

Apparently these excited individuals wish a fair combat between the operator and the dog.

Regarding the present agitation in the United States, some of our readers object to our speaking of the factitious side. As far as we are able, however, we print the most important news in whatever direction it may strike. Many people genuinely oppose vivisection, but few, if any, of them have the least standing in the scientific world. The New York County Medical Society was instrumental in having the *Herald* legally prevented from carrying certain medical advertising, and that paper seldom forgets a grudge. Moreover, this agitation happens to be extremely good business. The most profitable part of a daily paper is the drygoods advertising; women are the buyers; and in this howl about our dumb friends there is a mighty feminine appeal, especially to those women who are unfortunate enough to have no children. It is more vivid to proclaim in a half-inch headline, "See the bloody knife. It cuts. It cuts," than it is to talk about a reduced death-rate. Only two qualities are needed to conduct a first-class crusade, like the *Herald's* present picturesque effort—a slight knowledge of mob psychology and a short memory. The *Herald* may have forgotten that in 1895 it espoused the cause of antitoxin, started a fund for its popularization with a gift of \$1,000, and, with its brass band of publicity, induced the community to give \$7,000 more. To be sure, the generosity of the *Herald* flagged at this point, and a representative of the warm-hearted newspaper asked if the original \$1,000 could not be returned!—*Collier's Weekly*.

CURRENT NOTES ON METEOROLOGY AND CLIMATOLOGY

MONTHLY WEATHER REVIEW

RECENT issues of the *Monthly Weather Review* (U. S. Weather Bureau, Washington, D. C.) have contained many contributions of general scientific interest. Among these, the following are selected for special mention. In the September number (dated December 16) we find, under the title "On Atmospheric Currents at Very Great Altitudes," a discussion, by Professor C. C. Trowbridge, of the

atmospheric currents which are shown to exist in the extreme upper regions of the atmosphere by the observed drifting of the luminous trains formed by meteors. One method for determining the height of the atmosphere is by means of meteors. This paper gives many facts of interest, and is illustrated. "Studies of Frost and Ice Crystals," by W. A. Bentley. A continuation of a paper in the August *Review*. Mr. Bentley has made a life-long study of snow crystals, and presents details of extraordinary accuracy. "Colliery Explosions and Barometric Pressure." Note on the fact, many years ago pointed out by the English Commission on Prevention of Explosions in Collieries, that the combustible gases escape most freely into mines when the external pressure is falling and lowest.

THE *Monthly Weather Review* for October, 1907 (dated January 21, 1908), contains the following contributions: "Highest Kite Flight at Mount Weather, Va." On October 3, 1907, the altitude above sea level reached by the leading kite and the meteorograph is believed to be the greatest yet attained in any kite ascension, viz., 23,110 feet. "Interconversion of Centigrade and Fahrenheit Scales"; formulæ suggested by F. K. Ferguson, superintendent of schools, Paola, Kansas, as follows:

$$C = 5/9 (F + 40) - 40,$$

$$F = 9/5 (C + 40) - 40.$$

"Studies of Frost and Ice Crystals," by Wilson A. Bentley. "Meteorological Stations in Southern Nigeria," by C. F. Talman. Mr. Talman has, for some time past, performed a very useful service to climatologists in publications of the meteorological stations in various countries concerning whose climates we as yet know but little. In the present article he gives an account of the development of meteorological observations in southern Nigeria, with a map showing the location of the stations. "The Lagging of Temperature Changes at Great Heights behind those at the Earth's Surface, and Types of Pressure Changes at Different Levels," by H. H. Clayton. This is a preliminary report upon some results derived from a study of the records obtained with

sounding balloons launched from St. Louis. The detailed discussion will appear in the *Annals* of the Harvard College Observatory. "Our Present Knowledge regarding the Heat of Evaporation of Water," by Professor A. W. Smith. "Studies on the Vortices in the Atmosphere of the Earth," by Professor F. H. Bigelow. This paper deals with the application of the theory of vortex motion to the funnel-shaped waterspout at Cottage City, Mass., August 19, 1896.

