of the preceding night, during that part of the day which remained; but as we could not persuade ourselves to turn back, after having accomplished the ascent, we resolved to take our chance of spending the night on whatever part of the mountain it might overtake us.

"Wilson had not yet been seen, but as no time could be lost, we resolved to go as soon as possible to the top of the Peak, and look for him on our return. We met, as we proceeded, such numbers of unknown and interesting plants, as to occasion much delay in collecting, and were under the disagreeable necessity of passing by numbers which we saw in situations difficult of access. As we approached the summit, these became less frequent, and at length ceased entirely. Few cryptogamous plants are seen about any part of the mountains, and neither these nor any others occur frequently on the top of the Peak. There is an area of ten or fifteen acres, forming the summit, which is nearly level, and on this part scarce a lichen is to be seen. It is covered to a great depth with large splintery fragments of a rock entirely similar to that found at the base of the Peak, except, perhaps, a little more compact in its structure.

"By removing a few of these fragments, they were found to rest upon a bed of ice, which is of great thickness, and may perhaps be as permanent as old as the rocks with which it occurs.

"It was about 4 o'clock P.M., when we arrived at the summit. In our way we had attempted to cross a large field of snow, which occupied a deep ravine, extending down half a mile from the top, on the south-eastern side of the Peak. This was found impassable, being covered with a thin ice, not sufficiently strong to bear the weight of a man. We had not been long on the summit, when we were rejoined by the man who had separated from us near the outskirts of the timber. He had turned aside and lain down to rest, and afterwards pursued the ascent by a different route.

"From the summit of the Peak, the view towards the north, west, and southwest, is diversified with innumerable mountains, all white with snow; and on some of the more distant, it appears to extend down to their bases. Immediately under our feet on the west, lay the narrow valley of the Arkansas, which we could trace running towards the northwest, probably more than sixty miles.

"On the north side of the Peak, was an immense mass of snow and ice. The ravine, in which it lay, terminated in a woodless and apparently fertile valley, lying west of the first great ridge, and extending far towards the north. This valley must undoubtedly contain a considerable branch of the Platte.
miles, the smoke of a fire was distinctly seen, and was supposed to indicate the encampment of a party of Indians.

"To the east lay the great plain, rising as it receded, until, in the distant horizon, it appeared to mingle with the sky. A little want of transparency in the atmosphere, added to the great elevation from which we saw the plain, prevented our distinguishing the small inequalities of the surface. The Arkansas, with several of its tributaries, and some of the branches of the Platte, could be distinctly traced as on a map, by the line of timber along their courses.

"On the south the mountain is continued, having another summit* (probably that ascended by Captain Pike,*') at the distance of eight or ten miles. This, however, falls much below the High Peak in point of elevation, being wooded quite to its top. Between the two, lies a small lake, about a mile long and half a mile wide, discharging eastward into the Boiling-spring creek.* A few miles farther towards the south, the range containing these two peaks terminates abruptly.

"The weather was calm and clear while we remained on the Peak, but we were surprised to observe the air in every direction filled with such clouds of grasshoppers, as partially to obscure the day. They had been seen in vast numbers about all the higher parts of the mountain, and many had fallen upon the snow and perished. It is perhaps difficult to assign the cause which induces these insects to ascend to those highly elevated regions of the atmosphere. Possibly they may have undertaken migrations to some remote district*, but there appears not the least uniformity in the direction of their movements. They extended upwards from the summit of the mountain, to the utmost limit..."
of vision, and as the sun shone brightly, they could be seen, by the 
glittering of their wings, at a very considerable distance.

"About all the woodless parts of the mountains, and particularly on 
the summit, numerous tracks were seen resembling those of the common 
deer, but they most probably have been those of the big-horn."

A few of these Rocky Mountain Sheep (Ovis montana) are still 
found on Pike's Peak. F.W.C.

"From the flats and horns of these animals we had repeatedly seen near the 
licks and saline springs at the foot of the mountains, but they are

"There is a feeble saline spring, or "lick", on the base of the 
mountain slope on the south side of South Ruxton Creek, where Mountain 
Sheep still resort, and where they are occasionally seen

known to resort principally about the most elevated and inaccessible 
places.

