

*Rheumatism* did its most fatal work after the age of 30. Its destructiveness increased from that age until the last decade over 90 furnished the largest proportion of victims.

*Small-pox* did 45 per cent. of its fatal work on children under 5; 9 per cent. between 5 and 10; nearly 17 per cent. between 20 and 30; and about 7 per cent. of those from 30 to 40 fell beneath it.

*Whooping-cough* is almost exclusively a disease of childhood; 91 per cent. of its deaths were of children under 5, and 97 per cent. under 10.

*Worms* was also a disorder of very early life; 79 per cent. of those who were thus destroyed were under 5, and 96 per cent. were under 10; and 70 in 10,000 of the deaths caused by it were reported to be between 50 and 70 years old.

TABLE XXII.—Ratio of deaths from each cause to total deaths from all causes at each age.

NUMBER OF EACH DISEASE TO 10,000 OF ALL DISEASES AT EACH AGE.

DISEASES.	MALES.																	
	Under 1 year.	1 to 2 years.	2 to 3 years.	3 to 4 years.	4 to 5 years.	Total under 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	80 to 90 years.	Over 90 years.
Abscess.....	5	7	4	3	5	5	15	13	24	33	35	30	37	33	31	26	13	.....
Anaemia.....										1	2	2	3	8	2	4	.....	.....
Aneurism.....										3	4	5	7	2	3	1	.....	.....
Angina pectoris.....																1	.....	.....
Apoplexy.....	10	9	11	5	15	10	18	13	43	55	56	108	197	289	421	373	195	48
Asthma.....	3	9	10	5	11	6	4	8	5	6	7	13	25	54	66	95	58	24
Bowels, disease of.....	75	73	54	37	29	65	35	20	37	27	32	30	43	28	56	53	28	.....
Brain, &c., disease of.....	197	235	232	210	214	214	244	253	181	137	114	145	176	139	106	85	40	8
Bronchitis.....	85	72	49	44	43	70	39	24	15	45	49	41	58	52	70	64	28	8
Cancer.....	4	3	6	7	15	5	15	1	10	15	39	69	137	208	283	296	191	112
Carbuncle.....	1		1		1	1				1	3	3	8	8	16	5	6	8
Cephalitis.....	469	549	474	372	379	474	454	470	302	197	147	137	112	91	96	44	23	8
Cholera.....	14	22	25	18	15	18	46	30	32	28	38	43	47	62	62	28	21	8
Cholera infantum.....	435	397	159	56	55	327												
Chorea.....				1			4	3	6	1		1	1			1		
Cold water.....											2	1						
Consumption.....	256	279	265	213	197	255	274	589	1,726	2,737	3,125	2,926	2,545	2,172	1,977	1,448	543	289
Convulsions.....	777	356	270	221	179	523	147	119	118	84	78	66	62	52	63	65	41	32
Croup.....	854	819	1,133	1,260	1,121	942	544	100	14	7	6	3	6	8	6	5	4	8
Cyanosis.....		1		2														
Cystitis.....			1	2	1	1	2	3	5	5	2	4	14	8	38	57	17	24
Debility.....	77	33	28	32	21	52	14	10	9	25	26	24	43	69	120	224	236	104
Delirium tremens.....								1	2	31	49	108	122	63	24	9	2	8
Diabetes.....			2	4	1	1	8	25	10	21	24	12	22	29	51	58	21	16
Diarrhoea.....	396	612	389	169	124	412	104	85	65	78	95	117	108	108	113	104	84	24
Diphtheria.....	27	44	58	120	146	52	162	111	39	17	12	5	8	7	9	1		
Dropsey.....	64	117	161	212	222	115	267	369	269	230	204	318	430	650	1,087	1,227	635	309
Dysentery.....	360	729	618	424	300	489	281	210	128	148	145	163	155	155	146	128	86	40
Dyspepsia.....	4	3	3	4	3	3	5	8	18	11	16	38	50	97	120	81	37	.....
Enteritis.....	243	207	170	118	101	202	161	274	206	156	155	170	191	198	227	157	92	16
Epilepsy.....	11	5	4	8	7	8	9	16	30	25	22	34	25	16	13	6	8	.....
Erysipelas.....	111	51	42	54	33	76	39	75	74	48	57	74	85	112	117	123	67	64
Fever, intermittent.....	77	111	127	193	170	109	216	232	180	147	114	143	119	124	129	81	34	40
Fever, remittent.....	212	300	314	300	308	263	407	462	475	422	378	314	308	329	285	241	102	40
Fever, typhoid.....	360	166	240	286	389	164	611	1,274	1,655	1,587	1,106	865	715	623	462	235	110	64
Fistula.....				1				3		2	4	4	3	3	4			
Gastritis.....	20	19	22	11	19	19	22	20	27	17	26	31	49	47	31	22	15	8
Gout.....				1				1		1	1		3	8	7	6	4	.....
Heart, &c., disease of.....	71	41	31	43	61	55	103	160	169	142	172	224	314	412	574	625	271	88
Heat.....			2	7	9	2	11	8	20	25	40	45	46	26	15	4	4	.....
Hemorrhage.....	23	10	10	15	13	17	29	36	56	76	83	77	72	47	52	37	17	8
Hepatitis.....	2	3		4	3	2	6	3	2	6	5	12	11	17	13	9		
Hernia.....	7	1	1	2	3	4	1	3	16	16	12	14	22	35	44	46	17	32
Hydrocephalus.....	190	271	203	117	146	207	97	55	18	11	6	10	11	10	5	9		
Hydrophobia.....				2	1		5	5		3		1	1	2	1	1		
Ileus.....	1			1			2	3	1	3	3	2	3	1		1		
Infantile.....	906	29	8	5	7	427												
Inflammation.....	52	34	45	23	17	42	38	36	29	23	38	36	35	11	52	41	32	16
Influenza.....	21	13	7	12	13	17	5	13	2		2		3	8	4	5	17	16
Insanity.....								3	14	10	19	42	30	44	27	25	6	8
Intemperance.....							3		12	29	58	127	187	159	97	37	8	.....

## MORTALITY OF THE UNITED STATES.

TABLE XXII.—Ratio of deaths from each cause to total deaths from all causes at each age—Continued.

NUMBER OF EACH DISEASE TO 10,000 OF ALL DISEASES AT EACH AGE.