The November, 1907, number (dated February 10, 1908) contains the following contributions: "Phenomena connected with the San Francisco Earthquake," by Dr. C. M. Richter and Professor A. G. McAdie. Reference is made to the fact that the writers "have no record of any detonation coming from the ground"; that they "have no proof whatever that any particular optical or electrical phenomenon occurred preceding, during or following the earthquake." At the time of the San Francisco earthquake there was a well-defined high over practically the entire area of the United States. There were no unusual features connected with the wind, or with other meteorological elements. "It was a pleasant spring day." Dr. Richter and Professor McAdie believe that the clouds which have been reported over the San Francisco fire (see *SCIENCE*, November 14, 1906, and April 5, 1907) showed no features that can not be explained as smoke effects. "Well-marked Foehn Effects with Great Diurnal Ranges of Temperature in Southern California," by Professor A. G. McAdie. A foehn effect on November 29 and 30, and on December 1 gave maximum temperatures between 80° and 86°, while the morning temperatures were so low that frost was reported in many places. This range, of about 50°, is a very unusual one in southern California. "The Relation of the Movements of the High Clouds to Cyclones in the West Indies," by John T. Quin. This is the continuation of a previous discussion in the *Monthly Weather Review* for May, 1907. "Studies of Frost and Ice Crystals," by W. A. Bentley. "The Winds of the Lake Region," by Professor A. J. Henry. This is

an important paper, on a subject which has received little attention. It deals with the seasonal wind directions (with charts); the average velocities, and with high winds. "Influence of Vegetation in Causing Rain." A brief discussion, by the editor, as to the possible effects of soils, bare and covered with vegetation, upon rainfall. R. DEC. WARD

THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING

MR. ANDREW CARNEGIE has added \$5,000,000 to the endowment of the Carnegie Foundation in order that retiring allowances may be provided for professors in state universities.

UNIVERSITY	Date of Founding	No. in Faculty	Student Registration	Receipts, 1906	Entrance Requirements
Georgia.....	1785	23	408	82,642	11
N. Carolina ...	1789	36	870	235,603	11.6
Tennessee.....	1794	27	695	88,390	10
S. Carolina ...	1801	19	296	41,730	5.2
Ohio (Athens)	1804	22	1272	135,193	12
Indiana.....	1820	49	1684	152,138	15
Miami	1824	36	991	97,472	14
Virginia	1825	35	706	111,094	8.4
Alabama.....	1831	17	491	56,053	10
Michigan	1837	113	4136	451,697	14
Missouri	1840	85	2072	366,111	15
Iowa	1847	53	1815	432,304	15
Mississippi....	1848	17	571	144,704	11
Wisconsin.....	1848	119	3571	804,521	14
Utah.....	1850	30	1063	159,007	10.7
Louisiana	1860	27	458	65,214	9.5
Washington ...	1861	43	925	149,345	15
Kansas.....	1864	88	1706	391,778	15
Maine	1867	28	687	41,900	13.5
W. Virginia...	1867	36	1422	138,660	12.5
California.	1868	116	4173	727,536	15
Illinois	1868	156	4074	825,107	14
Minnesota.....	1868	90	3955	345,261	15
Nebraska	1869	84	2914	357,060	14
Ohio State.....	1870	92	2157	628,000	14
Arkansas	1872	36	1528	143,900	10
Oregon.....	1876	19	506	117,200	15
Colorado.....	1877	31	1327	140,000	15
South Dakota..	1882	24	381	68,750	15
North Dakota.	1883	18	733	177,250	13
Texas.....	1883	43	1991	289,193	11.4
Nevada	1886	23	254	130,000	12
Wyoming.....	1886	18	241	26,081	14
Idaho	1889	16	363	96,537	15
Arizona.....	1891	13	226	32,200	15
New Mexico...	1891	8	89	29,615	15
Oklahoma.....	1892	19	475	85,000	15
Montana.....	1895	15	289	57,000	14
Florida.....	1904	14	136	57,710	9.9