as it shot out. The whole apparatus was entirely twisted out of shape; the lead gas-pipes and a zinc jacket were literally ripped to pieces; several steel excavators which had been attaching a shelf, were bent up like bones, and one driven an inch into the floor. The paper on the wall was stripped; maps thrown down, and a wooden shelf was smashed into chips, and a large clock thrown off the wall. Strange to say, though the flask was bent not a tooth was cracked, and not even the arrangement disturbed.

The most maraculous part is that Mr. Brewster, who was standing not more than three feet from the vulcanizer, was untouched, and saving a deluge of lime and dust and a terrible stun, as if struck on the head with a mallet, and a stupor for two days, he escaped unhurt. Had he been standing two feet nearer any other part of the room he must have been injured, and possibly killed, as fragments of the explosion were thrown into every other part of the laboratory except within his immediate place. It was a most Providential escape, and only Providential.

Mr. Brewster says there was no loud report that he heard; all he knew was a sudden stun on the head, and the after realization of the explosion.

The cause is solely attributed to the high pressure of steam, as Mr. B's assistant had about five minutes previously turned on an unusually large full flame of gas. The explosion must have occurred at about 430°. No blame is attached to deterioration in the boiler, as it and the brass top remain almost perfect, excepting a few cracks and dinges. Is it not possible that the *too rapid* generation of steam had considerable to do with the explosion, and that the copper boiler may have deteriorated so much as to unfit it for safe use, though even now it looks very safe to the eye. A proof that the fusible safety plug is not always reliable as a test of the pressure of steam, is that it still remains in the brass top of this exploded vulcanizer.

This adds one more to the warnings to use diligent care with the vulcanizer, and never comfort oneself with the assurance that because ours has never blown out the fusible plug, it never can blow up till it does, and that because the process of vulcanizing is simple, it may not be also considered dangerous. After a few more have had their heads blown off, we shall begin generally to realize the little terrors we are daily using in our laboratories, in the vicinity of which, we, our assistants, and often our wives and families may be calmly sitting.