SECTION V.—SEISMOLOGY.

SEISMOLOGICAL ABBREVIATIONS USED IN THE INSTRUMENTAL REPORTS.

CHARACTER OF THE EARTHQUAKE.

I = noticeable.
II = conspicuous.
III = strong.
d = (terræ motus domesticus) = local earthquake (sensible or felt).
v = (terræ motus vicinus) = nearby earthquake (within 1000 km.).
r = (terræ motus remotus) = distant earthquake (1000 to 5000 km. distant).
u = (terræ motus ultimus) = very distant earthquake (beyond 5000 km.).

Examples.—I_d indicates a local earthquake of small intensity but sensible to individuals.

III_r indicates a distant earthquake whose record shows motions of considerable amplitude.

PHASES.

P = (undæ primæ) = first preliminary tremors.
PR*n* = P waves reflected *n* times at the earth's surface.
S = (undæ secundæ) = second preliminary tremors.
SR*n* = S waves reflected *n* times at the earth's surface.
PS = transformed waves; longitudinal (P) to transversal (S) or vice versa.
L = (undæ longæ) = long waves in the principal portion.
M = (undæ maximæ) = greatest motion in the principal portion.
C = (coda) = trailers.
F = (finis) = end of sensible disturbance.

NATURE OF THE MOTION.

i = (impetus) = abrupt beginning.
e = (emersio) = gradual appearance.
T = period = twice the time of oscillation.
A = amplitude of the earth's movement, reckoned from the zero line.

E or N attached to a symbol signifies the E–W and N–S component, respectively, thus:

A_E is the E–W component of A, A_N is the N–S component of A: measured in microns (μ) $\frac{1}{1000}$ mm.

INSTRUMENTAL CONSTANTS.

T_0 = period of the instrument.
V = magnification of the instrument.
ϵ = damping coefficient.

SEISMOLOGICAL REPORTS FOR JUNE, 1915.

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TABLE 1.—*Noninstrumental earthquake reports, June, 1915.*

Day.	Approximate time, Greenwich Civil.	Station.	Approximate latitude.	Approximate longitude.	Intensity Rossi-Forel.	Number of shocks.	Duration.	Sounds.	Remarks.	Observer.
		ARIZONA.								
	H. m.		° ′	° ′			*M. s.*			
23	4 00	Tucson	32 15	110 50	2	1			Disturbance in southern California.	C. E. Gassick.
	4 00	Wickenburg	33 56	112 44	3	1				W. J. Haswell.
	4 00	Yuma	32 45	114 36	7	1	2	Rumbling		C. J. Wood.
	4 00	Yuma	32 45	114 36	6	1	5		Slight damage	E. E. Roddis.
23	4 56	Parker	34 06	114 13	5	3	3	Rattling		F. R. Macpherson.
	4 56	Wickenburg	33 56	112 44	5		4		Shook buildings	W. J. Haswell.
	4 56	Yuma	32 45	114 36	7	1	4			C. J. Wood.
	4 56	Yuma	32 45	114 36	6	1	5			U. S. Weather Bureau.
27	8 30	Mesa	33 24	111 50	2	6	6			E. B. Hill.
		CALIFORNIA.								
4	21 10	Shively	40 25	123 56	5	3	1			Frank Essig.
6	17 51	Coyote	37 14	121 44			3			Chas. Fletcher.
	17 51	Oakland	37 47	122 15	4	1	2			Chas. Burckhalter.
	17 51	Oakland	37 47	122 15	4	1	2	Faint		Mrs. O. Whittaker.
	17 51	San Francisco	37 48	122 26	4	1				U. S. Weather Bureau.
15	20 55	Chester	33 53	117 38	2	2				G. W. Olsen.
17	16 13	San Jose	37 15	121 46	4		1			Prof. Louis Kroeck.
18	15 05	Avalon	33 27	118 22	5	1	1			T. S. Manning.
	15 05	Los Angeles	34 03	118 15	4	1				Mrs. J. J. Walsh.
	15 05	San Pedro	33 45	118 14	4	3			Rattled windows	Mr. Walters.
	15 05	Santa Monica	34 00	118 30	5	1	5			F. E. Hill.
19	15 15	Avalon	33 27	118 22	2	1	1			T. S. Manning.