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)=near-by earthquake (within 1,000 km.).
r=(terræ motus remotus)=distant earthquake (1,000 to 5,000 km. distant).
u=(terræ motus ultimus)=very distant earthquake (beyond 5,000 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, N, or Z attached to a symbol signifies the E-W, the N-S, or the vertical component, respectively, thus:

A_E is the E-W component of A
A_N is the N-S component of A
A_Z is the vertical component of A
} measured in microns (μ), $\frac{1}{1,000}$ mm.

INSTRUMENTAL CONSTANTS.

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

SEISMOLOGICAL REPORTS FOR JANUARY, 1916.

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[Dated: Weather Bureau, Washington, D. C., March 1, 1916.]

TABLE 1.—*Noninstrumental earthquake reports, January, 1916.*

Day.	Approximate time, Greenwich Civil.	Station.	Approximate latitude.	Approximate longitude.	Intensity Rossi-Forel.	Number of shocks.	Duration.	Sounds.	Remarks.	Observer.
		CALIFORNIA.								
	H. m.		° ′	° ′			*Secs.*			
1	23 55	Claremont	34 07	117 44						F. P. Brackett.
	23 55	Corona	33 52	117 35	3	1	½	Rumbling		J. W. Garthwaite.
	23 55	Rialto	34 12	117 27	3	2	1		Rattled windows and doors	South California Edison Co.
11	5 15	Cahuilla	33 32	116 43	4	1	10	Rumbling	Windows rattled	Dr. W. L. Shawk.
16	0 41	Peachland	38 24	122 50	2	1	4			E. H. Parnell.
		INDIANA.								
7	19 45	Worthington	39 08	86 58	3	1	5			D. W. Solliday.
		NEVADA.								
18	9 00	Rebel Creek	41 39	117 45		1	2			F. Whitaker.
		NEW YORK.								
5	13 56	Caldwell	43 24	73 43	5	2				Chas. Forsell.
	13 56	Gloversville	43 05	74 21		1				(Press report.)
		OREGON.								
4	18 40	Newport	44 38	124 08	3-4	2			Dishes rattled	Wm. Matthews.
		WASHINGTON.								
2	0 52	Olympia	47 02	122 55	4	3	3		Windows rattled	S. R. Holcomb.
	0 52	Seattle	47 38	122 20	4	1	2		Doors moved	U. S. Weather Bureau.
	0 52	Silverton	48 00	121 32		1	5	Rumbling		C. M. Mackintosh.
	0 52	Sumner	47 12	122 13	4	2	3		Shook buildings	H. E. Thompson.
		PORTO RICO.								
7	15 05	Vieques	18 09	65 27	2	1	1	Faint		H. M. Pease.