find out who he is. Speaks excellent english. Shortly afterwards a man called Wertheimer called. seems to be some kind of an agent or a promoter. Does not impress me favorably. Had very short talk with him and at 3 P.M. went out for lunch. Have managed to write some letters between calls. - Busy times! Dictated letter for D. & F. Co. seeking information & prices relative

1/2 X

chlorine liquefaction Charge 1/2 day D. & F. Co. & [type?]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

172

Theatre

Then just time to hurry to hear "Dollar princess". Good music. Poor play. ridiculous conception. Bad smelling place. Smells urinals everywhere in Europe, except England! Uncomfortable badly ventilated narrow seated theatres - Fire traps! Actresses fat-clumsy women; chorus girls are all bier-wurst type. Undoubtedly continentals and specially Germans lack elegance as to personal appearance. They

must all look like sausages!

June 19. Today a man

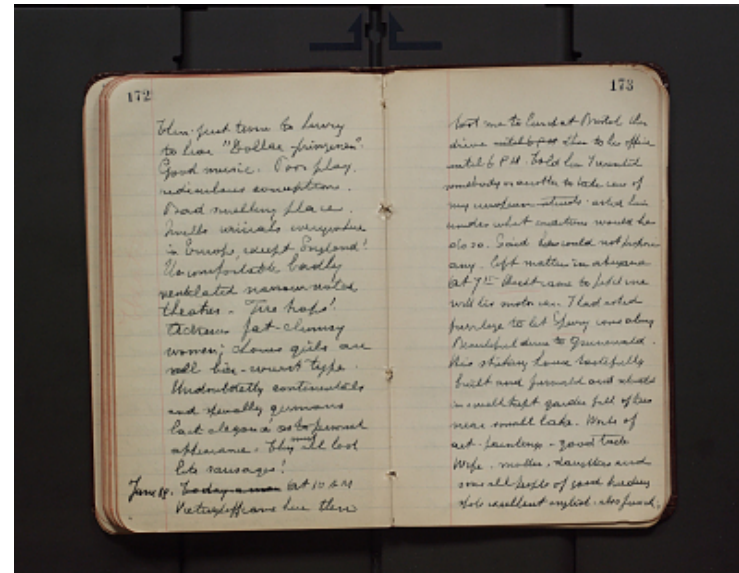
At 10 AM Vielinghoff came here then

[end page]

[start page]

173

took me to lunch at Bristol then drive until 6 PM then to his office until 6 PM. Told him I wanted somebody or another to take care of my European interests. asked him under what conditions would he do so. Said he could not propose any. Left matter in abeyance At 7:15 Hecht came to fetch me with his motor car. I had asked privilege to let Sperry come along Beautiful drive to Grunewald. His striking house tastefully built and furnished and situated in a well kept garden full of trees near small lake. Works of art. paintings - good taste Wife, mother, daughters and sons all people of good breeding spoke excellent English. also French



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 174 [[/preprinted]]

Bottle of most excellent German wine at dinner. His bowling alley reminds me of Eichmann's but this man looks more solid. At 11 P.M. drove back ^ <sup>in motor taxi</sup> because Sperry had to catch midnight train to Hamburg.

Sperry seems very glad of his visit also because he got his tin chloride patents thru. <sup>June 18.</sup> At 10 AM came Karl Gossweiler with one of his salesman who carried a bundle of paper box samples, simply pressed. This man has been bothering me with his letter since weeks. He says his pressed boxes are impregnated with linseed oil. Nothing similar to Bakelite

[[end page]]

[[start page]]

[[preprinted]] 175 [[/preprinted]]

<sup>[[written vertically in margin]]</sup> I never saw his samples. Instead he tried to bluff me some time afterwards with a letter telling me Bakelite was old etc.

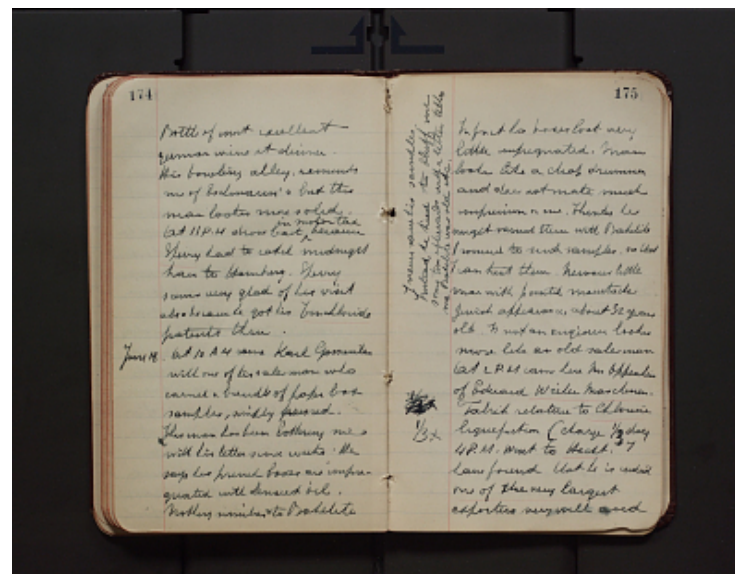
In fact his boxes look very little impregnated. Man looks like a cheap drummer and does not make much impression on me. Thinks he might varnish them with Bakelite. Promised to send samples so that I can treat them. Nervous little man with pointed mustache Jewish appearance, about 32 years old. Is not an engineer looks more like an old salesman. At 2 P.M. came here Mr. Oppenheim of Edward Weiler Maschinen.

<sup>[[margin]]</sup> ~~1/2 X~~ <sup>1/3 X</sup>

Fabrik relative to Chlorine

liquefaction (Charge 1/3 day 4 P.M. Went to Hecht.