DISEASES.	MALES.																	
	Under 1 year.	1 to 2 years.	2 to 3 years.	3 to 4 years.	4 to 5 years.	Total under 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	80 to 90 years.	Over 90 years.
Ischuria.....	1			2				1	2	3	1	1	8	2	7	5	10	
Jaundice.....	20	7	8	14	11	15	19	10	12	13	15	16	24	33	38	37	23	8
Joints, &c., disease of.....			1	7	3	1	11	31	11	4	8	4	1		2		2	
Kidney, &c., disease of.....	4	4	3	8	5	4	5	10	12	26	33	44	54	71	146	162	89	8
Laryngitis.....	1	3	1	4	1	2	3		1	4	2	3	3	2	3	1		
Liver, disease of.....	36	33	39	26	17	34	32	56	70	52	80	106	170	204	205	144	58	8
Lungs, disease of.....	107	107	91	89	67	113	72	53	78	76	74	106	118	456	134	164	86	40
Malformation.....	10	4	4	2		8					1							
Marasmus.....	59	36	38	16	15	44	10	11	10	10	13	9	9	14	13	4	4	
Measles.....	110	252	289	206	170	184	159	103	73	53	31	23	12	8	13	4	4	
Mortification.....	2	2	2	1	1	2	3	6	7	7	9	9	14	18	28	33	56	32
Necrosis.....	1	4	1	2	3	2	8	28	15	11	7	3	7	15	9	5		
Neuralgia.....	6	5	8	11	11	7	13	30	32	26	31	34	37	45	54	32	17	8
Old age.....														17	291	1,630	4,867	7,548
Paralysis.....	6	80	11	1	11	8	16	38	25	32	46	87	134	314	564	813	605	209
Parotitis.....	3	6	6	14	7	5	10		5	2	2	1	1		3			
Pericarditis.....								1	2	1	2	4	2	3		1	2	
Peritonitis.....	1	1	1			1	1	3	6	12	3	4	2	1	2	1		
Phlebitis.....								1	2	1	1				1			
Pleurisy.....	15	10	6	4	11	11	16	43	54	53	53	48	88	79	99	71	45	16
Pneumonia.....	806	775	669	568	526	739	566	789	1,063	1,114	955	995	1,110	1,103	1,077	765	408	225
Prostate, disease of.....															2	2		
Purpura and scurvy.....	1	3	5	5	5	3		3	3	2	4	2	5	1	1			
Quin y.....	18	16	30	44	39	23	48	28	27	13	7	10	15	5	10	9	2	8
Rheumatism.....	3	2	6	16	21	6	61	130	126	68	55	81	96	106	182	127	82	32
Scarlatina.....	395	972	1,766	2,459	2,799	1,075	2,623	1,250	369	81	56	34	29	26	22	10	6	8
Serofula.....	66	103	91	82	102	83	114	161	122	85	78	52	34	43	47	32	8	16
Skin, disease of.....	210	51	30	26	13	118	15	6	3	1	2	1	3	5	3	5	4	
Small-pox.....	33	33	39	58	37	37	52	28	42	73	85	45	33	32	16	8	6	8
Spine, disease of.....	21	32	42	54	33	30	42	85	48	34	26	35	33	27	29	12	4	
Splenitis.....	1	3	1		5	1	2	5	1	1	2	2	7	6	2			
Stomach, disease of.....	5	4	5	7		4	5	1		2	5	5	13	14	27	20	2	
Stone.....	3	3	6	9	9	4	6	21	15	7	2	15	22	45	150	229	217	80
Sudden death.....	28	15	11	11	23	20	13	20	15	12	21	22	33	45	51	52	32	8
Syphilis.....	6	3	2			4	3		3	14	18	14	15	12	9	2	2	
Teething.....	284	665	210	25	11	322												
Tetanus.....	121	39	24	32	31	74	52	103	78	33	29	34	37	23	17	14	4	8
Throat, disease of.....	67	108	165	243	326	124	299	198	61	36	21	23	15	18	17	22	10	
Thrush.....	91	41	23	13	16	59	13	2	3			1	3	4	2	2		
Tumor.....	8	3	3	8	3	6	8	20	7	12	14	15	18	39	38	21	13	
Ulcer.....	5	5	3	4	11	5	6	2	9	9	13	10	16	17	23	34	13	8
Whooping-cough.....	499	480	400	307	263	447	174	60	19	4	3	1	3		4	5	2	
Worms.....	39	107	201	222	160	105	125	48	9	1	3	1		1	3	1		
Yellow fever.....	2	7	15	14	19	7	16	20	46	78	112	75	30	14	13			
Violent deaths.....	403	354	512	647	779	450	867	1,309	1,416	1,225	1,404	1,317	1,049	746	522	345	156	201

TABLE XXIII.—Ratio of deaths from each cause to total deaths from all causes at each age.

NUMBER OF EACH DISEASE TO 10,000 OF ALL DISEASES AT EACH AGE.

FEMALES.

