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Joseph Henry's Record of Experiments, Book 1

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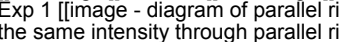
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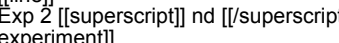
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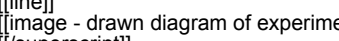
May 12th 1835

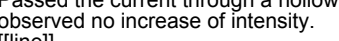
mistake

Exp 1  Passed currents of about the same intensity through parallel ribbons - a continued current accelerated ~~so~~ an instantaneous current - When the current was passed through one, a shock was produced by the other when in the same direction. Good exp.

Exp 2 nd  NB

A current from a small battery (Shaker) passed through coil, parallel with currents from single circular battery; the currents from single pair appeared in every case to be decreased in intensity by the passage of the other in either direction Try this on larger scale

Exp 3 rd  Passed the current through a hollow electromagnet filled with mercury - observed no increase of intensity.

Ex 4 The two wires from the large magnet  were connected with the galvanometer and the keeper suddenly separated the needle made a complete revolution

Exp 5 Repeated Exp 1st, but with a very different result. The intensity was lessened & no increase action could be obtained - Repeat this on a larger scale tomorrow

end page

start page

May 13th Charged one of the troughs?

Ex 1

of the large battery with mixture of nitric & sul. acid. 1st arranged deflagrator 11 elements spark with coil 60 feet - with this same as of one element The spark about the same, a little more obtained

Exp 2 nd Charged a second box with ^{pure?} water, transferred the battery from the strong acid to the water, some acid remained on the plates. The shock was as vivid as when in the strong acid ie with arrangement of one plate Whe? the battery was converted into a deflagrator? ~~with~~ of 11 plates, then the shock was scarcely perceptible.

From this Exp it is clear that to produce the greatest effect with a coil, it is only necessary to use a battery of large dimensions charged with water, or very weak acid One plate of the battery gave a feeble shock, hence accurately? and low intensity is required.

In these exp. battery No 11 was used

Exp 3 The battery was put into the acid, & the coil prepared? for



shocking by soldering two copper cylinders, one on each end, by a small wire, the shock was felt in the arms as high [ink blot] the elbow in the muscles of the

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