Scenic Surgery for "Old Man of Mountains"

Forehead of Famous Profile on Mount Cannon, New Hampshire, Has Been Secured by Bolts to Prevent It from Tumbling Into Space

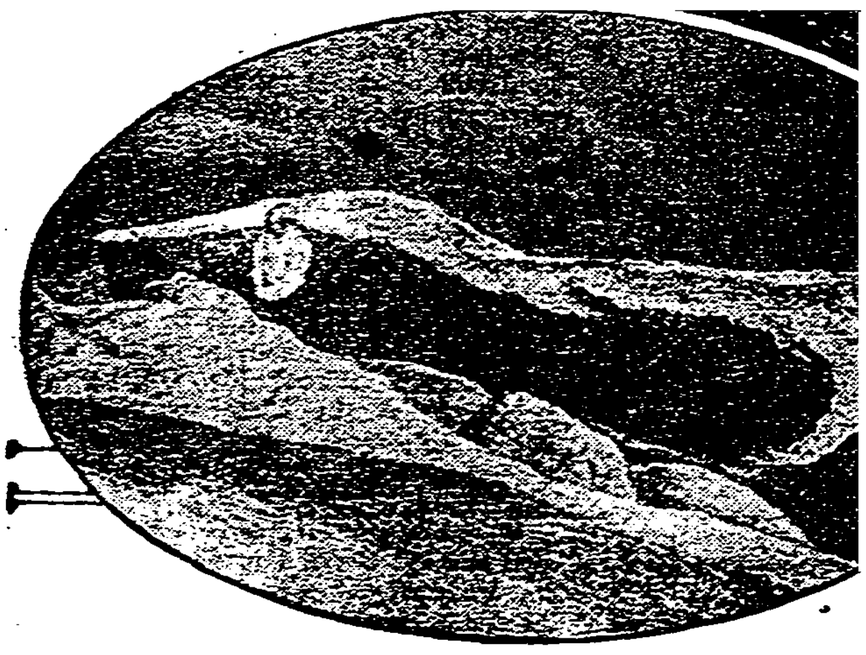
NEW HAMPSHIRE'S oldest inhabitant and America's most famous highbrow, to use the word high as expressing altitude—in other words, "the Old Man of the Mountains"—has just undergone an operation, or one might say that he has had his rugged features preserved through the medium of plastic surgery of a rude type.

The exact date of the Old Man's birth is unknown. Some say that it was 2,000 years B. C. At any rate, he was discovered by white men in 1805, while The Profile, as the relic is also called, had been worshipped by Indians for many generations previous as an impersonation of the Great Spirit. Geologists say that he was created by certain moving effects of the glacial period when Franconia Notch and Mt. Cannon, his home near by, were colder in July than they are now even in December. According to their theory, certain layers of granite ledge were so ground out and moved about during those "years without a Summer" as to produce the awe-inspiring visage immortalized by Hawthorne in his epic, "The Great Stone Face." Anyway, like mortals made of dust, he had a creator and, in view of the paucity of properly attested genealogical history, this tracing of his family tree is not unreasonable.

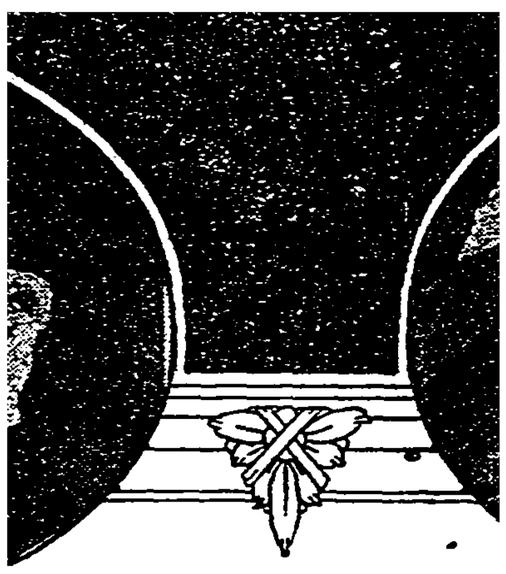
thus giving a grip that would, it was believed, withstand all strains. Between and connecting these blocks large threaded turn-buckles were to be attached by heavy clevises, and were to run at an angle of 45 degrees from the ledge, so as to hold the stone from slipping in two directions. These turn-buckles were to be 3½ inches in diameter, 16 inches long, and were to receive threaded bars of Bessemer steel 2 inches in diameter. Thus, in effect, the stone would be hung upon hinges.

