



A GLACIER.

difference between the photo-topographic camera and others is, that it has no adjustment for focusing, because the views are all distant. The camera is a rigid, brass-bound box, with a superior lens, and its field covers about sixty degrees, so that six views take in the whole horizon. It fits onto the tripod of the theodolite, which is used for measuring angles, and hence, it can be levelled before exposing for a view. Glass plates, $4\frac{3}{4} \times 6\frac{1}{2}$ inches, are used for obtaining the views, which are afterwards enlarged to double the size, and from the prints the necessary measurements are taken for obtaining the contour lines, that is, for the topography of the country.

The accompanying view (of some 700) is one of last season's work. It is taken from a mountain 4,000 feet high, and shows an ice river (the Windom Glacier), with two branches emptying at the head of Taku Inlet, Alaska.

The surveyor's work in photo-topography is very arduous and often very dangerous. He is continually climbing to the summits of mountains, where no foot

has trodden before. His camp is pitched on the sea shore and as a rule he finds very little room for his tent, for the shore rises very abruptly and the mountains are densely wooded to the water. It sometimes happens that in pitching camp not enough consideration is given to the tides: the result is a rude awakening at night by the advancing waters, and a hurried scramble for luggage and outfit, and a rush to a safe retreat in the bush and woods. Naturally, the woods at the lower level are the more dense, but the most annoying, aggravating, and expletive-provoking hindrance to travel, is the devil's club, a tall, partly trailing shrub, which is covered with thorns (poisonous at that) from head to foot; and even its large leaves are all fortified in this manner. After the timber line is passed, which is generally at an elevation of about 2,500 feet, travelling is somewhat better, especially in the latter part of the season, when there is not so much snow. However, many crags and precipices are encountered, where nerve and judgment are necessary to make a successful ascent.