DISEASES.	Under 1 year.	1 to 2 years.	2 to 3 years.	3 to 4 years.	4 to 5 years.	Total under 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	80 to 90 years.	Over 90 years.
Abscess.....	9	11	6	1	10	8	6	12	12	15	25	15	22	20	15	17	10	.....
Anæmia.....				1					1			3		1				.....
Aneurism.....							2			1	1		3	2				.....
Angina pectoris.....				1											1			.....
Apoplexy.....	7	7	6	7	14	7	9	28	30	47	44	106	189	290	304	311	176	64
Asthma.....	3	4	12	8		5	7	6	3	5	8	14	38	49	86	85	38	32
Bowels, disease of.....	71	57	63	25	24	59	29	36	33	20	33	22	35	42	37	43	17	12
Brain, &c., disease of.....	185	209	189	203	165	194	208	212	128	79	79	89	99	87	72	42	12	6
Bronchitis.....	78	69	56	47	36	66	43	36	31	49	42	42	53	47	44	41	10	.....
Cancer.....	7	14	13	7	12	10	9	27	26	50	172	394	622	491	370	225	110	.....
Carbuncle.....				1	2		1	1	2			1	9	6	4	1	2	6
Cephalitis.....	430	478	426	380	357	431	425	300	226	147	147	104	104	80	45	35	6	.....
Child-birth.....								26	451	815	988	1,065	422	19				.....
Cholera.....	10	11	23	25	13	14	46	28	12	21	27	21	31	37	48	29	21	12
Cholera infantum.....	461	374	161	73	40	326												.....
Chorea.....							2	18	5	2		3	3	2	1			.....
Cold water.....																		.....
Consumption.....	276	315	274	213	259	277	357	1,175	2,993	3,821	4,027	3,475	1,059	2,540	1,920	1,639	638	239
Convulsions.....	737	298	271	218	169	472	136	92	102	85	82	95	77	51	60	50	36	57
Croup.....	773	766	1,057	1,348	1,171	902	556	79	14	10	14	6	3	5	8	1	6	.....
Cyanosis.....	5				2	2												.....
Cystitis.....			1	1	2	1		3		3	3	4	3		3	1	2	6
Debility.....	71	34	27	11	18	46	8	12	17	25	31	42	65	116	184	246	212	220
Delirium tremens.....									2	5	11	13	15		2	3		.....
Diabetes.....		1	2		2	1	10	26	10	7	2	6	9	11	7	6	4	6
Diarrhœa.....	418	617	387	165	124	413	83	76	44	45	64	57	82	81	79	125	70	6
Diphtheria.....	22	48	83	132	157	58	175	155	50	19	22	13	9	6	7	1	4	6
Dropsy.....	58	101	135	190	143	99	211	285	264	318	376	476	830	1,108	1,241	1,102	681	308
Dysentery.....	392	701	586	407	257	466	268	191	103	100	121	124	133	180	163	170	116	84
Dyspepsia.....	2	4	3	4	4	3	4		3	14	18	31	40	74	94	49	8	.....
Enteritis.....	211	203	151	120	132	185	142	208	141	139	137	163	151	169	152	157	53	38
Epilepsy.....	12	6	2	5	2	7	5	14	19	25	18	23	21	16	9	12	6	.....
Erysipelas.....	129	71	49	38	32	87	43	60	55	57	57	61	59	102	102	139	77	32
Fever, intermittent.....	101	114	120	162	188	119	234	236	151	106	97	133	122	134	99	69	27	.....
Fever, remittent.....	240	312	327	335	365	200	400	446	465	431	348	345	281	174	294	232	88	45
Fever, typhoid.....	93	158	261	296	400	176	680	1,453	1,696	1,117	781	668	627	591	411	254	98	58
Fistula.....									1			1	1	1	1			.....
Gastritis.....	21	27	28	23	36	25	29	40	34	34	37	52	38	49	36	29	15	.....
Gout.....								1				1	1		2			.....
Heart, &c., disease of.....	67	32	24	20	49	45	107	232	170	154	165	254	351	430	539	483	176	58
Heat.....	1		4	7		1	4	9	5	4	3	6	6	6	3	1		.....
Hemorrhage.....	20	8	7	10	12	14	14	31	62	49	70	82	64	44	34	35	17	12
Hepatitis.....	1	1	4	1	2	2	8	3	3	5	3	4	11	10	14	6		.....
Hernia.....	2		1	2		1	1	3	1	7	5	9	22	11	15	18	4	.....
Hydrocephalus.....	192	224	204	138	126	192	99	40	17	11	10	10	5	10	9	4	4	.....
Hydrophobia.....		1		1	2		1	3	1	1								.....
Ileus.....								1		1	2		2	3		1		.....
Infantile.....	938	28	11	1		421												.....
Inflammation.....	39	40	36	23	28	36	36	45	23	37	38	43	33	40	30	29	12	.....
Influenza.....	19	13	9	11	12	15	9	10	3	5	3	5	4	7	9	27	23	19
Insanity.....								1	6	14	17	25	45	35	34	23	8	.....
Intemperance.....										11	12	18	27	6	8	3		.....
Ischuria.....								1		1			2	1		3		.....
Jaundice.....	23	6	12	14	32	17	23	7	5	9	14	16	20	29	37	41	17	6
Joints, &c., disease of.....	1			2	2	1	3	6	7	4	1	2	3	3	2	4	8	.....
Kidney, &c., disease of.....	1	3	1	2	4	1	4	6	9	7	13	18	25	16	27	34	6	6
Laryngitis.....	1	1	1	1	10	2	2	1	2	1	1		2				2	.....
Liver, disease of.....	34	34	27	25	36	32	36	36	31	56	68	83	149	230	221	127	43	12
Lungs, disease of.....	109	91	88	44	63	92	67	84	99	83	63	89	102	126	152	145	68	32
Malformation.....	13	3		1		7		3	1							1		.....
Marasmus.....	68	57	34	19	12	54	12	7	6	10	5	7	6	8	9	7	2	.....
Measles.....	120	258	299	261	208	200	157	137	78	66	42	39	39	23	18	9		6

## MORTALITY OF THE UNITED STATES.

TABLE XXIII.—Ratio of deaths from each cause to total deaths from all causes at each age—Continued.

NUMBER OF EACH DISEASE TO 10,000 OF ALL DISEASES AT EACH AGE.

DISEASES.	FEMALES.																	
	Under 1 year.	1 to 2 years.	2 to 3 years.	3 to 4 years.	4 to 5 years.	Total under 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	80 to 90 years.	Over 90 years.
Mortification	2	2		1	6	2	3	7	3	3	2	6	8	12	9	21	19	19
Necrosis		3	3	1	6	2	3	7	3	8	4	4	7	6	2			
Neuralgia	7	5	10	8	18	8	19	29	38	34	36	57	60	49	66	63	30	6
Old age													3	34	404	2,852	5,463	7,730
Ovarian dropsy										1		2	2	2	1			
Paralysis	6	9	11	5	26	9	15	31	25	26	43	61	194	393	673	967	703	265
Paramenia								21	20	15	15	25	38	17				
Parotitis	1	4	4	7	16	4	3	3	3	1	1	1				3		
Pericarditis	1		1					4	2	2	2		3			4	2	
Peritonitis		1			2			6	7	13	12	9	4	2		3		
Phlebitis					2				1	1	2	2		1				
Pleurisy	16	9	10	1	12	12	18	36	29	21	24	41	64	85	85	83	38	6
Pneumonia	709	739	645	528	470	672	509	758	824	643	596	672	761	801	803	747	367	155
Prostate, disease of																		
Puerperal fever								7	129	324	278	270	113	8				
Purpura and scurvy		3		1		1		3	1	1	2	2	3	6	1	1		
Quinsy	16	23	24	49	57	25	56	37	12	13	13	14	14	6	9	9	2	6
Rheumatism	3	3	9	5	16	5	54	108	55	45	41	53	88	102	130	125	47	19
Scarlatina	301	1,021	1,700	2,540	2,741	1,133	2,858	1,526	435	134	103	61	39	37	22	13	8	
Scrofula	68	93	100	74	87	81	113	170	101	78	71	66	68	48	48	27	8	
Skin, disease of	197	56	27	19	22	107	8	4	1	3	5	3	6	3	2	3		
Small-pox	37	45	49	46	40	42	40	34	29	36	31	14	18	21	15	10	12	6
Spine, disease of	26	24	27	32	40	28	36	36	23	24	29	25	33	29	23	15	6	
Splenitis		1		1				1		2	3	6	3	5		1		
Stomach, disease of	6	2	5	7	4	5	2	9	7	10	5	11	9	16	25	9	6	
Stone	2	1			2	1	1	3		1	5	2	6	7	18	18	2	6
Sudden death	32	13	70	10	12	20	9	20	14	16	18	16	24	25	37	26	25	51
Syphilis	7	3	2		4	4	1		7	14	8	7	13	3	2	1		
Teething	307	693	247	35	24	340												
Tetanus	116	31	32	22	22	67	33	26	18	15	8	16	15	15	11	12	2	6
Throat, disease of	67	108	203	283	335	138	423	266	84	33	27	25	35	24	22	17	4	6
Thrush	98	48	31	15	6	60	9	1	3	9	12	12	8	6	2	5	6	
Tumor	4	2	2	10	8	4	9	10	11	12	24	39	57	70	63	52	6	
Ulcer	8	4	2	5	4	5	5	7	6	9	11	14	20	25	24	12	8	6
Uterus, &c., disease of								3	18	22	30	38	70	38	22	6	2	
Whooping-cough	639	741	580	420	370	613	241	79	14	8	7	5	1	6	2	6		
Worms	39	124	192	214	200	111	127	23	2	2	1	1		6	4			
Yellow fever	4	2	6	7	14	5	16	18	11	14	20	16	7	11	4			
Violent deaths	458	315	443	509	668	450	596	609	361	251	239	192	206	176	172	131	156	142

## RATIO OF DEATHS FROM EACH CAUSE TO TOTAL DEATHS FROM ALL CAUSES IN EACH AGE.

Of the deaths in infancy under 1, somewhat more than 4 per cent. were from *cholera infantum*; nearly 7 per cent. from *convulsions*; 8 per cent. from *croup*; 9 per cent. from the various causes included in the term *infantile*; and almost the same proportion from *pneumonia*; about 4 per cent. from *scarlet fever*; nearly 3 per cent. from *teething*; and nearly 5 per cent. from *whooping-cough*. More than one-half, 51 per cent., of all the deaths of children under 1 was caused by *cholera infantum*, *whooping-cough*, *scarlet fever*, *croup*, *convulsions*, *consumption*, *pneumonia*, *teething*, and *infantile diseases*.

