

July 16, 1841

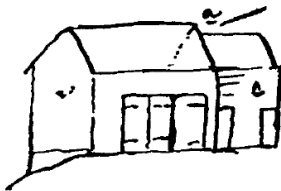
"RECORD OF EXPERIMENTS"


Henry Papers, Smithsonian Archives

July 16th 1841

{ Effects of lightning
{ Barn struck on Rocky Hill
{ D^r Macleans House

Visited this morning with Mr <George> Archi^d Maclean¹ the bar[n] of Mr <G> Leigh² of rocky hill which was also struck on the same evening at about 10 o'clock. Lightning struck at *a*, the highest peak of the barn,



which consists of two parts one for hay and grain and the other for a horse stable. It passed down each rafter, splintering them in its course, so as to completely destroy the continuity of the wood on the north side. It passed down along the posts and large barn door and then through the foundation wall into a kind of c[e]llar stable. The barn is on ground which slopes on one side so that the entrance to the cellar is even with the ground on the lower side. In this cellar a number of cattle and sheep were collected at the time—3 of the sheep and a heifer were killed. The lightning made a triangular hole in the wall, with the apex inward as  if an explosion from within out had produced the effect. The same kind of hole was also observed in the wall at Mr Philip's³ and also at D^r Maclean's.⁴ A horse in the stable *c* was also much injured by the discharge.

On the same day, or rather evening, Dr Maclean's house, about 6 miles south of Princeton was struck. The lightning passed down the rod which had been erected but a few days previous. It left the rod at or near the ground and passed through the foundation of the chimney, which is 3½ feet thick, making a solid angular hole as if by a force from within out⁵ as in the case mentioned in reference to Mr Philip's wall and the barn on

¹ Archibald Maclean (d. 1894), brother of John Maclean, Jr. *Henry Papers*, 4:419. George M. Maclean (*Henry Papers*, 2:100) was another brother of these two.

² The only G. Leigh mentioned in the 1840 New Jersey census was Gabriel H. Leigh of Lebanon Township, Hunterdon County. This was far from Rocky Hill, a community in Somerset County, about four miles north of Princeton. So Mr. Leigh's precise identity still eludes us, although four Leighs lived near

Princeton. Albert S., James E., Phebe, and Samuel. Ronald Vern Jackson and Gary Ronald Teeple, eds., *New Jersey 1840 Census Index* (Bountiful, Utah, 1978).

³ See the previous entry.

⁴ George M. Maclean.

⁵ At this page turn, the text does not resume at the top of the next page, but rather midway down. The entry for September 2, 1841, intervenes.

July 19, 1841

Rocky hill. The connection of this lightning rod with the ground was defective—it probably terminated in dry earth

The natural electricity being driven down into the lower end if it had not a free escape would be repelled off the electricity of the discharged as it descended the rod

I have examined a number of trees struck by lightning and they all present the same appearance that of being most shattered at the place where the larger branches are given off from the trunk.

1. A tulip poplar, about 4 miles this side of Trenton struck. First and principal effect at the juncture of the body and larger branches slight effects higher up.

2 High pine tree near <the> above struck at the branches

3 Tree near Mr Comforts* struck same man[ner]

4 Tree on Rocky hill struck the same

5 Liberty pole without branches struck at the top and splintered to the bottom

* Presumably David Comfort of Kingston and member of the Board of Directors and (Henry Papers, 2:376), Trustee of Princeton, Trustee of the Seminary.

TO HARRIET HENRY

Family Correspondence, Henry Papers, Smithsonian Archives

[Philadelphia]
Monday afternoon
July 19th 1841

My Dear H.

I arrived safely in the city at about 3 o'clock had a pleasant passage found Mr Backus¹ of Baltimore on board the steamboat. We took the water at the place next below Trenton. Also I had some interesting conversation with the Physician from Africa who is mentioned in the papers as having addressed a meeting at Newark.² He gave me information concerning the

¹ Probably John Chester Backus (1810-1884), pastor of the First Presbyterian Church of Baltimore. Backus studied at the Princeton Theological Seminary and was a Director from 1841 to 1884. Alfred Nevin, *Encyclopaedia of the Presbyterian Church in the United States of America* (Philadelphia, 1884), p. 47. *Princeton Catalogue*, p. 431.

² The *Newark Daily Advertiser* of July 13, 1841, reported on a colonization meeting ad-

dressed by two colonists from Liberia, a Mr. Brown and a Mr. Harris: "Mr. Brown is an educated man, having studied medicine in Washington city before emigrating to Liberia, and is an influential citizen of the colony." The *Twenty-Fifth Annual Report of the American Colonization Society* (1842), p. 11, notes that James Brown, a member of the Legislative Council of Liberia, had been traveling with an ACS agent in the United