The three complete turn-buckles would measure 3 feet 9 inches, 5 feet 6 inches, and 6 feet 3 inches, respectively, and together would weigh 450 pounds. When in place the Lewis blocks were to be brimstoned in to keep out water, and the turn-buckles painted with asphalt paint to prevent rust. Although a score of ways had been suggested to Colonel Greenleaf in years past for "fixing The Profile," the foregoing was the first feasible method suggested, he said, and this was the one carried out.

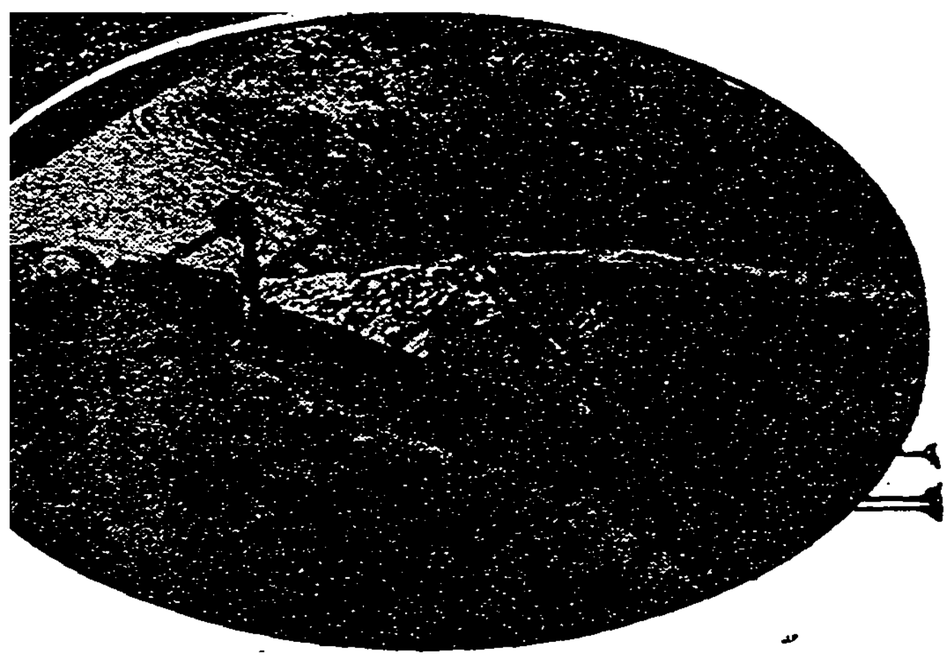
Measurements taken in September a year ago and again in June of this year by Mr. Roberts showed that the southern end of the stone had slipped away during the previous ten months one and a quarter inches, while the profile-forming end had moved away three-quarters of an inch. Although this was not much, it was enough, because the rock had only to move four inches or less before it would overbalance and fall to the valley, 1,200 feet below, breaking off the nose in its descent. Last Winter Mr. Geddes made small brass models of turn-



View Before the "Operation."



The Old Man of the Mountain, Seen from the Road Below.



Slipping Stone, with Turn-Buckle in Place.

As with other infants even this famous "Old Man" has had a brain development, and that of long standing. It is evident that at birth the quantity of his "gray matter" was such that he had a retreating forehead, for then the four and a half, by five, by nineteen foot stone weighing 30 tons, the northern end of which forms the most prominent part of his forehead, was back snug against the ledge. From this ledge it has gradually slipped away during the ages until now the northern end is two feet ten inches and the other end five feet five inches from where it was at birth. This slipping of the brain—not softening—caused "The Old Man" to "grow old beautifully," for it changed a retreating forehead into one of Websterian proportions.

All this had been well, but in 1906 it was again discovered that unless something was done in the near future to prevent this portion of the forehead from slipping further it would eventually be pushed off by the heaving force of frost and ice from its scanty resting place. In its descent, it would naturally break off most of the rock that forms the nose. A man with neither nose nor forehead would hardly present a pleasing profile. And "The Old Man of the Mountains" had neither nose nor forehead to spare.

And so it came about that he needed an "operation" simply to prevent the ravages of time from destroying his sublime countenance. But the serious questions were, "Who will operate?" "How shall it be done?" "How arrange for the operation?" and "Who will pay the bill?"

Prior to 1906, although it was known that the relic needed attention, nothing was done to bring this to pass. But in September, 1906, this need was rediscovered by the Rev. Guy Roberts, then of Monroe, and now of Whitefield, N. H. Unlike those who had preceded him, he was not content to sit idly by and allow one of the most remarkable natural curiosities in America to go to pieces. He remembered that the immense egg-shaped boulder so long suspended in The Flume was torn out by a landslide from Mt. Flume on June 19, 1885, and had never been seen since, although it had been there for ages, possibly, and "would not slip for centuries," so a noted mountain authority had declared.