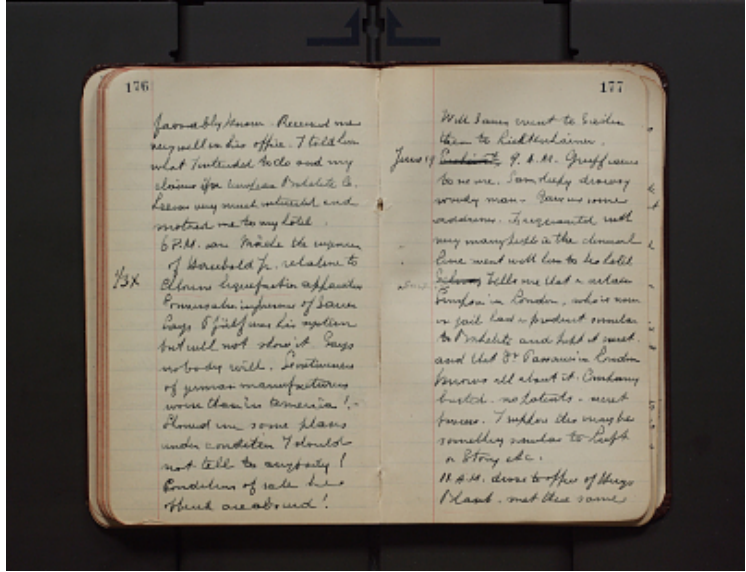
I have found that he is indeed one of the very largest exporters very well and



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 176 [[/preprinted]]  
favorably known. Received me very well in his office. I told him what I intended to do and my claims for European Bakelite Co. Seems very much interested and motored me to my hotel.  
6 P.M. came Möche the engineer of Hambold F. relative to [[margin]] 1/3 X [[/margin]] chlorine liquefaction apparatus  
Conversation in presence of Sauer Says Pfülf uses his system but will not show it. Says nobody will. Secretiveness of German manufacturers worse than in America! Showed me some plans under condition I should not tell to anybody! Conditions of sale he offered are absurd!  
[[end page]]  
[[start page]]

[[preprinted]] 177 [[/preprinted]]  
With Sauer went to ~~Siechen?~~ then to Liechtenhainer.  
[[margin]] June 19 [[/margin]] ~~Eusheine?~~  
~~9 A.M.~~ 9 A.M. Grieff came to see me. Same sleepy drowsy woody man - Gave me some addresses. Is acquainted with very many people in the chemical line went with him to his hotel  
~~Schwa~~ Tells me that a certain Simpson in London, who is now in jail had a product similar to Bakelite and kept it secret and that Dr. Passaner? in London knows all about it. Company busted. no patents. secret process. I suppose this may be something similar to Luft or Story etc.  
11 A.M. drove to office of Hugo Blank. met there same

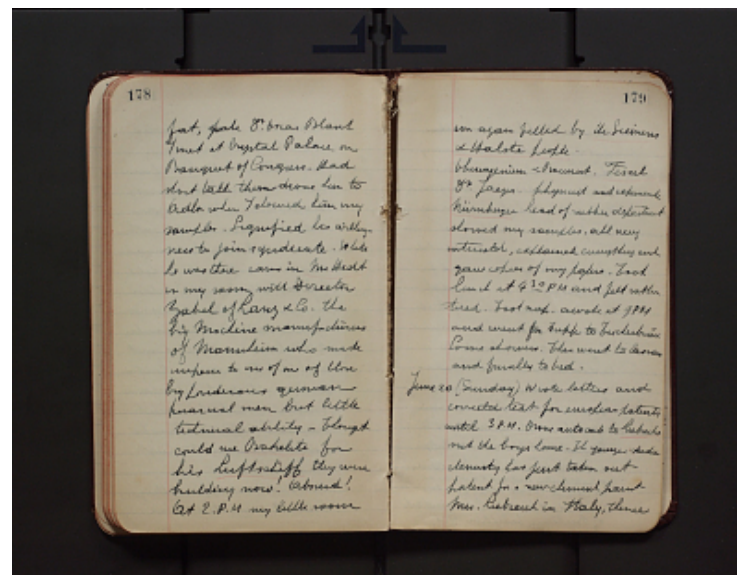


Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

fat, pale Dr. Oscar Blank I met at Crystal Palace on Banquet of Congress. Had short talk then drove him to Adlon where I showed him my samples. Signified his willingness to join syndicate. While he was there came in Mr. Hecht in my room with Director Zabel of Lanz & Co. the big Machine manufacturers of Mannheim who made impress to me of on of those big ponderous german financial men but little technical ability - Thought could use Bakelite for his Luftschiff they were building now! Absurd! At 2 P.M my little room

is again filled by the Siemens & Halske people, Theusgenium & Procurest Fessel, Dr. Jaeger physicist and experimenter Nürnbergger head of rubber department showed my samples. all very interested, explained everything and gave copies of my papers. Took lunch at 4:30 PM and felt rather tired. Took nap. awoke at 9 PM and went for supper to Tucherbräu Some showers. Then went to Casino and finally to bed.

June 20 (Sunday) Wrote letters and corrected text for european patents until 3 P.M. Drove auto cab to Lubrechts met the boys home. The younger studies chemistry has just taken out patent for a new chemical paint Mr. Lubrech in Italy, thence



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

180  
drove to Hecht's. ~~Sperry~~ there ~~Met several other people among them an Italian inventor Carbone, wide awake, vivacious little fellow who has new arc lamp and new rubber tire. French, German, English Dutch spoke all these. Remained for supper served on Verandah~~

Louis engaged. Pretty bride with big frank honest blue eyes. Drove me back to Adlon in Hotel. Lou makes good impression of serious young business man. Rain in evening.

June 21. Breakfast Sperry At 10 AM to Meffert & Sell then drove to Rütgers met Dr. Kohler & Dr. Nöbe. fine offices small testing laboratory - are the largest wood impregnators

Lunched at Hotel. Bloemendall of Berliner Telephon

[[end page]]

[[start page]]

181

chlorine

Hannover came to my room showed him samples & explained everything. Do not think he is big enough to bother much about.