Of all the mortality of children under 5, 4.5 per cent. was caused by *cephalitis*, *inflammation of the brain*; 3 per cent. by *cholera infantum*; 7 per cent. by *dysentery* and *diarrhœa*; 3.5 per cent. by *convulsions*; 2.5 per cent. by *consumption*; 9 per cent. by *croup*; 5 per cent. by *fevers*; 7 per cent. by *pneumonia*; 10 per cent. by *scarlet fever*; 3 per cent. by *teething*; 4.5 per cent. of the boys, and 6 per cent. of the girls, by *whooping-cough*. The epidemic and contagious diseases caused more than half the mortality of childhood.

In the period 5 to 10 *scarlet fever* was the great destroyer, carrying off 2,633 males and 2,838 females in 10,000 of all that died in that age. About 13 per cent. died of *fevers*; 5.5 per cent. of *croup*; between 3 and 4 per cent. of *diseases of the throat*; nearly 7 per cent. of *diseases of the brain*; the same of *cholera infantum*, *dysentery* and *diarrhœa*; over 5 per cent. of *pneumonia*; 1.5 per cent. of *measles*; and almost 2 per cent. of *whooping-cough*; and, what is very remarkable, 807 deaths of boys and 576 of girls out of 10,000, of all causes, were caused by accident, violence, &c.

Of the deaths between 10 and 15, *fevers* caused about one-fifth; *scarlet fever* one-eighth of the boys and one-seventh of the girls, and *pneumonia* one-thirteenth. *Consumption* caused 3 per cent.; *cephalitis* 4.5 per cent.; *dysentery* and *diarrhœa* 1 per cent.; *inflammation of the bowels* 2 per cent.; *measles* 75 in 10,000; and accidents, violence, &c., 13 per cent. of the boys and 6 per cent. of the girls.

In the period 15 to 20 *fever* and *consumption* hold the first rank as destructive forces. From the first, 22 per cent. of the males and 23 per cent. of the females; and from the second, 17 per cent. of the males and 29 per cent. of the females, were carried away.

*Pneumonia* took away 9 per cent.; *scarlet fever* 4 per cent.; *diseases of the brain* carried off 35 per cent.; and *diseases of the bowels* almost 3 per cent.; accidents, violence, &c., 1,416 males and 361 females in 10,000.

In the next quinquennial period, 20 to 25, *consumption* took the first rank as a destroyer, and produced 27 per cent. of the deaths of males and 38 per cent. of those of females. *Fever* follows next, and caused 21.5 per cent. of the male deaths and 16.5 per cent. of the female deaths. *Disease of the bowels* carried off .27 per cent. of the males and .20 per cent. of the females who died. *Pneumonia* became proportionately more destructive; 11 per cent. of the male deaths and 6.5 per cent. of the female deaths were produced by it. *Diseases of the brain* of all kinds took away 3.8 per cent. of the males and 2.7 per cent. of the females. *Childbirth* was fatal to 11 per cent. of the females who died. Accident and violence were fatal to 12.2 per cent. of the males and 2.5 per cent. of the females that perished.

Of the deaths between 25 and 30, the largest proportion, 31 per cent. of the males and 40 per cent. of the females, were caused by *consumption*; 16 per cent. of males and 12 per cent. of females by *fevers*; 4 per cent. of males and 3.5 per cent. of females by *diseases of the bowels*; 9.5 per cent. of males and 6 per cent. of females by *pneumonia*; 2.8 per cent. of males and 3 per cent. of females by *diseases of the brain*; 14 per cent. of males and 2.4 per cent. of females by *accident and violence*; and 12.5 per cent. of females in *childbirth*.

Among the deaths between 30 and 40, the largest proportion, 29.26 per cent. of males and 34.75 per cent. of females, were from *consumption*; (this is a smaller ratio than in the previous period;) 13 per cent. of males and 11 per cent. of females were from *fevers*; 4.6 per cent. of males and 3.5 per cent. of females from *diseases of the brain*; 5 per cent. of males and 4 per cent. of females from *diseases of the bowels*; about 2.5 per cent. from *disease of the heart*; almost 10 per cent. of males and 6 per cent. of females from *pneumonia*; 1 in 42 males and 1 in 322 females from *intemperance* and *delirium tremens*; 13 per cent. of females in *childbirth*; 13 per cent. of males and 2 per cent. of females from accident and violence.

Of the deaths between 40 and 50, *consumption* still takes the lead, though not so prominently as in the earlier ages; still it caused 25 per cent. of the male and 10.5 per cent. of the female mortality. *Fever* caused 11 per cent. of male and 10 per cent. of the female deaths. Nearly 5 per cent. of the male and 4 per cent. of the female deaths were produced by *diseases of the brain*; 11 per cent. among males and 7.6 per cent. among females were due to *pneumonia*; about 4 per cent. to *diseases of the bowels*; 514 in 10,000 women died from *childbirth*. Among the same numbers 319 men and 42 women died from *intemperance*, and 1,049 men and 216 women from accident and violence.

Of the deaths between 50 and 60, one-fifth of the male and one-fourth of the female followed *consumption*; one-tenth of male and one-eleventh of female followed *fevers*; 3 per cent. of the male and 4 per cent. of the female followed *palsy*; one-ninth of the male and about one-twelfth of the female were caused by *pneumonia*; 2.2 per cent. of the male by *intemperance*; 4 per cent. in each sex by *disease of the heart*; over 3 per cent. of the male and one-tenth as large a proportion of the female mortality was caused by *apoplexy*. In 10,000 deaths of each sex, 746 males and 176 females were caused by accidents and violence.

Of the mortality of persons from 60 to 70 years old, 19 per cent. in each sex was from *consumption*; 8 per cent. from *fevers*; 5 per cent. from *heart disease*; 10 per cent. male and 8 per cent. female from *pneumonia*; about 3 per cent. of each sex from *disease of the bowels*; nearly 3 per cent. male and 5 per cent. female from *cancer*; 8 per cent. male and nearly 10 per cent. female from *palsy*; 4 per cent. male and 3 per cent. female from *apoplexy*; about 3 per cent. male and 4.6 per cent. female from *old age*; and 522 male and 172 female, in 10,000 of each sex, from accident and violence.