"The party remained on the summit only about half an hour. In this 
time the mercury fell to 42°, the thermometer hanging against the side 
of a rock which, in all the early part of the day, had been exposed to 
the direct rays of the sun. At the encampment of the main body in

the plains, a corresponding thermometer stood, in the middle of the day, 
at 96°, and did not fall below 80°, until a late hour in the evening.

"Great uniformity was observed in the character of the rock about all 
the upper part of the mountain. It is a compact, indestructible ag-
gregate of quartz and feldspar, with a little hornblende in very small

Some of the granite of the summit zone of Pike's Peak contains

"The reddish granites of the Pike's Peak region and of the Rocky 
mountains generally wherever such granites occur, owe their color 
to the presence of a pigment formed by the oxidation of an 
iron constituent in the feldspar, and they usually become redder on 
long exposure to the weather, as may be observed by comparing the 
freashly quarried Phalle canon granite with the same stone seen in 
buildings made from it. If these red granites could be observed at 
great depths below what geologists call the "zone of oxidation", they 
would not have the ruddy appearance which, as exposed, they commonly ex-
buit." F.W.C.

owing to the close texture and the impenetrable firmness of this rock, 
that so few lichens are found upon it. For the same reason, it is
little subject to disintegration by the action of frost. It is not improbable that the splintery fragments which occur in such quantities on all the higher parts of the Peak, may owe their present form to the agency of lightning; no other cause seems adequate to the production of so great an effect. *

*They are, of course, due primarily to the original jointed structure of the granite, and secondarily to the expansive action of frost; their displacement and irregular positions being brought about by the combined action of frost and gravitation. — F. W. C.*

"Near the summit, some large detached crystals of feldspar of a peagreen colour," were collected; also large fragments of transparent white, and smoky quartz, and an aggregate of opaque white quartz with crystals of hornblend.

"About five in the afternoon we began to descend, and a little before sunset arrived at the commencement of the timber, but before we reached the small stream at the bottom of the first descent, we perceived we had missed our way. It was now become dark as to render an attempt to proceed extremely hazardous, and as the only alternative, we kindled a fire and laid ourselves down on the first spot of level ground we could find. We had neither provisions nor blankets; and our clothing was by no means suitable for passing the night in so bleak and inhospitable a situation. We could not, however, proceed without imminent danger from precipices; and by the aid of a good fire, and no ordinary degree of fatigue, we found ourselves able to sleep during a greater part of the night.

"At day-break on the following morning the thermometer stood at 38°; as we had few comforts to leave, we quitted our camp as soon as the light was sufficient to enable us to proceed, and had travelled about three hours, when we discovered a dense column of smoke rising from a deep ravine on our left. As we concluded this could be no other than the smoke of the encampment where we had left our blankets and provisions, we descended directly towards it. The fire had spread and burnt extensively among the leaves, dry grass, and small timber, and was now raging over an extent of several acres. This created some apprehension lest the smoke might attract the notice of any Indians who should be at that time in the neighbourhood, and who might be tempted by our weakness to offer some molestation, But we soon discovered a less equivocal cause of regret, in the loss of our bache of
of provisions, blankets, clothing &c., which had not escaped the conflagration. Most of our baggage was destroyed, but out of the ruins we collected a scanty breakfast, of the half consumed fragments of the bison's meat. We chose a different route for the remaining part of the descent, from the one we had taken in going up, and by that means avoided a part of the difficulty arising from the crumbled granite; but this was nearly counterbalanced by the increased numbers of yuccas and prickly pears.

We can only conjecture as to this detour in the return route; but it is not unlikely that it was in part by the course followed by the trail to Crystal Park, that leaves Ruxton creek by starting up a small ravine a short distance below Minnehaha and Shelter Falls, passing around the west and south sides of the noted and conspicuous boulders of disintegration. "Gog and Magog." It is possible that they went through Crystal Park, but that would make their detour unnecessarily large, and it is more probable, that, from the southern offing of "Gog", they passed easterly to the head of the

Of these striking landmarks, "Gog" signified the southern, "Magog" the northern position of the two. It is said that a certain facetious educator—formerly resident in Colorado, but now in Texas—used to insist that their astonishing character could only be suitably expressed by the exclamations, "Gosh!" and "By Gosh!"

