

abrasion amounted to almost a polish, at once bringing to mind the published descriptions of the cutting, polishing and sometimes complete destruction of tree trunks in portions of the southwest by flying sand.

To clearly show the entire possibility of the abrasion in this case being due to flying snow or sleet, I would state that the woodland wherein the phenomena was noticed is very open, of scattering growth and constitutes the northwestern border of a forest of small extent, having an open exposure to the westward of upwards of a mile. Thus the prevailing westerly winds, which rage with tremendous severity at times through this open tract, are able during the winter to hurl and sift through this thin forest growth tons of snow and icy sleet. This is evidenced by the enormous snow-banks which yearly form in the forest, at a little distance from its margins, in short, at the point where the wind by meeting repeated resistance loses its carrying power. This line of deposit varies, governed by the surface contour and variable density of forest growth.

Possibly the phenomenon described has been noticed and published before, but having access to considerable literature on forestry, I have never as yet met with any account, hence this slight contribution which may be of interest to some of the readers of SCIENCE.

PERCY M. VAN EPPS.

GLENVILLE, N. Y.

#### THE PUMA, OR MOUNTAIN LION.

DURING last July and August I was encamped with my family up on the Strait of San Juan de Fuca, near Port Williams, Clallam county, about thirty miles west of Port Townsend. One afternoon, while my children, with their nurse, were playing upon the beach in front of our cabin, a mountain lion (*Felis concolor* Linn.) came down through a strip of woods to the low bank overlooking the beach, and gave utterance to a most frightful cry or scream. I hastened out, calling loudly, and the commotion made by myself, wife, children and nurse, frightened away the brute. Although I had a Winchester repeating rifle in the cabin, I was unable to attempt to get a shot, by reason of a severe illness with which I had been prostrated for several weeks. I

heard this wild cry repeated several times afterwards, but each time farther away in the forest.

About two years before a Mr. Travis, a rancher, living near our camp, was returning home after dark, on horseback, and was chased by a lion. The horse fled in terror along the trail through the forest, never stopping until reaching home. Mr. Travis thinks that the attack was incited by a small dog that accompanied him, rather than upon himself or his horse. He returned the next morning to the locality with several hunting dogs and succeeded in shooting the animal, which proved to be a very large specimen, measuring eight feet from tip to tip. The lions are comparatively plentiful in all wild and thinly settled portions of the State.

I have written this sketch at the suggestion of Mr. Frederick W. True, of the Smithsonian Institution, author of an interesting illustrated paper on 'The Puma or American Lion,' published under the auspices of the Institution in 1891. In this paper Mr. True refers to a conflict of authorities in regard to the cries or screams of the animal, and also in regard to its belligerency, or rather, possibly, its timidity.

MERIDEN S. HILL,

*Corresponding Secretary, Tacoma Academy of Science.*

TACOMA, WASHINGTON, February 13, 1896.

#### LOGIC AND THE RETINAL IMAGE.

WHILE admitting that *all* the physiological antecedents to the sensation of vision are entirely outside the bounds of our experience in the use of eyes, your correspondent, C. L. F. (SCIENCE, February 7, 1896, p. 201), and many others who have written to this journal on the subject during the last six months, object to my assertion that I find *one* of these phenomena inconceivable; and they treat my statement that I cannot conceive that the image on my retina is upside down, as if I had said that I could conceive of the image if it were anything else than upside down.

If for purposes of illustration I declare my conviction that the moon is not made of green cheese, what are we to think of the 'logic' which interprets this as an assertion that it is made of cheese, although this is not green? I