In 10,000 deaths in either sex between 70 and 80 years old, 1,448 of males and 1,639 of females were of *consumption*; 1,153 of males and 1,054 of females, of *dropsy*; 813 of males and 967 of females, of *palsy*; 373 of males and 311 of females, of *apoplexy*; 130 of males and 119 of females, of other *diseases of the brain*; 625 of males and 483 of females, of *diseases of the heart*; 1,077 of males and 833 of females, of *pneumonia*; 5.5 per cent. of *fevers*; 1,630 males and 2,852 females, of *old age*; and 345 males and 131 females from accidents and violence.

Of the mortality in extreme old age, 80 to 90, in 10,000, 5,103 males and 5,675 females, died of *debility* and *old age*; 665 males and 703 females, of *palsy*; 543 males and 638 females, of *consumption*; 588 males and 664 females, of *dropsy*; 279 males and 258 females, of *diseases of the bowels*; 408 males and 367 females, of *pneumonia*; 271 males and 176 females, of *disease of the heart*; 246 males and 213 females, of *fevers*; and 156 in each sex of accident and violence.

Past the age of 90, more than three-fourths of each sex died of *old age*; .2 per cent. of males and 2.5 per cent. of females died of *palsy*; 2.25 per cent. of males and 1.5 per cent. of females died of *pneumonia*; 3 and 3.5 per cent. of *dropsy*; and 289 males and 239 females in 10,000, of *consumption*.

## MORTALITY OF THE UNITED STATES.

TABLE XXIV.—Ratio of deaths in each month to total deaths in the year from each cause.

NUMBER IN EACH MONTH TO 10,000 IN ALL MONTHS.

DISEASES.													QUARTER ENDING LAST DAY OF—			
	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	September.	December.	March.
Abscess .....	602	585	833	656	691	851	780	886	975	1,010	939	1,188	2,730	2,074	2,322	2,872
Anæmia .....	512	512	1,025	1,025	1,282	512	256	1,538	512	1,538	512	769	1,794	2,504	2,051	3,589
Aneurism .....	238	476	476	714	476	1,100	1,428	1,428	1,666	952	476	476	1,190	1,666	3,095	4,047
Angina pectoris .....	1,666	1,666	-----	-----	1,666	-----	1,666	-----	-----	1,666	1,666	-----	3,333	1,666	3,333	1,666
Apoplexy .....	612	684	664	762	691	632	814	867	1,000	1,029	1,078	1,160	2,852	2,112	2,138	2,897
Asthma .....	702	448	627	702	687	777	732	971	1,031	1,121	1,091	1,106	2,899	1,778	2,197	3,124
Bowels, disease of .....	989	983	1,288	1,151	684	516	535	603	672	709	672	1,194	2,856	3,422	1,736	1,985
Brain, &c., disease of .....	803	910	1,026	860	725	572	604	760	825	966	944	1,000	2,748	2,797	1,902	2,552
Bronchitis .....	495	548	521	641	621	631	887	955	1,111	1,330	1,231	1,022	2,750	1,711	2,139	3,397
Cancer .....	797	855	818	870	800	690	702	785	794	939	836	1,138	2,772	2,544	2,469	2,469
Carbuncle .....	612	612	1,224	1,428	1,224	408	714	918	306	918	714	918	2,244	3,265	2,346	2,142
Cephalitis .....	781	995	1,127	973	704	497	548	736	764	910	903	1,057	2,742	3,095	1,750	2,411
Child-birth .....	626	601	643	579	613	611	840	976	1,028	1,185	1,097	1,195	2,919	1,824	2,066	3,190
Cholera .....	849	1,961	2,810	1,344	586	303	353	232	182	333	374	667	1,890	6,117	1,243	748
Cholera infantum .....	749	2,048	2,932	1,617	701	233	212	264	195	191	245	607	1,603	6,598	1,146	651
Chorea .....	545	545	727	181	181	727	727	1,636	1,090	1,090	1,272	1,272	3,090	1,454	1,636	3,818
Cold water .....	-----	4,000	-----	2,000	-----	-----	-----	2,000	-----	-----	-----	2,000	2,000	6,000	-----	2,000
Consumption .....	733	727	722	717	678	641	717	856	887	1,110	1,060	1,146	2,940	2,167	2,037	2,853
Convulsions .....	786	917	888	731	670	530	687	850	882	1,048	922	1,081	2,791	2,537	1,888	2,782
Croup .....	463	489	555	775	963	885	964	1,116	1,061	1,044	871	810	2,144	1,820	2,812	3,222
Cyanosis .....	689	1,034	-----	689	344	344	2,413	344	689	1,034	1,034	1,379	3,103	1,724	3,103	2,068
Cystitis .....	549	604	934	274	879	769	630	824	934	1,153	1,153	1,263	2,967	1,813	2,307	2,912
Debility .....	729	814	889	790	758	664	711	744	772	1,010	987	1,127	2,845	2,494	2,133	2,526
Delirium tremens .....	765	765	713	643	695	573	730	869	956	991	1,660	1,234	3,060	2,121	2,000	2,817
Dianbetes .....	571	649	675	727	857	779	987	1,064	1,012	883	597	1,194	2,363	2,051	2,623	2,961
Diarrhoea .....	1,010	1,661	2,229	1,483	832	387	283	290	249	295	378	898	2,287	5,374	1,503	834
Diphtheria .....	500	391	572	746	897	819	951	795	1,078	1,144	1,066	1,036	2,602	1,710	2,668	3,018
Dropsy .....	813	721	783	753	704	622	738	768	848	999	1,009	1,236	3,059	2,257	2,065	2,616
Dysentery .....	863	1,414	2,418	1,892	969	339	253	262	223	243	322	796	1,983	5,726	1,561	729
Dyspepsia .....	832	772	1,158	856	796	759	747	651	687	868	844	1,025	2,702	2,786	2,303	2,207
Enteritis .....	760	966	1,058	1,023	787	546	631	751	711	829	912	1,041	2,714	3,028	1,966	2,291
Epilepsy .....	700	960	1,020	640	640	700	630	680	780	1,160	1,120	980	2,800	2,620	1,960	2,620
Erysipelas .....	627	620	700	631	671	700	715	993	956	1,109	1,047	1,223	2,898	1,953	2,088	3,059
Fever, intermittent .....	554	948	1,624	1,928	1,215	537	444	427	526	567	583	642	1,780	4,501	2,196	1,521
Fever, remittent .....	707	1,041	1,334	1,356	1,004	580	462	560	607	720	760	853	2,320	3,732	2,057	1,888
Fever, typhoid .....	656	720	1,040	1,291	1,168	884	711	711	681	715	664	753	2,075	3,052	2,764	2,107
Fistula .....	270	540	1,081	540	810	540	1,891	-----	540	351	540	1,891	2,702	2,162	3,243	1,891
Gastritis .....	898	848	1,114	937	720	473	621	700	700	1,036	908	1,036	2,843	2,902	1,816	2,438
Gout .....	1,219	487	731	731	243	243	243	487	975	1,219	1,951	1,463	4,634	1,951	731	2,682
Heart, &c., disease of .....	762	702	605	629	716	649	724	898	901	1,175	1,035	1,200	2,997	1,937	2,090	2,974
Heat .....	1,495	5,835	1,407	498	234	-----	-----	-----	-----	116	147	263	1,905	7,741	234	117
Hæmorrhage .....	782	547	721	699	775	645	767	843	1,063	1,056	1,018	1,079	2,879	1,968	2,188	2,903
Hepatitis .....	850	600	600	800	1,050	950	500	700	900	750	900	1,400	3,150	2,000	2,500	2,350
Hernia .....	696	752	606	724	863	752	863	919	779	1,030	863	1,058	2,618	2,172	2,479	2,729
Hydrocephalus .....	782	826	1,017	850	591	538	679	800	856	997	956	1,103	2,842	2,604	1,809	2,633
Hydrophobia .....	1,052	1,052	1,842	1,052	789	526	-----	1,315	1,052	-----	526	789	2,368	3,947	1,315	2,368
Ileus .....	1,363	909	909	454	681	454	454	454	681	681	2,272	681	4,318	2,272	1,590	1,818
Infantile .....	708	760	925	818	695	595	713	954	901	956	969	1,001	2,679	2,504	2,004	2,811
Inflammation .....	768	714	844	608	661	593	646	897	897	1,102	1,072	1,193	3,034	2,107	1,901	2,897
Influenza .....	446	209	262	367	708	498	892	1,023	1,522	1,522	1,312	1,233	2,992	839	2,089	4,068
Insanity .....	888	666	977	933	756	533	822	622	733	800	666	1,600	3,155	2,577	2,111	2,155
Intemperance .....	636	712	680	680	788	701	799	831	885	1,112	1,004	1,166	2,807	2,073	2,289	2,829
Ischuria .....	181	909	1,454	363	727	1,090	545	363	545	1,090	1,272	1,454	2,909	2,727	2,363	2,000
Jaundice .....	825	678	722	678	693	796	914	1,002	825	1,002	870	988	2,684	2,079	2,404	2,831
Joints, &c., disease of .....	538	1,000	769	615	384	768	768	768	1,153	846	692	1,692	1,923	2,769	2,923	2,384
Kidney, &c., disease of .....	785	736	969	576	736	638	838	932	907	1,092	871	895	2,552	2,282	2,233	2,932
Laryngitis .....	675	540	405	270	945	405	675	1,486	540	2,297	675	1,081	2,432	1,216	2,027	4,324
Liver, disease of .....	806	753	764	738	722	658	722	757	806	1,012	1,012	1,244	3,063	2,256	2,104	2,576
Lungs, disease of .....	605	535	476	540	664	538	700	1,031	1,230	1,266	1,185	1,224	3,015	1,552	1,902	3,528
Malformation .....	944	708	629	1,023	866	157	629	1,023	944	1,181	1,023	866	2,834	2,362	1,653	3,149
Marasmus .....	660	1,002	1,244	1,112	814	638	539	660	693	748	859	1,024	2,544	3,359	1,993	2,103
Menses .....	922	677	615	471	368	296	414	639	837	1,363	1,664	1,726	4,314	1,765	1,079	2,840
Mortification .....	714	714	821	785	535	750	750	1,107	857	1,142	1,000	831	2,535	2,321	2,035	3,107
Necrosis .....	819	983	874	1,038	491	546	601	874	546	983	1,147	1,092	3,060	2,896	1,639	2,404
Neuralgia .....	653	631	852	858	620	642	930	974	753	974	974	1,107	2,735	2,369	2,192	2,702
Old age .....	664	641	700	731	646	701	801	978	940	1,116	1,036	1,041	2,742	2,073	2,148	3,035