June 22 9 A.M. Oppenheimer drove me and

X 1/2

Sperry in auto to their works. Their steel bottles for Cl contain 45 kilos Tried 50 Atm. for export 30 At. for Germany Weighs empty 40 kilos with valve and Chlorine cap Walls 5 m.m. Diam. 203 m.m. outside Height 360 m.m. with cap. Price 32 Mk net f.o.b. Hamburg. Will take 14 days to deliver 100 bottles. One car load = 140 bottles

[[Hyshop?]]

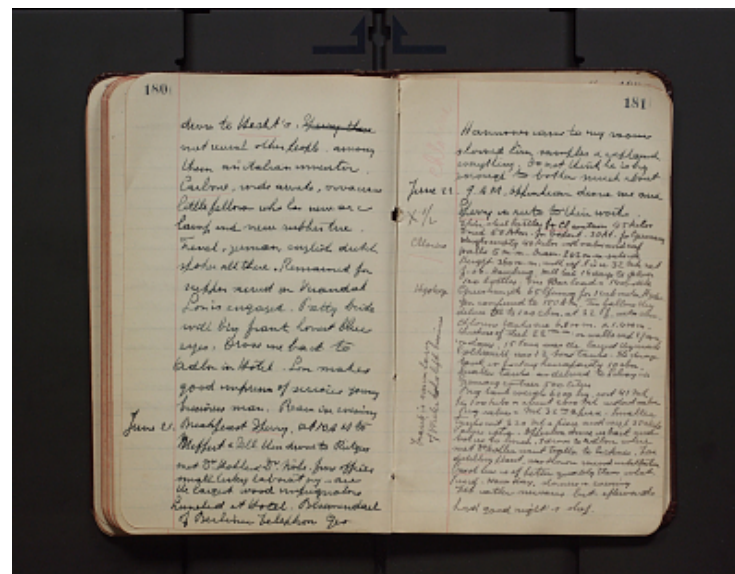
[[Griesbaum?]] gets 656 fennig for 1 cub meter Hydro. Gen compressed to 150 Atm. For balloons they deliver 50 to 100 cbm. at 32 pf.

~~cbm~~

Chlorine tanks are 6.800 m. x 1.400 m. thickness of steel 22 m.m. on walls and 27 m.m. on dome. 15 tons was the largest they made Goldsmith uses 12 ton tanks. The storage tank in factory has capacity 10 cbm. Smaller tanks as delivered to Solway in Germany contain 500 liters.

Big tank weighs 6200 kg cost 41 mk per 100 kilo or about 2600 Mk without valve Big valves = Mk 32.00 apiece. Smaller tanks cost 320 Mk apiece and weigh 250 kilo. Valves extra. Oppenheimer drove us back and took us to lunch. I drove to Adlon where met Dr. Kohler went together to Tichnes? Bar distillery plant. Cresol is of better quality than what I used. Warm day, shower in evening. Felt rather nervous but afterwards had good night's sleep.

Traub is son in law of Wieler who left business



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

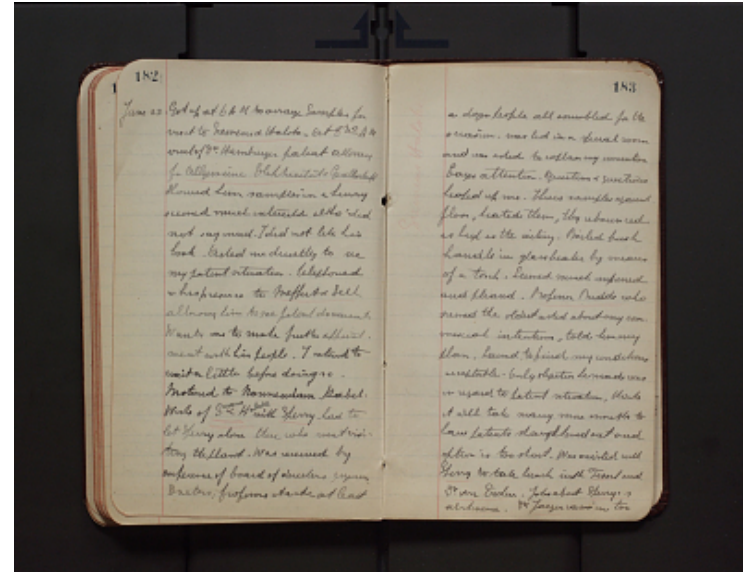
182

June 23 Got up at 6 AM to arrange Samples for visit to Siemens & Halske. At 8:30 AM visit of Dr. Hamburger patent attorney for Allgemeine Electricitäts Gesellschaft. Showed him samples in a hurry seemed most interested altho' did not say much. I did not like his look. Asked me directly to see my patent situation. Telephoned in his presence to Meffert & Sell allowing him to see patent documents. Wants me to make further appointment with his people. I intend to wait a little before doing so. Motored to Nonnendam? Koebel Werke of Siemens & Halske with Sperry had to let Sperry alone there who went visiting the plant. Was received by conference of board of directors, engineers, Doctors, professors etc etc at least

[[end page]]  
[[start page]]

183

Siemens & Halske a dozen people all assembled for the occasion. was led in a special room and was asked to explain my invention. Eager attention. Questions and questions leaped up me. Threw samples against floor, heated them, they rebounded as high as the ceiling. Boiled brush handle in glass beaker by means of a torch. Seemed much impressed and pleased. Professor Budde who seemed the oldest asked about my commercial intentions, told him my plan. Seemed to find my conditions acceptable. Only objection he made was in regard to patent situation, thinks it will take many more months to have patents straightened out and option is too short. Was invited with Sperry to take lunch with Fessel and Dr. von Eiden. Jokes about Sperry's abstinence. Dr. Jaeger came in too



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

184

We were shown all around the works. then one of the Directors sent us his motor car which drove us to the station hence to hotel. Then ~~we~~ went Dr. ~~[[?]]~~ met Dr. Frank ~~[[?]]~~ who is ~~[[?]]~~ an austrian interested in ~~[[?]]~~ COs ~~[[?]]~~ CI who came to see me about ~~[[1/3 X in margin]]~~ Townsend Cell (1/3) Chg D & F Co short interview wanted only general information, has been connected with Kellner. Then drove to Hecht's office who had assembled representatives of Cohen & Co furniture ~~[[?]]~~ ~~[[?]]~~ manufacturers. Raschig (brother of Dr. Raschig (the phenol mfr) who manufactures & exports frames & moldings. also partner ~~[[?]]~~ of ~~[[?]]~~ and brother in law of the latter. I do not think there is much use just now of losing much time with these people.