Although there was no possible danger to the profile from a landslide, because there is no land on that part of Mt. Cannon to slide, there was great danger from vandalism and from the effects of frost and ice. And so for the next ten years Mr. Roberts tried persistently to secure such action as would save "the profile of all profiles," as he believes it to be.

Colonel C. H. Greenleaf, President of The Profile and Flume Hotels Company, who has always been much interested in the relic, was interviewed by Mr. Roberts several times. Some thirty-eight years ago, knowing of the precarious position of the slipping stone, Mr. Greenleaf and two workmen made an examination of the head, but decided that nothing could be done owing to the immense size of the boulder. In September, 1915, the long-hoped-for opportunity came to Mr. Roberts, in that he guided Edward H. Geddes, manager of the C. H. Hardwick granite quarries in Quincy, Mass., up Mount Cannon to examine the head, and together they worked out the following scheme for fastening the slipping forehead stone by the use of Lewis blocks and turn-buckles.

Lewis blocks are steel blocks, in this case 14 inches long, 4 inches wide at the outer end, 3 inches at the other end, and 1 inch thick, and are clevised through an eye to large turn-buckles, which are turned up after the blocks are keyed in place in the rock, thus giving a pull which would hold a slipping stone in leash. Three holes, each 10 inches deep, were to be drilled into the back side of the forehead stone; three others were to be drilled into the front edge of the solid ledge, from which the stone had gradually slipped away; the blocks were to be inserted in these holes and keyed in with inch square steel keys,

buckles, and Mr. Roberts made a plaster model of the profile-forming mass of ledge, using the Geddes turn-buckles in fastening the slipping stone. This he showed to Colonel Greenleaf, and then the model and certain photographs taken by Mr. Roberts were shown to Governor Spaulding and his Council at Concord, N. H., in August, the outcome being a decision to proceed at once with the necessary "operation" at State expense. Colonel Greenleaf was put in charge of the work.

The turn-buckles were made from the brass models and to fit measurements taken by Mr. Roberts and Mr. Geddes by O. V. Hooker & Co. of St. Johnsbury, Vt., under the supervision of their Superintendent, William Astle. Arrangements were made with Mr. Geddes to go to The Profile and proceed with the work as "scenic surgeon," and his task was completed last week. He did the work alone, having but one day's help from R. E. Marden of Whitefield, N. H.

Mr. Geddes is a man nearly 50 years old, small, wiry, full of nerve, absolutely fearless, and strictly temperate—in short, "an old-fashioned stone mason," who is not afraid to do a difficult job himself. During the "operation" he rose at 5 A. M. and, after a light breakfast, followed the trail up Mount Cannon, a steep and rugged climb of some 1,900

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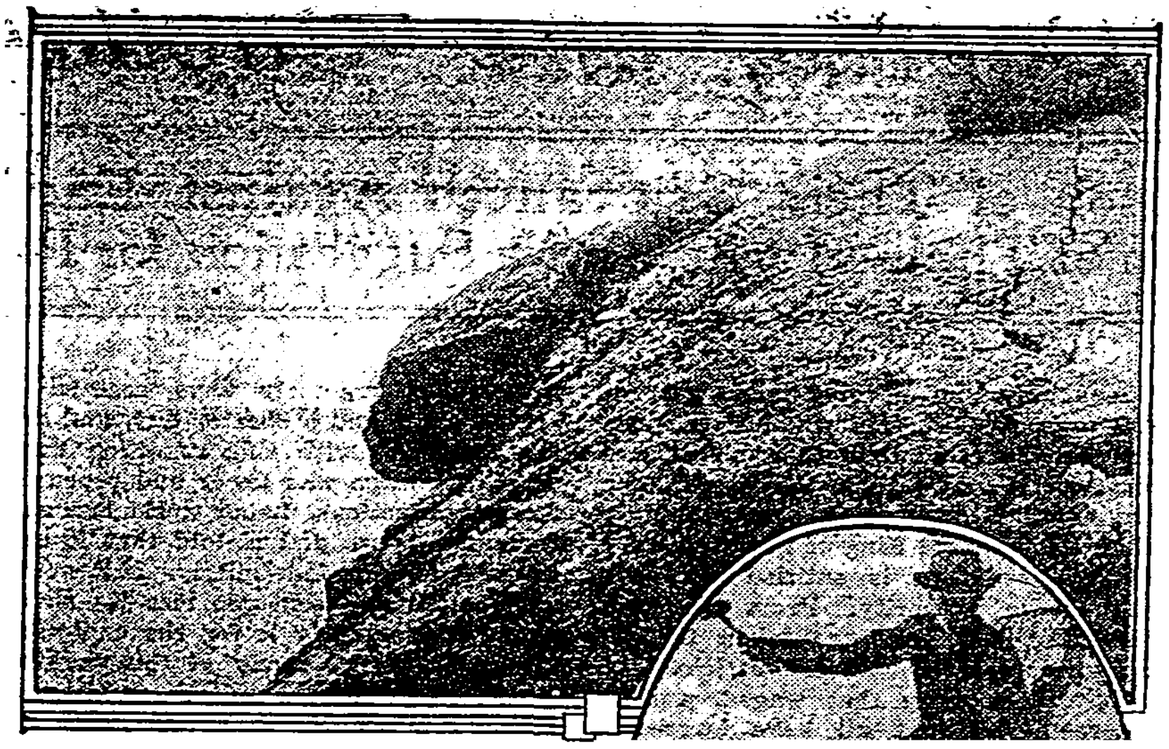
feet, covering a distance of one and three-quarter miles. It took him about forty-five minutes. From the top of the mountain he would go down some 800 feet to the "top of the head," working there until about 4 in the afternoon, when he would again descend the mountain for supper and lodging at The Profile House. It is a good day's work for a rugged man merely to make the trip to the head and return, as the trail is long, rough, and steep. One woman is known to have made the trip, a Miss Nellie I. Emery of Littleton, N. H., and a strenuous time she had.