TABLE XXIV.—Ratio of deaths in each month to total deaths in the year from each cause—Continued.

NUMBER IN EACH MONTH TO 10,000 IN ALL MONTHS.

DISEASES.													QUARTER ENDING LAST DAY OF—			
	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	September.	December.	March.
Ovarian dropsy			1,111		1,111	2,222	2,222	1,111				2,222	2,222	1,111	5,555	1,111
Paralysis	771	662	771	716	690	701	773	957	924	954	957	1,117	2,846	2,150	2,165	2,837
Paramenia	636	700	509	700	1,082	828	445	573	764	1,082	1,210	1,464	3,312	1,910	2,356	2,420
Parotitis	737	737	1,311	337	655	655	983	409	573	1,475	819	1,311	2,868	2,377	2,295	2,459
Pericarditis	612	816	816	816	612	816	612	408	1,224	1,428	612	1,224	2,448	2,448	2,040	3,061
Peritonitis	619	530	1,061	884	707	796	973	442	1,061	1,238	973	707	2,300	2,477	2,477	2,743
Phlebitis		800	800	800	400	800	800	2,000		1,600	800	1,200	2,400	2,000	2,000	3,600
Pleurisy	493	342	334	437	509	652	914	1,050	1,177	1,670	1,280	1,137	2,911	1,113	2,076	3,898
Pneumonia	473	342	329	396	468	594	795	1,254	1,470	1,552	1,339	981	2,795	1,069	1,858	4,277
Prostate, disease of				2,500		2,500	2,500						2,500	2,500	5,000	
Puerperal fever	657	599	549	499	724	541	857	949	1,024	1,248	1,099	1,248	3,005	1,648	2,123	3,222
Purpura and scurvy	886	1,139	253	1,045	379	632	379	506	1,012	1,139	632	1,392	2,911	3,037	1,392	2,658
Quinsy	385	467	508	825	1,251	784	1,004	1,072	921	1,141	866	770	2,022	1,801	3,039	3,136
Rheumatism	757	624	474	661	576	629	715	992	1,131	1,061	1,184	1,789	3,132	1,700	1,921	3,185
Scarlatina	603	530	545	593	646	674	837	1,064	1,126	1,227	1,109	1,072	2,785	1,068	2,158	3,388
Serofula	808	716	842	719	786	653	701	712	853	994	1,083	1,128	3,020	2,278	2,141	2,560
Skin, disease of	634	794	777	760	680	548	868	1,068	1,080	1,034	954	800	2,388	2,331	2,007	3,182
Small-pox	520	535	449	480	472	646	961	1,347	961	1,197	1,229	1,197	2,947	1,465	2,080	3,506
Spine, disease of	752	771	855	706	845	594	613	734	855	1,022	1,068	1,180	3,001	2,332	2,053	2,611
Splenitis	526	921	1,052	657	1,578	1,052	526	394	921	526	1,052	789	2,368	2,631	3,157	1,843
Still-born	714	807	620	620	580	654	787	981	927	1,088	927	1,288	2,930	2,049	2,022	2,997
Stomach, disease of	855	817	1,078	966	743	483	594	557	817	855	892	1,338	3,085	2,862	1,821	2,240
Stone	505	772	817	713	861	787	698	817	950	1,010	1,173	891	2,570	2,303	2,347	2,778
Sudden death	751	837	689	640	714	591	837	775	923	923	1,059	1,256	3,066	2,167	2,142	2,623
Syphilis	822	1,038	476	779	735	735	952	692	822	822	1,082	1,038	2,942	2,294	2,424	2,337
Teething	1,002	1,338	1,558	1,090	793	461	469	457	440	596	660	1,129	2,792	3,988	1,724	1,494
Tetanus	692	773	972	729	760	617	716	910	785	978	941	1,122	2,755	2,475	2,094	2,674
Throat, disease of	500	567	786	999	899	791	941	752	880	979	941	960	2,402	2,352	2,632	2,612
Thrush	583	1,018	1,434	1,404	1,127	771	563	573	534	603	702	682	1,968	3,857	2,462	1,711
Tumor	776	991	743	677	793	545	462	958	826	1,057	991	1,173	2,942	2,413	1,801	2,842
Ulcer	702	756	729	972	675	729	972	648	621	1,297	918	972	2,594	2,459	2,378	2,567
Unknown	736	804	875	828	731	589	721	869	868	991	915	1,067	2,719	2,598	2,042	2,730
Uterus, &c., disease of	905	699	699	864	946	534	576	864	1,028	658	987	1,234	3,127	2,263	2,057	2,551
Whooping-cough	832	959	1,084	1,017	680	499	536	612	731	953	950	1,139	2,923	3,062	1,717	2,297
Worms	784	1,021	1,131	1,161	885	553	548	603	658	684	824	1,141	2,751	3,314	1,986	1,946
Yellow fever	182	243	592	881	3,875	3,191	379	136	75	136	106	197	486	1,717	7,446	349