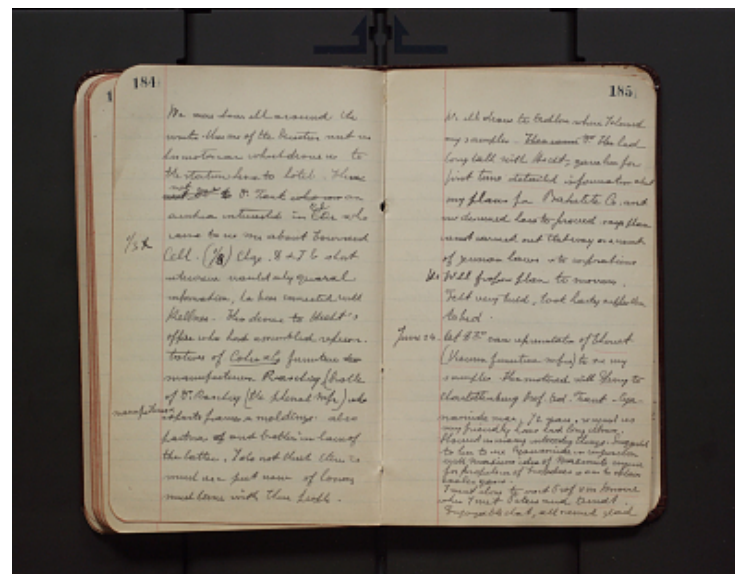
~~[[end page]]~~

~~[[start page]]~~

185

We all drove to Adlon where I showed my samples. ~~[[?]]~~ Then came Dr. ~~[[?]]~~ Then had long talk with Hecht gave him for first time [[?]] detailed information about my plans for Bakelite Co. and we discussed how to proceed says plan cannot be carried out that way on account of german laws as to corporations. He will propose plan to morrow. Felt very tired, took harty supper then to bed.

June 24. At 8:30 came representative of Thonet (Vienna furniture mfrs) [[?]] to see my samples. Then motored with Sperry to Charlottenburg Prof. Ad. Traut - Cyanamide man. 72 years. received us very friendly has had long illness. Showed us many interesting things. Suggested to him to use Cyanamide in conjunction with Maxims idea of [[?]] engine for propulsion of torpedoes so as to obtain cooler gases. I went alone to visit Prof von Knovel where I met Peters and Arndt. Enjoyable chat, all seemed glad ~~[[end page]]~~



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07



186

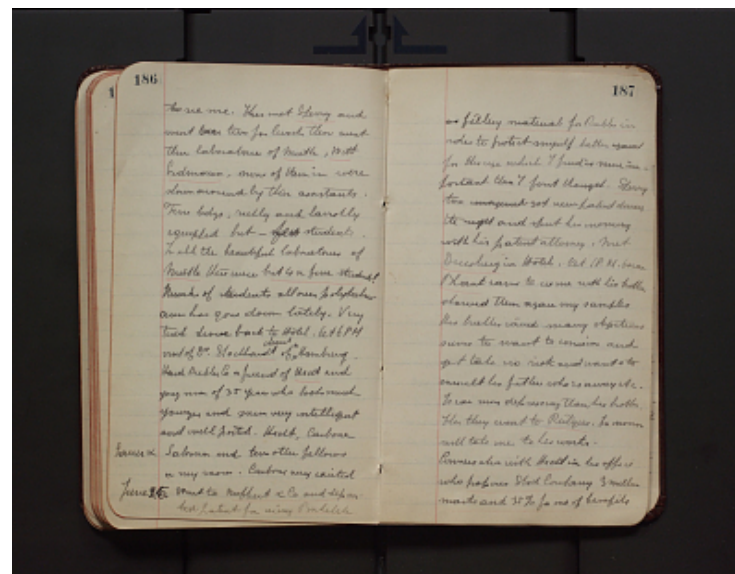
to see me. Then met Sperry and went ~~to~~ two for lunch then went thru laboratories of Mietke?, Witt Erdmann, some of them in were shown around by their assistants. Fine bldgs, richly and lavishly equipped but - few students. In all the beautiful laboratories of Mietke? there were but 4 or five students! Number of students all over polytechnicum has gone down lately. Very tired drove back to Hotel. At 6 PM visit of Dr. Stockhardt ^chemist^ of ^a^ Hamburg Hard Rubber Co a friend of Hecht and young man of 35 years who looks much younger and seems very intelligent and well posted. Hecht, Carbone Sauer & Saloman and two other fellows in my room. Carbone very excited

June 15. Went to Meffert & Co and ~~deposited~~ patent for using Bakelite

~~end page~~

187

as filling material for Rubber in order to protect myself better ~~against~~ for this use which I find is more important than I first thought. Sperry too ~~imagined~~ got new patent during the night and spent his morning with his patent attorney. Met Driesberg? in Hotel. At 1 P.M. Oscar Blank came to see me with his brother raised many objections seems to want to come in and yet take no risk and wants to consult his father who is away etc. Is ever more depressing than his brother. Then they went to Rütgers. To morrow will take me to his works. Conversation with Hecht in his office who proposes Stock Company 3 million marks and 35% for me of benefits  
~~end page~~



