

liams, William House and Robert Ormes, after a great deal of difficult climbing were defeated within 300 ft. of the summit, but have in mind another attempt this year.

This is merely a synopsis of some of the more interesting mountaineering carried on during the past season, and does not by any means enumerate all the serious climbing which occurred in the Colorado Rockies. There were numerous trips up the E. face of Longs Peak by various established routes, as well as other climbs throughout the state which lack of space precludes mentioning. Now that the winter season is here again numerous skiing ascents are being planned by the Colorado Mountain Club and individual members.

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#### ROCKY MOUNTAINS OF CANADA

*A Note on the Chaba Glacier.* On July 7th, 1933, being encamped in the eastern fork of the Chaba, E. Cromwell and the writer reoccupied the glacial observation station made by the Harvard party of 1927, at which time (July 28th) the ice was within 45 ft. of the station. At the time of our visit the ice had retreated an additional 559 ft., roughly 62 ft. annually. Photographs were taken from the station, and a record left with the figures of the 1936 measurements.

On July 6th our party had ascended through the main icefall to the summit of the present Chaba Peak, expecting it would be a first ascent. We found, however, the record of E. Schoeller, of Breslau, and the guide, Julius Rähmi, of Pontresina, who ascended the mountain on September 6, 1928, while on a hunting trip. The peak was not attempted by the Harvard party of 1927.

As already stated in the *Climber's Guide*, this is not the peak to which Habel gave the name "Chaba." On July 8th we ascended the peak 10,300 ft., one mile further east, and found Habel's record of August 1st, 1901, on the summit. Habel was accompanied by the packers, Fred Ballard, of Banff, and Dan Campbell, of Michigan, their climb having been made "on a beautiful cloudless day." The fact that, following Habel's account (*Appalachia*, x, 34), we were able to proceed directly to his peak and find the record is sufficient refutation of Wheeler's statement (*Alta.-B. C. Boundary*, Part II, 73) that "the the description given is too vague to permit the certain identification of either ['Mt. Eden' or 'Mt. Chaba']."



*Saskatchewan Glacier.* No measurements were made, but the upper course was examined from Castleguard meadows on July 1st, 1937. The glacier has receded more than 200 ft. from the S. lateral moraine where horses were taken on the ice in 1923. This is

now impossible, the marginal lake having drained away, leaving a deep basin of moraine, its glacier side bounded by an almost perpendicular ice-wall about 100 ft. in height.



*Freshfield Glacier.* Observations made on July 5th, 1937, complete a fifteen-year period since the first measurements were undertaken (1922). Photographs from Camp Station and Station C afford further evidence of the subsidence of the tongue through ablation, about one-third of the total volume of the tongue having been lost in fifteen years.

The total retreat of the tongue since 1922 amounts to 1312 ft., as follows:

<i>Retreat</i>	<i>Feet</i>	<i>Average per day inches</i>
1922-26.....	330	2.67
1926-30.....	253	2.09
1930-34.....	317	2.60
1934-37.....	412	4.50

The great boulder on the ice has advanced 1551 ft. in fifteen years, and is now exactly on the line surveyed in 1922:

<i>Advance</i>	<i>Feet</i>	<i>Average per day inches</i>
1922-26.....	505	4.01
1926-30.....	426	3.52
1930-34.....	345	2.78
1934-37.....	275	3.0

It is apparent that the tongue's retreat, uniform from 1922 until 1934, is now accelerating, seemingly due to additional stream erosion and greater rainfall. The advance of the great boulder diminishes progressively as the ice terminus is approached.

Variations in distance between the great boulder and the glacial erratic marked "1922," due to side-slip from ice-pedestals, are as follows: 350 ft. (1922), 440 ft. (1926), 429 ft. (1930), 410 ft. (1934), 411 ft. (1937).

In 1937 plates 6 and 8 of the 1922 line were still on the ice, just above the upper margin of the terminal dirt-zone of the tongue, and about 1200 ft. below the surveyed line A-B of 1922.



*Prior Peak* (10,750 ft.) and *Unnamed* (10,150 ft.). July 8th, 1937. First ascents of these were made in a continuous route from camp below the tongue of Freshfield glacier. E. Cromwell, E. Cromwell, Jr., Miss G. Engelhard, F. S. North, J. M. Thorington. From the Freshfield basin the crevassed draw leading to the base of Mt. Nanga Parbat was ascended, turning on the upper snow plateau to pass between Mts. Bulyea and Walker, Prior Peak then being traversed from S. to N. on broken ledges. On returning through the Bulyea-Walker saddle, the snowfield was crossed to