## EFFECT OF SEASONS AND MONTHS ON THE CAUSES OF DEATH.

Table XXIV shows the proportion of the mortality from each disease which fell on each month and season, from which can be seen the times and the seasons of the prevalence of each cause of death. Many of the causes seem to have no especial relation to season, but rather to the habits and exposures of the people. Others vary very greatly with the seasons, and seem, therefore, to be influenced by them.

The deaths from *abscess* were about a third more in the winter and spring than in the quarter ending with September, and about 18 per cent. more than in the quarter ending with December. The mortality of *apoplexy* was in the winter and spring—January to the end of June—33 per cent. greater than in the other half—July to the end of December. There was a still wider variation with the seasons in the mortality from *asthma*. It was 76 per cent. greater in the winter quarter, and 64 per cent. greater in the spring than in the summer. Its greatest intensity was in March, when it was 175 per cent. greater than in July—the month of the least mortality from this cause. Deaths from *diseases of the bowels*, not specified, were twice as great in July, August, and September, as in the quarter next following. August was the most fatal, and November the least fatal month in the year. *Cephalitis* destroyed twice as many in May and August as in November and December. The mortality in the quarter ending with September exceeded that of the next following quarter by 76 per cent. *Childbirth* was most fatal in winter and spring, and least in summer and autumn. The mortality in the months from December to May exceeded that in the other half of the year by 72 per cent. The mortality from *cholera infantum* was four times as great in the quarter July to September as in the quarter preceding; about six times as great as in the next following; and ten times as great as in the months January to March. *Consumption* did its greatest work in March, April, and May, and its least in October and November. In the spring and winter months it was 33 per cent. greater than in the summer and autumn.

## MORTALITY OF THE UNITED STATES.

TABLE XXV.—Showing the order of the months in respect to fatality of consumption, correction being made for difference of length, beginning with the greatest mortality.

UNITED STATES.		MASSACHUSETTS.		NEW YORK CITY.	
1850—1860.	Daily deaths.	22 years.	Daily deaths.	26 years.	Daily deaths.
May .....	37	September.....	245	February.....	174
March .....	36	April .....	237	March .....	171
April .....	35	May .....	227	January .....	169
February .....	30	March .....	226	April .....	166
January .....	28	August.....	224	July .....	160
September.....	24	October.....	223	December.....	155
June.....	24	February.....	221	October.....	156
July .....	23	December.....	216	August .....	153
August .....	23	July .....	209	September.....	153
December.....	23	June .....	207	May .....	152
October.....	22	November .....	206	November .....	152
November.....	21	January .....	202	June .....	133

The columns of deaths show the number that died of consumption in each day of the month specified in all the years included; that is, in Massachusetts 245 died in one-thirtieth part of the Septembers of twenty-two years, and in New York 166 died in one-thirtieth part of the Aprils in course of twenty-six years. The months of autumn and early winter seem to be the most favorable, and the spring the most unfavorable, to those suffering from consumption; yet this difference is not very great. The daily average of mortality varies not very widely in the several months when many years are included in the observation.

*Croup* was most fatal in the autumn and winter. Its mortality in the quarter ending with December exceeded that of the spring quarter 50 per cent., and that of the summer 77 per cent. The deaths in January, February, and March were more than double those in June, July, and August.

*Diarrhœa* varied very greatly in its destructiveness in the different seasons, being more than six times as great in summer as in winter, and nine times as great in August as in February.

*Diphtheria* was most fatal in winter, and about equally fatal in spring and autumn. Its fatality in the coldest season exceeded that of the warmest by nearly 77 per cent.

The great burden of *dysentery* fell on the summer, in which more than half of its mortality happened, when it was seven times greater than in winter.

*Epilepsy* was the most fatal in the spring, when it was 7 per cent. more than in the winter and summer, which were exactly alike. The greatest proportion was in March, when it was 87 per cent. greater than in December.

*Erysipelas* was most destructive in the winter, and then 56 per cent. more than in summer. Winter and spring had similar proportions, and also summer and autumn. May was the most fatal month, exceeding July by 97 per cent.

*Intermittent fever* differed widely in its intensity in different seasons. The mortality from this cause was about three times as great in summer as in winter. About one-fifth of all the deaths from this cause were in September, about one-sixth in August, one-eighth in October, and one-tenth in July. In these four months 57 per cent. of the whole year's mortality occurred.

*Remittent fever* showed a similar, but less, excess of fatality in the summer quarter, when it was twice as great as in the winter. The greatest mortality was in September—13.5 per cent.; and the least in December—4.6 per cent. of all.

*Typhoid fever* was more equally distributed through the quarters; yet in the summer it was 45 per cent. more fatal than in the winter. The most fatal month was September; the next, October; and the next, August. The least fatal month was June; and the next, February. Nearly one-half, 46.34 per cent., of the deaths from *gout* occurred in the spring quarter, and a little more than a quarter, 26.82 per cent., in the winter, less than a fifth in summer, and about one-fourteenth in the autumn. April was the most fatal month, when just the same proportion, 19.51 per cent., died as in the three summer months from this malady. In October, November, and December, each, only 2.43 per cent. died. The deaths from *disease of the heart* were about the same, 29 per cent., in winter and spring, and the same, 19 and 20 per cent., in summer and autumn. May, the most fatal month, had about twice the mortality of August, the least fatal.

*Hepatitis, jaundice*, and all *diseases of the liver*, varied less in their effects with the seasons than many other diseases. Spring was the most fatal, and summer the least; the difference was 24 per cent. Autumn was intermediate between these two seasons, and winter was nearly the same as spring.

*Ileus*, including *colic* and *intussusception*, created its greatest mortality in spring—nearly three times as great as in autumn, about twice as great as in summer, and nearly two and a half times as great as in winter. In April the proportion of deaths was the same, 22.72 per cent., as in the whole quarter, July to September, and 43 per cent. greater than that of the quarter ending with December.