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

188

and half million marks down in cash. Called up Rütgers and Dr. Brudde (of S & H) and made appointments. Later on Hecht joined us in hotel when I was with younger Dr. Frank and Vielinghoff to tell me that Rütgers accept my conditions. Sperry joined, then met Moore of Washington (Bureau Chemistry, and Dr. Leeling) Washington - all went to Sperry's room to see the Gyroscope model. I went with Vielinghoff for supper

until 11 P.M. Told him about my progress asked him to represent my interests while I was gone, as far as technical or patent questions might require it but we did not discuss conditions or fees as I think it better to leave these matters until definite agreement is settled with Syndicate. went to

Lebach

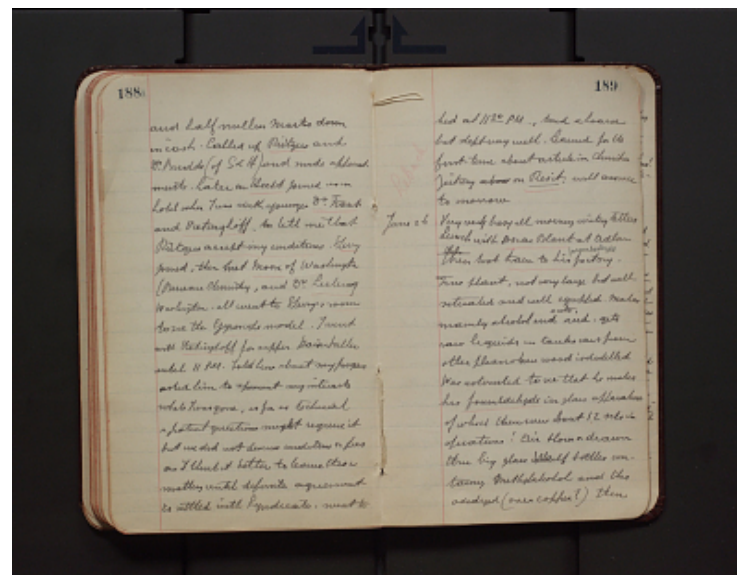
189

Lebach

bed at 11:30 PM, tired & hoarse but slept very well. Learned for the first time about article in Chemiker Zeitung about Resit will announce to morrow

June 26 Very very busy morning writing letters Lunch with Oscar Blank at Adlon then took train to his formaldehyde factory. Fine plant, not very large but well situated and well equipped. Makes mainly alcohol and acetic acid. gets raw liquids in tanker cars from other places where wood is distilled Was astonished to see that he makes his formaldehyde in glass apparatuses of which there were about 12 sets in operations! Air blown or drawn thru big glass bottles containing methylalcohol and then oxidized (over copper?) then

bed at 11:30 PM, tired & hoarse but slept very well. Learned for the first time about article in Chemiker Zeitung about Resit will announce to morrow



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

190

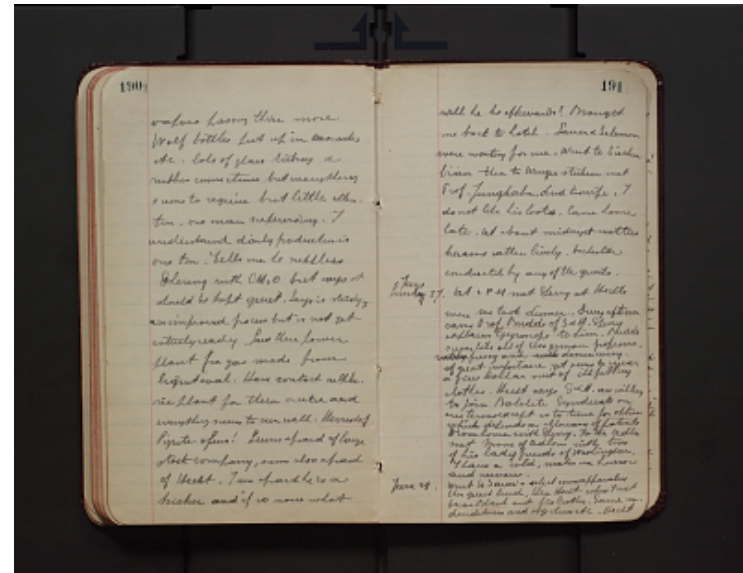
vapors passing thru more Wolf bottles put up in cascades etc. lots of glass tubing & rubber connections but everything seems to require but little attention. one man supervising. I understand daily production is one ton. Tells me he supplies Schering with CH<sub>2</sub>O but says it should be kept quiet. Says is studying an improved process but is not yet entirely ready. Saw their power plant for gas made from lignite?. Have contact sulphuric plant for their acetic acid everything seems to run well. Hevresdorf? Pyrite opens! Seems afraid of large stock company, seems also afraid of Hecht. I am afraid he is a kicker? and if so now what

191

will he be afterwards? Brought me back to hotel. Sauer & Saloman were waiting for me. Went to Siechenbräu then to Wingerstuben met Prof Junghain and his wife. I do not like his looks. Came home late. At about midnight matter became rather lively. Orchestra conducted by any of the guests.

June 27 Sunday. At 2 P.M met Sperry at Hechts where we took dinner. During afternoon came Budde of S & H. Sperry explains Gyroscope to him. Budde seems like all of those german professors. rather fussing and ~~domineering~~ domineering. of great importance yet seems to wear a five Dollar suit of ill fitting clothes. Hecht says S & H are willing to join Bakelite Syndicate on our terms except as to time for option which depends on allowance of patents Drove home with Sperry. In the Adlon met Moore of Adlon with two of his lady friends of Washington. I have a cold, makes me hoarse and nervous.

