northern Mexico, crosses the Gulf of California, follows the coast of southern California, and passes out to sea off San Francisco. South of this belt the dip is increasing; north of it, it is decreasing. The curve of the secular change of the magnetic dip, though generally decreasing, had a secondary maximum about 1860. This subordinate extreme has been passed north of the belt, but has not yet been reached south of it. The magnetic intensity is also decreasing, and reached a subordinate maximum in 1870. Since then it is again decreasing. On the map showing the lines of equal horizontal force, Schott has marked the approximate situation of the region of stationary horizontal intensity. It runs from north-west Florida through Georgia, Tennessee, Missouri, Nebraska, Wyoming, and western Montana. South of this belt the horizontal force is decreasing; north it is increasing.

G. Hellmann has discussed the statistical data on damage done by lightning in Sleswick-Holstein, Baden, and Hesse, which are contained in the reports of the insurance companies. He finds the danger from lightning, though generally increasing, to be decreasing in certain districts. The danger becomes less the more closely the houses are clustered. The petrographical character of the ground is of great influence. If the danger from lightning upon calcareous soil be represented by 1, 2 will represent the danger upon marly, 9 upon sandy, and 22 upon clayey soil. No explanation can be offered for the fact that, among trees, oaks are struck most frequently. If the danger for beeches be 1, that for pine is 15, for oaks 54.

NOTES AND NEWS.

In a report by Passed-Assistant Surgeon T. H. Streets, U.S.N., of the U. S. coast survey steamer C. P. Patterson, surveying in the waters of Alaska, after referring to the vast forests of spruce, cedar, and hemlock which clothe the shores and mountains and islands of south-eastern Alaska with everlasting verdure, and alluding to the herring, cod, and halibut which inhabit the deep waters, the immensity of the schools of salmon is illustrated by the following account of what he saw at Naha: "To illustrate how immense are the schools of salmon, I will relate what I saw at Naha, where they crowded into a stream of fresh water in such numbers as to materially impede the progress of our canoe. Bruised, lacerated, and killed in attempting to surmount the falls that obstructed their course, suffocated in the jam below, where the water was awork with them, with backs and dorsal fins protruding, their dead bodies lay two and three deep along the shores of the stream, and for fifteen to twenty yards from the water's edge, where they had been left by the receding water. The mouth of the stream was obstructed by a wire trap held to the banks by a wire fence. The trap, at the time of our visit, was raised to allow the fish to enter the stream. The wire fence was broken down by the weight of the mass of dead fish drifting against it, and many must have been carried to sea by the tides and currents. The air was offensive with the odor of the decaying carcasses. Flocks of ravens and gulls fed upon the dead, and the bears fattened upon the living; yet sufficient numbers overcome the high falls yearly to provide for the annual return of the swarms. A large fishery is located there, which also does its part to reduce their numbers. It is a blind instinct which leads migratory fishes to return to the streams where they were hatched; and Nature is prodigal with her forces in carrying out her plans."

— The signal service will be seriously crippled by the failure of the deficiency appropriation bill. The chief signal officer says, "It is now impossible to remove a man, even to discharge or recruit him, or to replace those who are dead or dangerously ill." The term of service of a number of men has expired, but they must remain in the corps from lack of money to send them to their homes. The telegraphic reports of cold waves, storms, warnings, etc., must be discontinued at a number of important points, as the funds on hand for that purpose are nearly exhausted.

— The new German *Centralblatt*, devoted to bacteriology and parasitology, continues to furnish its readers weekly with records of recent researches on these subjects. We understand that Dr. G. Sternberg will confine himself to reporting American original work on micro-organisms, and that Prof. R. Ramsay Wright, Toronto, has undertaken to furnish a similar account of papers published in America on animal parasites and on epidemics occasioned by them. Professor Wright will be obliged to authors for extras of such papers, which will be promptly noticed in the *Centralblatt*.

— The annual consumption of cocoa is 80,000,000 pounds, produced principally in the West Indies and South America. France consumes 26,000,000 pounds; Spain, 16,000,000; England, 14,000,000; and the United States, 8,500,000. Since 1860 the consumption of cocoa in the United States has increased sixfold; during the same period, that of coffee and tea has not quite doubled.