A small branch known as, and down the latter, the east and north, past the vicinity of the present Manitou station of the Colorado Midland railway, to Ruxton creek and the Boiling spring.

"We arrived, a little after noon," says Doctor James, "at the Boiling Spring, where we indulged freely in the use of its highly aerated and exhilarating waters.

"A large and much frequented road passes the springs and enters the

mountains, running to the north of the high Peak. It is travelled principally by the bison, sometimes also by the Indians who penetrate here to the Columbia.

"The men who had been left at the horse camp, about a mile below the springs, had killed several deer, and had a plentiful supply of provisions. Here we dined; then, mounting our horses, proceeded towards the encampment of the main body, where we arrived a little after dark, having completed our excursion within the time prescribed.

"Among the plants collected in this excursion, several appear to be undescribed. Many of them are strictly alpine, being confined to the higher parts of the mountains, above the commencement of snow.

"Most of the trees which occur on any part of the mountain are evergreen, consisting of several species of Abies, among which may be mentioned the balsam fir (A. balsamea, Ph.), the hemlock, white, red, and black spruce (A. alba, A. rubra, and A. nigra), the red cedar, and com-"
mon juniper, and a few pines. One of these, which appears to have been hitherto unnoticed in North America, has, like the great white or Weymouth pine, five leaves in a fascicle, but in other respects there is little resemblance between them. The leaves are short and rather rigid, the sheathes which surround their bases, short and lacerated; the strobiles erect, composed of large unarmed scales, being somewhat smaller than those of _P. rigida_, but similar in shape, and exuding a great quantity of resin. The branches, which are covered with leaves chiefly at the ends, are numerous and recurved, inclining to form a dense and large top; they are also remarkably flexible, feeling in the hand somewhat like those of the _Dirca palustris_. From this circumstance, the specific name _flexilis_ has been proposed for this tree, which is in several respects contrasted with the _P. rigida_. It inhabits the arid plains adjacent to the Rocky Mountains, and extends up their sides to the region of perpetual frost. The fruit of the _Pinus flexilis_ is eaten by the Indians and French hunters about the Rocky Mountains, as is that of another species of the same genus by the inhabitants of some parts of Europe.

(Continued on 36a)
Dr. James was the leader of the party that accomplished the first ascent of Pike's Peak by white men. If it was an honor to be of such a party, we can but think it would have been the fair thing for him to have given us the names of all who made the ascent. As he did not do so, there remains some doubt as to whether three, men, and only three, made it, or four. It is clear that the Doctor's party proper consisted of but three, viz., himself, and two men detailed to climb with him; but he [bracketed] of "Mr. Wilson", (Z. Wilson, the baggage master), "who had accompanied us as a volunteer", and [bracketed] of "Mr. Wilson", (Z. Wilson, the baggage master), "who having, near timber-line, turned aside and lain down to rest," had "afterward pursued the ascent by a different route," and had rejoined the others when they "had not been long on the summit". In the absence of a complete list of names, the "puffing" does not seem to have been very equally distributed, we cannot say absolutely, on the basis of Dr. James' narrative, whether this volunteer was of the three, or an independent fourth climber. One would suppose, however, that a man detailed to accompany the Doctor to the top of the Peak, would hardly have been mentioned as a "volunteer"; and we are inclined, therefore, to the view that on the 14th of July, 1820, Pike's Peak summit was reached by four white men.

The history of the names of Pike's Peak, will be more fully discussed by the writer at another time and place. It will suffice here to present a few facts of more immediate interest concerning it.

This mountain was named James' Peak by Major Long, in honor of Dr. James, and in recognition of the latter's ascent of it in 1820; and this name appeared in print in the Atlas of Long's Expedition to the Rocky Mountains, in 1822, and again in Dr. James' Account of the same, where the explanation of the naming is given in an extract from Major Long's manuscript notes, appended as a footnote in connection with the Doctor's use of the name in giving the Peak's bearing from a prominent landmark that he notices on July 15th, in returning down Arkansas river from the Royal Gorge. That extract, being of more interest in the present connection, was as a footnote in that connection, in which Dr. James gives it, we here introduce, with some comments and related matter. It is as follows:

(Continued on 368.)