June 28 Went to Sauer's select some apparatus then quick lunch, then Hecht where I met Oscar Blank and his brother. Same undecidedness and objections etc. Hecht



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07

192

handled them in rather dictatorial way. told them they could stay out if they did not like it and we would go on just the same, leaving it to the future to decide whether we want them or not Hecht proposes me his plan: 4% to be paid on capital invested; 10% on board of Directors with minimum of 3000 Mks each. I to receive 35% of net profits of which 5% go to Hecht and 30% to me. he to be of board of Directors, Capital to be 1 1/2 million marks and to be brought to 3 million Marks. I to get 5000000 Mk cash in advance on account of my share of profits. In the evening left with Sperry for Krupp's Walter Field a manufacturer of Baryta salts came to see me with letter of introduction from V. Knoire. Gave him letter of introduction for Dr. Arthur Elliot.

June 29. Motor car of Allgemeine Elektrikat Gesellschaft came to get me at 11 AM. Before met Dr. & Mrs. Comey of Dupont Powder Co. Wilmington Del. Durshey says he is defending german patent law against undesirable (for him) changes told me that they (Bayer) arranged for new patent treaty between Germany and U.S and had paid expenses for commissioner to come to Germany. This is probably what Schweitzer referred to some time ago in Chemistry Club in presence of Cliff Richardson. - Long drive to Kabelwerks of AEG. met Director Weber, slim youngish looking man, about forty Left me waiting about 20 minutes Also young chemist Dr. Weiss who seemed to think that Bakelite was nothing new and the same thing as Bayers shellac-substitute. Showed him his mistake and advised him to study the matter nearer. Showed all my samples and explained everything Told him about my plans. Were very

[[end page]]

[[start page]]

193

interested but do not show the same intense eagerness as Siemens & Halske. I shall not lose much time with them. Was motored back to hotel over very bad pave. At 2:15 Blank came to talk over patent situation, gave him complete record of literature. loaned him copies of my english patents. Says he wrote to his father. Am under impression he will not join. He is too timid and probably limited on capital. Finally got my lunch at 4:30 PM! Taukenstr. Evening went to theater = Sprudelfee. Stupid play. n.g June 30 At breakfast talk with Durshey says Buchau and Nonnendam fellows are rascals, dishonest, pirates of patents etc. infringe on the sly. I advised Greiff and Hooker. Durshey says has trouble with Eastman and is suing him!! auf seinen Knien! Says they will make acetic anhydride in Albany and may buy chlorine from us. - Advised Hooker. Afterwards I met Bernthsca

of Badische Anelin & Soda Co asked him to see Chlorine liquefying apparatus. He refers me to Dr. Heinrich van Brunck who is their President. about 65 years ruddy full face dark eyes, white beard. Says he studied in Ghent under Kebulé and knows Swarts but has not seen him since. Will wire to obtain permission for us to see apparatus. He says they want to make connections in States for Nitric acid from air process. He is President of Nonnegrn Co. Says they are negotiating with Nichols and others but want more competition Sperry back from Krupps: They seem to be interested for his Gyroscope for battle-ships. Wrote and dictated letters for D & T. Co. until 6 P.M. (1/2 D & T Went with Sperry to bräu talking over our work our hopes etc. (1/2 X in margin)]



[[end page]]  
[[end page]]

Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Extracted Sep-13-2014 10:42:07

[[preprinted]] 194 [[/preprinted]]  
 July 1. at 11. A.M. general conference at Hechts with Nöhe & Blank. First seems still well disposed but seems to think I did not specify at first interview the 1/2 million Marks cash, in which he is certainly mistaken. Blank is again timid and wants to form to companies, one producing raw materials, the other utilizing it. Hecht again handles him very adroitly, told him that altho' he would be welcome we shall go ahead as if he does not exist so as to avoid delays and gives him until Wednesday to come in. Budde and Segal are still away so everything postponed until Wednesday. Returning to Hotel find rather ambiguous answer of Lebach? on my letter in Chemiker Zeitung of which proof was sent to me directly by Vielinghoff before publication. Wrote directly Knoll warning them against infringements of my english patents - Hotel rather filled again with representatives of Kalisyndicate who are in excited situation because they cannot agree to renew the trust Took lunch at 4 PM! My cold bothers me considerably. frequent coughing Spent evening talking with Sperry and the Comeys; Supper at Pschoir? at 11 P.M  
 July 2 Met von Brunck in Hotel says can arrange for me and Sperry to go to Barduche? on Monday, will ~~write~~ wire and let me know  
 Went to Alexander to inquire how Rassour? Editor of Zeitschrift is. Went to Sauer's office then had interview with Vielinghoff told him my progress - Concluded to ask Lebach for a copy of his article as it will appear in the Zeitschrift Took lunch at 2 P.M. then as coughing bothers me took a nap.  
 [[end page]]  
 [[start page]]  
 195  
 Begin to feel somewhat restless and impatient and less interested in my work Wrote letters. Sperry frequently is my tonic - our problems are very similar. Took supper at Rainskeller? and when walking home met Dr. Nöhe on street - seems confident our business will go on.  
 At Adlon met Lindsay of General Electric Co Schenectady. Then wrote letter to Celine and went to bed.  
 July 3. Up early went to Hecht with Sperry. Hecht says A E Co. are not by any means so lukewarm as I seem to think. Went to Meffert but everybody seems away. Find that they have neglected to carry out instructions relative watching Knoll's patents. Got rather disgusted and wrote sharp letter. In evening Alexander came to fetch me .. Sauer has a cold - Supper at Weihen-Stephan then Casino. then home about midnight.  
 July 4 (Sunday) Beautiful day. American flags in Hotel At 2P.M Hecht drove Sperry and myself to his house for dinner. Came back at 5:30. Dressed up. American dinner: Dr. & Mrs. Comey, Sperry, Vielinghoff, Lindsay Director & Mrs. Hirshberg. feasted 4th of July at 7:35 PM. jumped from table changed clothes caught 9:04 P.M Sleeper for Mannheim. Bad sleep.  
 July 5 [[marginal entry]] 2 days & expenses [[/marginal entry]]  
 D & F  
 Arrived Mannheim 8 A.M. thence drove to Ludwigshafer Bad. Am. & Suda F. after breakfasting at Station. Sperry rattles and talks and talks and tires me considerably. My throat is sore and makes me prefer not talking nor being talked to. sometimes this is entertaining some other days & to day positively tiring. At the works



were  
[[end page]]

Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Extracted Sep-13-2014 10:42:07

196

put in large bare chamber. Then came Munch a nephew or brother of von Brunck who has not acquired the "von" Ponderous stout sausage german who begins by cross examining us, whether we will compete with Goldsmith etc etc then came Bernthsen who shows hesitating attitude. I made some fun of them to the point that they finally let us see their ~~Cl~~ plant liquefying plant to which we were escorted by Bernthsen who began to thaw out little by little. Dr. Müller who is chemist at the head Cells of this department took us around. Chlorines made from electrolytic cells do not tell which but they all seem 250 to 300 Ampere per square meter of anode surface. Chlorine gas is under slight pressure and carried thru towers to dry where dehydrated with H<sub>2</sub>SO<sub>4</sub>. First is cast iron lined with Lead. Towers about 5 ft. diameter by 30 ft. high. H<sub>2</sub>SO<sub>4</sub> rains into them. The H<sub>2</sub>SO<sub>4</sub> from towers is blown with hot air so as to expel Cl and H<sub>2</sub>SO<sub>4</sub> is reconcentrated. Gas is driven thru large glass washbottle filled with H<sub>2</sub>SO<sub>4</sub> so as to see whether it still gives off H<sub>2</sub>O, then enters large cast iron lined with lead, the liquid being H<sub>2</sub>SO<sub>4</sub> which regulates flow of gas from cells. Compressors take about 4 each and each liquefies about 3 tons in 24 hours. Plunger of compressors, stoneware packed with asbestos, drives movable column of H<sub>2</sub>SO<sub>4</sub>, the of liquid or compression space which comes in contact with Cl is naturally hot but is kept hotter by means of circulating steam around

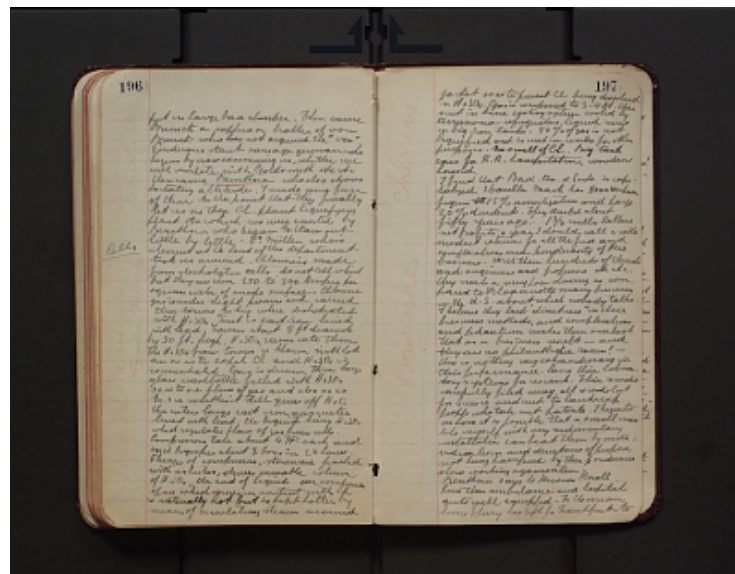
[[end page]]  
[[start page]]

197

[[red line top to bottom left margin with Badische Chlorine written vertically in red]]

jacket so as to prevent Cl being dissolved in H<sub>2</sub>SO<sub>4</sub>. Gas is compressed to 3 - 4 At. then sent in brine cooling system cooled by ammonia refrigerators. Liquid runs in big iron tanks. 50% of gas is not liquefied and is used in water for other purposes. No smell of Cl. Big tank cars for R.R. transportation, wooden housed. I find that Bad.Am & Suda is capitalized 36 million Mark has 8000 workmen figure ~~10~~ 15% amortization and pays 20% dividend. They started about fifty years ago! 1 3/4 mill Dollars net profits a year I should call a modest return for all the fuss and complications and ponderosity of their business. With their hundreds of Chemists and engineers and professors etc etc. they make a very poor showing as compared to Velox and to many businesses in the U.S. about which nobody talks. I believe they lack "directness" in their business methods, and complications and pedantism makes them overlook that as a business result -- and they are no philanthropic concern! -- there is nothing very extraordinary in their performance. Same their laboratory's systems for research. Their records carefully filed away all records lost for Science and used to handicap people who take out patents. I begin to see how it is possible that a small man like myself with very rudimentary installation can beat them by individualism and directness of purpose not being hampered by their ponderous slow working organization. Benthsen says he knows Knoll their ambulance and hospital quite well equipped. In the meantime Sperry has left for Frankfurt to

[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Extracted Sep-13-2014 10:42:07



198

interview Linde about Cl. Bernthsen? took me for lunch in the works restaurant, was very attentive. At 5 P.M. drove me for Mannheim in his Limousine, thru Heidelberg - how I would have liked to spend a few hours here - then to his little country house, prettily situated on the Neckar among green hills and woods. Poor fellow is all alone, his wife has nervous ailments and is away for treatment, his eldest son died some time ago. - It rained hard I did not stay long was driven back to Heidelberg station and arrived at 10 in Frankfurt where had to change cars for sleeper. Was eating a hurried Frankfurter wurst - when the last minute Sperry popped up to our great amusement and we got aboard in time. Sperry told me his troubles in Mannheim to get his valve without receipt!