Mr. Geddes supplemented his "little morning trip" for eight successive days with drilling holes, inserting the blocks, and fastening the turn-buckles in place. Although no staging of any kind was required, much of the work had to be done in dangerous positions, where a slight misstep would mean a fall of several hundred feet. Besides, great care had to be taken to avoid starting the rock, one end of which rests on a small shelving portion of the ledge, while the other is suspended in the air merely by the overbalancing weight of The Profile-forming end. Not more than 40 per cent. of the under surface of this stone rests on the ledge, while the remaining 60 per cent. projects into space, where it has been slowly crowded out during the ages by frost and ice heaving. In fact, so nearly overbalanced is this great portion of the forehead that it is estimated that one or two men with bars could easily dislodge the 30-ton mass, to the utter ruin of The Profile. In fact, the rock often trembled during the operation. The wonder is that vandals have not tried to pry off the stone, but fortunately there is no trail from the top of Mount Cannon down to the head, and very few people, not excepting mountain enthusiasts, make the descent.



Stone That Was Slipping Off, in Its Relation to Rest of the Top of Head.

As to the exact formation of The Profile, the common guidebook description is the one generally supposed to be correct. This says that "The Profile is formed by three separate and disconnected ledges of granite covering a lateral distance of 100 feet. Of these one forms the chin, another the nose and upper lip, and a third the forehead. In height The Profile is 90 feet from the bottom of the chin to the top of the forehead." This description was published by the late Rev. Thomas Starr King in his book, "The White Hills." Exactly where he got his information is not known, but his measurements are wrong. As a matter of fact The Profile is 40 feet 5 inches high from top of forehead to bottom of chin, according to measurements made by Mr. Geddes, who went down over the face on a rope for this very purpose. It is composed of five layers of granite ledge one exactly above the other. The lateral distance is but 25 feet. Of the five layers one forms the chin, another the upper lip, a third the nose, while two layers make up the forehead, one of them being the rock that has been fastened back. It was also often stated that the nose, chin, and other parts of the head had been chained, bolted, or cemented in place, but this was untrue until Mr. Geddes completed his work. It is hoped that a bronze tablet may be placed on the fastened rock, to record how it was secured and to guard against the supposition of fraud in generations to come.

Mr. Geddes Drilling Into the Ledge—Just at His Left Is a Sheer Drop of Hundreds of Feet.

One of the many difficulties to be overcome by Mr. Geddes was that of getting the turn-buckles and other material up to the head. The only feasible way was to have them carried up by men. From thirty to forty pounds is a good load for such a trip, and even at high pay it was difficult to get men to make one trip a day. Drills, hammers, turn-buckles, Lewis blocks, ropes, brimstone, paint, water, and food were packed up, and a third of the way down the other side of the mountain to The Profile location, Mr. Geddes himself carried not a little of this impedimenta in his morning trips.

The route from the top of the mountain down to the head is especially difficult. It is steep and rough, and often a dense cloud obscures all of the landmarks. At times during the work the cloud mist was so dense on the head that one man could not see another twenty feet distant, while the rush of wind sometimes compelled the men to use safety ropes. The combination of cloud mist, wind, cold, snow, ice, slippery surfaces, and dangerous position made the operation exceedingly difficult, and required much nerve and skill on the part of Mr. Geddes.

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