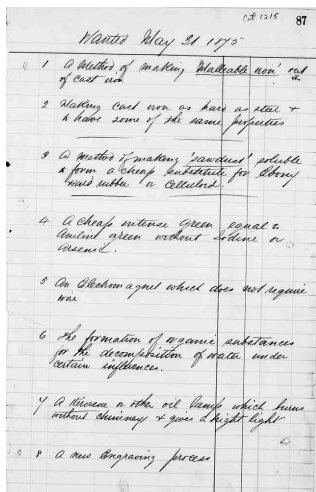


*Memorandum: List of  
Experimental Topics*

[Newark,] May 31 1875<sup>1</sup>

## Wanted

- 1 A Method of making 'Malleable iron' out of cast iron
- 2 Making cast iron as hard as steel & to have some of the same properties<sup>a</sup>
- 3 A method of making 'sawdust' soluble to form a cheap substitute for Ebony Hard rubber or Celluloid.<sup>2a</sup>
- 4 A cheap intense green equal to Aniline green without Iodine or Arsenic.<sup>3</sup>
- 5 An Electromagnet which does not require wire
- 6 The formation of organic substances for the decomposition of water under certain influences.<sup>4</sup>
- 7 A Kerosene or other oil lamp which burns without chimney & gives a bright light<sup>5</sup>
- 8 A new Engraving process
- 9 A Galvanic Battery of equal constancy to Daniells but with an electromotive force equal or nearly equal to Grove.<sup>6</sup>

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- 10 A substance which will not pass or pass but little P. current & all of a N current
- 11 A New force for Telegraphic communication<sup>7</sup>
- 12 Make soluble peroxidized paper with less acid than the Celluloid Co.<sup>8</sup>
- 13 A cheap process for the extraction of low grade ores, decomposed earth like either Carb Ag. or H<sub>2</sub>S Ag. ores.
- 14 Platina solution cheap & as delicate as Iodide of Potassium without drawbacks<sup>9</sup>
- 15 A Detector for Gold & Silver at a distance.<sup>10</sup>
- 16 A Polarized Electromotograph.<sup>11</sup>
- 17 A Sexduplex Telegraph.<sup>12</sup>
- 18 A copying press that will take 100 copies & system<sup>13</sup>
- 19 A cheap process of printing new.
- 20

D, NjWoe, Lab., NS-75-001 (*TAEM* 7:319). Written by Charles Batchelor. \*Followed by broken horizontal line.

1. A longer, partly congruent list of experimental topics is found in the index to an account book, with corresponding ledger entries for many of the items. These entries were assembled retrospectively, at least in part. Cat. 1214:1-3, Lab. (*TAEM* 21:564-65).

2. Experiments on celluloid solvents can be found in Cats. 1172 and 994, Lab. (*TAEM* 3:75, 192), and Cat. 1317, Batchelor (*TAEM* 90:661); see also Docs. 395, 583, 586, and 645. An account entry for experiments on 15 July can be found in Cat. 1214:112, Accts. (*TAEM* 21:620).

3. For an experiment related to this see Cat. 1172:259, Lab. (*TAEM* 3:156).

4. Cf. "Chemical Decomposition by Electricity and Magnetism," in Cat. 1214:88, Accts. (*TAEM* 21:608).

5. Edison, Batchelor, and Adams conducted some related experiments on 3 June (Cat. 1172:233, Lab. [*TAEM* 3:145]); a corresponding account entry is in Cat. 1214:82, Accts. (*TAEM* 21:605).

6. "Experiments to find a strong constant battery" are found in Cat. 1172:241-53, Lab. (*TAEM* 3:149-53). The experimental account is probably the one headed "Experiments to find a Cheap Battery" in Cat. 1214:60, Accts. (*TAEM* 21:594).

7. Cat. 1214:80, Accts. (*TAEM* 21:604) contains accounting entries for 3 May and 2 (Doc. 581), 8, and 9 June which correspond with notebook entries related to these experiments.

8. Probably related to the entry for "Celluloid" in Cat. 1214:84, Accts. (*TAEM* 21:606).

9. An account entry for these experiments is found in Cat. 1214:76, Accts. (*TAEM* 21:602).

10. Cf. Doc. 650.

11. An account entry labeled "Electromotograph" contains entries dating back to Edison's earliest experiments in April 1874 and continues to 3 September 1875. Cat. 1214:72, Accts. (*TAEM* 21:600).

12. See Docs. 583 and 611. An account entry for experiments of 7 June is found in Cat. 1214:86, Accts. (*TAEM* 21:607).

13. See documents related to Edison's electric pen and autographic press. There is an account entry for "Copying Experiments" in Cat. 1214:78-79, Accts. (*TAEM* 21:603).