July 6. Arrived Berlin at 8 for breakfast in Hotel Several important letters waiting. One of Lebach enclosing his M.S.S Devored it hastily. Also letter of Knoll claiming priority. Went to Meffert discussing claims of patents for bases = 10% maximum as compared to 1/5 molecular weight. Meffert wants to let matters as they stand stayed there until 12.M then went to Hecht. Says Blank went to Siemen & Halske without asking permission and has raised so many issues that the latter seem to be affected by all this and want to be independent as purchases. Matters do not look so smooth as before. I believe shall have to make concessions as to time for option and payment of initial cash in installments. Lunched at 2:30 and took much needed nap. Wrote letters until late evening and spent time calculating proportions relative to my claims for Base - patent. Letter of Joyce

[end page]

[start page]

19

arrives bothering me with Rosanoff claim relative as to his paper which came too late for publication. Have referred everything to Loeb. At 9 PM went to Supper to Pschoor's?. Not much time for amusements! Am very much disappointed as inaction of Thurlow and not a single letter from him since I left Yonkers! Have to think over many many delicate points. I shall know how to act and when to get away.

July 7 Got up early 6:00 AM after fine sleep. Wrote some letters and at 11AM hurried back to Meffert. He prefers not to change claims to 1/5 Mks but to add some explanations to the text. Then went to Hecht for conference: Segall, Clemson? & Hecht there. Blank telephones wants to see me but I do not want to see him. We have concluded to drop Blank and Siemens. Segall came well prepared and makes good impression by his directness and matter broadly. No small potatoes like Blank. Says they can have all the money wanted. Proposes changes which are quite acceptable; see his type written document. In order to get around uncertainty as to issue of date of issue of different patents proposes to assign to each patent a relative value expressed in percentages. Very little time lost, resolution drawn up for further study and at 1:45 P.M. all three and I hurried to hotel where I have appointment with Henrick Ryberg a young swede who arrived from Hamburg. Has been employed there until last week by Dr. Braun, who purchased Claypoole patent for his rubber works. Ryberg wants position. Has worked Luft patent when his employer Swinburne

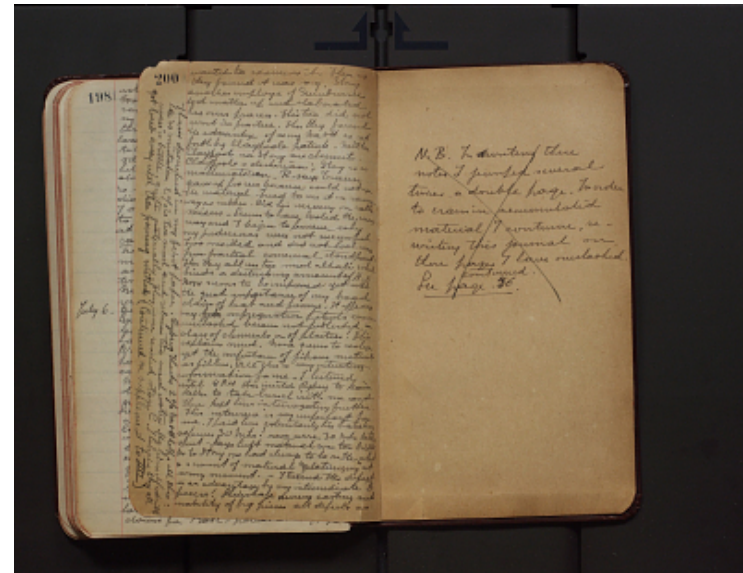
[end page]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Extracted Sep-13-2014 10:42:07

200

wanted to examine it. Then as they found it was n.g. Story another employee of Swinburne took matter up and elaborated his own process. This too did not work in practice. Then they found the advantage of using NaOH as set forth by Claypoole patents. Neither Claypoole nor Story are chemists. Claypoole = electrician; Story is a mathematician. R. says Braun gave up process because could not use the material. Tried to use it in same way as rubber. Did his mixing on roller mixers - Seems to have looked the wrong way and I begin to perceive why my predecessors were not successful. Too onesided and did not look away from practical commercial standpoint. Then they all use too much alkali which binds a disturbing amount of H<sub>2</sub>O. None seems to be impressed yet with the great importance of my broad claim of heat and pressure. It appears my ~~fibr~~ impregnation patents were overlooked because not published in class of chemicals or of plastics! This explains much. None seems to realize yet the importance of fibrous materials as fillers. All this is very interesting information for me. I listened until 4 P.M then invited Ryberg to ~~Bauerkeller?~~ to take lunch with me and there kept him interrogating further. This interview is very important for me. I paid him voluntarily his traveling expenses 30 Mks.! Never were 30 mks better spent. Says Luft material was too brittle As to Story one had always to be on the alert on account of material "gelatinizing" at wrong moment. - I turned this defect in as advantage by my intermediate B process! Shrinkage during casting and inability of big pieces all defects as   
[[written vertically in margin]] I have described in my first paper. Ryberg thinks 2% NaOH helps all this; he is mistaken 2% is too much and retains too much water. He himself admits mass is brittle. Quite naturally. They never reached stage C. I believe they all got lured away with their pouring methods (Continued on Supplement to III)   
[[end page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Extracted Sep-13-2014 10:42:07

[[blank page]]  
[[end page]]  
[[start page]]  
[[blank page]]



Leo Baekeland Diary Volume 4, 1909  
Transcribed and Reviewed by Digital Volunteers  
Approved by Smithsonian Staff  
Extracted Sep-13-2014 10:42:07



## Smithsonian Institution

*Archives Center - NMAH*

The mission of the Smithsonian is the increase and diffusion of knowledge - shaping the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world. Founded in 1846, the Smithsonian is the world's largest museum and research complex, consisting of 19 museums and galleries, the National Zoological Park, and nine research facilities. Become an active part of our mission through the Transcription Center. Together, we are discovering secrets hidden deep inside our collections that illuminate our history and our world.

Join us!

The Transcription Center: <https://transcription.si.edu>

On Facebook: <https://www.facebook.com/SmithsonianTranscriptionCenter>

On Twitter: [@TranscribeSI](https://twitter.com/TranscribeSI)

Connect with the Smithsonian

Smithsonian Institution: [www.si.edu](http://www.si.edu)

On Facebook: <https://www.facebook.com/Smithsonian>

On Twitter: [@smithsonian](https://twitter.com/smithsonian)