

CHICAGO, Dec. 11.—General Miles today received a report from Captain Conrad to the effect that seventeen hundred Indians at the Yankton Sioux agency are now receiving rations enough for merely two days out of a week and are starving. Their crops have failed, and, although they are willing to work, there is no employment for such a number during the winter. On ration day they are so furnished that they cannot resist eating at once practically all they receive, notwithstanding another issue is not due for a week. It is a standing complaint with these Indians that they have \$1750 owing them for right-of-way of land locked up in the Treasury at Washington, and individuals among them are unpaid for services rendered the government as far back as 1862.

BISMARCK, S.D., Dec. 11.—Major McLaughlin, agent at Standing Rock Agency, is in today. He says there is no danger of an outbreak and never has been. Sitting Bull and his followers are still keeping up the ghost dance on Grand River, but thinks a week more of cold weather will stop the dancing. He says the reports from Standing Rock of a cattle stampede by Indians and an exchange of shots near Buffalo Gap is a canard. No cattle have been run off by the Indians, only their own stock.

CHICAGO, Dec. 12.—A special from Pine Ridge, S. D., indicates a fight between the peace and the war factions in the Two Strikes band, more sanguinary than indicated in the Associated Press dispatches. It says that Yankton Charlie, a full blooded Sioux and government scout, came in from the Indian camp in the Bad Lands and reports a bloody fight among the followers of the chiefs Short Bull and Two Strikes. Each claimed the leadership and each tried to secure it by force. The result is twenty to fifty dead Indians. This report has been verified by several who have been waiting for some time to escape to the agency. As the spies took advantage of the fight to make their escape, it is not known yet which chief was conquered. Large reinforcements have come in from Standing Rock and other agencies. The depredations of the Indians have been extended to the foot of the Black Hills. It is useless to talk of peace. There has been no attempt made on the part of the hostiles to move out of their intrenchments, since the peace council was held. None of the promises made there has been kept. There is great excitement here. It is said that when the chiefs returned from the agency a council was held and Two Strike and his followers favored peace, but Kicking Bear, Short Bull and other chiefs composing the majority of the camp took a decided stand on another ground. The council lasted several hours during which the excitement reached its highest pitch and finally broke up in a fight. The troops have received orders to be in readiness to march to the Bad Lands.

KANSAS CITY, Dec. 15.—Duis

Del Commun of Cholula, Pueblo, Mexico, was in the city today, enroute to Chicago. In an interview tonight he said the Aztec Indians of Mexico are afflicted with a Messiah craze very similar to that which is disturbing the Indians in the northwest. The Aztec prophecy is very like that which is believed in by the Sioux. The Messiah will cause the volcano Popocatepet to erupt and overwhelm the country with lava, which will destroy all but the Aztecs.

CHICAGO, Dec. 14.—General Miles, accompanied by Captain Maus and the general's private secretary, Mizen, left Chicago tonight for St. Paul. The general will stop at St. Paul a couple of days and then go to the northwestern Indian country. He could not say how long he would be absent.

### THE FLIGHT OF BIRDS.

The behavior of some birds is so peculiar that they are supposed to be as fond of sport as kittens, puppies, and monkeys; and the purpose of this paper, says a writer in the *Erie (Pa.) Gazette*, is to speak of a few birds that seem to be of sporting tendency while on the wing, and then call attention to some of the principles of action that govern them in flight and also in maintaining themselves in the air without any apparent motion of the wings as they do in "sailing."

The canary flits from perch to perch dexterously, and it seems to do so sometimes merely for the pleasure of the exercise. Swallows assemble high in the air, and fly about here and there so swiftly that when the stroke of the wing is stopped they sail through the air a long distance on extended wings, making long curves without descending, apparently, toward the earth. They cross and recross each other's track, time after time and hour after hour, in a very sportive manner. A few days ago three domesticated pigeons were seen in the air over a three-storied building in this city, sporting, apparently, against a steady, strong breeze. They made rapid flights against the wind a short distance upward at an angle of about thirty degrees, and then, with a firm, outspread wing, they "rat upon the wind," as in sailing, still advancing, until the momentum they had acquired by common flight had been expended, when they began to fall backward by the force of the wind and also downward by the force of gravity. After they had been blown backward nearly to the point from which they started a vigorous flopping of wings sent them forward, again to be forced back. These movements were, apparently, often repeated for sport.

It may be of some interest to ascertain, if possible, the means by which birds maintain their flight in sailing against the wind or in circles. Dr. Holder has given considerable attention to the subject, and he comes to the conclusion that "birds remain in the air precisely

as a boy's kite does, literally sitting upon the breeze, gravity operating in lieu of the string." In both cases the action of the wind on each would be the same, and the action of gravity would affect both the kite and the bird, but with greater force on the bird, because the weight of the bird may be greater than that of the kite, and here the analogy between them comes to an end, for without the string and its attachment to guys leading to the extremities of the frame the kite would fall to the ground, as it always does when the string breaks or is let loose. The bird must depend on its own muscular energy to sustain itself in the air or it falls more quickly than the kite. The effort of the bird is far from being "precisely" like the string of a kite tied to a hitch post or in the hands of a running boy.

Dr. Holder falls into a similar error in saying: "When birds rise in circles they are operated on precisely the same as vessels on the water." The error lies in supposing the bird moves obliquely side-wise by the wind against the sails. Between the two there seems to be no similarity of movements. The vessel lies still on the water where there is no wind, but a bird can mount upward and "sail" in a calm. Birds have no supernatural power over gravity or any other force, and to rise above the earth they must use their wings. The front of the wing inclines slightly downward at every downward stroke, and at every upward stroke it inclines upward, the resistance of the air forming, as it were, an inclined plane down which the wing slides forward, causing the bird to advance, and by an almost invisible vibration of the wings birds are doubtless enabled to sail a long time.

Eagles and some other large birds remain frequently a long time in the air circling round and round without any visible movement of the wing or any apparent descent toward the earth. The soaring of these creatures of the air is generally looked upon as a great mystery, and several theories have been advanced to explain the phenomenon. The idea of momentum having been acquired by these birds' effort in flying to sustain them in the air after they commence sailing is plausible enough for a short sail, but for long distances the explanation is very unsatisfactory. The force and acquired momentum are not sufficient to buoy up the body of an eagle against the force of gravity, and a solution of the mystery must be sought for elsewhere. If it could be proved that a tremulous movement of the wings is sufficient for sailing, which I imagine is really a fact, the soaring of that interesting bird, the emblem of liberty, would be to my mind a satisfactory explanation.

I have looked over a precipice at tank swallows, who had nests directly under my eye, they being ignorant of my presence. On coming from a distance they would stop the usual motion of the wings, and their flight by sailing, and as they approached the nest I could see the