The mortality from the class of diseases included in *infantile* was the greatest in winter, exceeding that of the autumn, the least, by 40 per cent. That of winter, spring, and summer was nearly equal. The highest ratio, 10 per cent., of all was

in May, and the least, 5.95 per cent., in November. *Influenza* carried off in winter, January to March, nearly five times as large a proportion as in summer, July to September, and about twice as large as in the autumn. Spring held an intermediate rank between winter and autumn. February and March were the most fatal months, and April and May were not far behind them. July had less than one-seventh of the mortality of March, and August was nearly as much favored.

*Intemperance* and *delirium tremens* were nearly equally fatal in winter and spring. *Intemperance* produced 28 per cent. of its mortality in each of these seasons—20 per cent. in the summer and 23 per cent. in the autumn. *Delirium tremens*, 30 per cent. of its mortality in the spring, 28 per cent. in the winter, 21 per cent. in the summer, and 20 per cent. in the autumn.

*Diseases of the kidneys, bladder, &c.*, were most fatal in the winter, when 29.32 per cent. of their mortality occurred, and the least, 22 per cent., in the autumn and summer. In the winter about one-quarter of the deaths of the year occurred from this cause.

*Marasmus* did its fatal work more effectually in the summer than at any other time. One-third of the deaths of the year from this cause occurred in July, August, and September; one-fourth were in the spring, and about one-fifth each in autumn and winter.

*Measles* was in the spring four times, and in the winter nearly three times, as destructive as in the autumn. In May the proportion of the year's mortality was 17.26 per cent.; in April, 16.64 per cent.; while in November it was 2.96 per cent., and in October 3.68 per cent. *Old age* sank beneath the chills of winter and spring—30 per cent. in January, February, and March; 20 per cent. in April and May, and 49 per cent. in the other seven months. March was the most destructive, carrying off 11.16 per cent.; June, July, and September the least, taking 20.3 per cent.

*Palsy* did its greatest work in the winter and spring—January to the end of May. May was the most fatal, when 11.17 per cent. of all the mortality of the year from this cause happened. About 9.5 per cent. occurred in January, February, March, and April, respectively. The death rate was the lowest in July, and in the other months it was nearly equal—7 to 7.8 per cent. of the whole in the year.

*Pleurisy* was especially a winter malady, and it was very prevalent in the spring. March was its most fatal month, when 16.7 per cent. of the work of the year was done. April had 12.8 per cent. and May 11.37 per cent. There was a sudden decline of the disease with the approach of summer—4.93 per cent. in June, 3.42 and 3.34 per cent. in July and August, and thence a gradual increase to March.

*Pneumonia* made its greatest havoc in the winter, when 42.77 per cent. of its year's mortality fell beneath it. 56.16 per cent. died in the four months, January to April, and 9.81 per cent. in May; but summer brought relief, and the proportion was 3 to 4 per cent. in each month from July through September, when it increased through the autumn and winter.

*Puerperal fever* was also most fatal in winter and spring. This, with the other dangers of child-birth, destroyed nearly one-third of its victims in the quarter from January through March, and three-tenths in the quarter next following. Summer was most favorable, its proportion of deaths from these causes being but little more than half of that in the colder season. Autumn was more dangerous than summer, but much less than spring.

Winter and spring also offered the largest opportunity for the action of *rheumatism*. In each of these seasons it did three-tenths of its year's work. February, March, April, and May each had about 11 per cent. of the whole annual mortality from this cause. Summer offered a respite from its destruction, and the lowest proportion, 4.74 per cent., was in August.

In winter *scarlet fever* did 33.88 per cent. of its work, and in spring 27.85 per cent. The destruction in summer was but half, and in autumn less than two-thirds, of that in winter. March was its most fatal month; January, February, and April nearly the same. In July and August the mortality was but about half of that of those months, and in the other warm months, June, September, and October, it was in somewhat larger proportions.

*Small-pox*, also, did its largest work in the cold season. About seven-tenths of the deaths from this malady were in the six months, December through May. The largest proportion, 13.47 per cent., was in January; the next, 12.29 per cent., in April. The smallest, 4.49 per cent., was in August, and the next, 4.8 per cent., in September.

The *sudden deaths* without reported cause were the most frequent in the spring, when 30 per cent. of the year happened. The least, 21 per cent., was in the autumn. May was the most fatal month from this cause, and September the least, when the mortality was half as great.

Summer was most fatal to *teething* children. 39.88 per cent. of the mortality of the year from this trouble occurred in the quarter ending with September. In winter the proportion was but 14.94 per cent.; in autumn, 17.24 per cent.; and in spring, 27.92 per cent. of the year's mortality from this cause. August stood paramount with 15.58 per cent., July nearly equal with 13.38 per cent., and May, June, and September each with about 11 per cent. The other months were more favorable, varying from a proportion of 4.4 per cent. in November to those already mentioned.

*Whooping-cough* was most destructive in the warmer months, July, August, and September, when 30.62 per cent. of its year's work was done. The proportion of spring, 29.23 per cent., was nearly equal to it. It was much less, 22.97 per cent., in winter, and still less, 17.17 per cent., in autumn. The greatest proportion of deaths was in May, August, and September, and the smallest in November, December, and January.

*Worms* varied some in their periods of destruction. One-third of their fatal work was done in the quarter ending with September, one-fourth in the quarter ending with June, and about one-fifth each in the other quarters. The most fatal months were May, August, and September, each having slightly more than one-ninth of the mortality of the year. The least fatal months were November and December, in each of which about one-nineteenth of the deaths of the year occurred.

MORTALITY OF THE UNITED STATES.

TABLE XXVI.—Ratio of deaths from each cause to total deaths from all causes in each month.

NUMBER OF EACH DISEASE TO 10,000 OF ALL DISEASES IN EACH MONTH

DISEASE.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	QUARTER ENDING LAST DAY OF—			
													June.	September.	December.	March.
Abscess.....	13	11	14	12	14	21	17	16	17	16	15	18	5	13	17	16
Anæmia.....			1	1	1			2		1				1	1	1
Aneurism.....						2	2	2	2	1					1	1
Apoplexy.....	75	75	64	77	79	86	100	90	99	89	98	96	91	72	89	92
Asthma.....	18	10	13	15	17	23	19	22	22	21	21	20	20	13	19	21
Bowels, disease of.....	63	57	65	61	41	37	34	32	34	32	32	52	48	61	37	33
Brain, &c., disease of.....	184	188	184	162	156	146	139	146	152	155	160	154	164	178	147	152
Bronchitis.....	38	37	31	40	44	54	68	61	69	71	70	52	55	36	55	67
Cancer.....	105	101	84	94	99	101	93	87	84	84	81	101	95	93	97	85
Carbuncle.....	2	2	3	4	4	1	2	3		2	2	2	2	3	3	2
Cephalitis.....	324	371	366	333	274	229	228	257	255	265	277	295	296	357	245	259
Child-birth.....	102	88	82	77	93	110	137	134	135	135	132	131	124	82	113	135
Cholera.....	33	70	87	44	21	13	14	7	5	9	11	17	19	67	16	7
Cholera infantum.....	144	355	443	257	126	50	41	42	30	25	35	79	80	354	74	32
Chorea.....	1	1	1			1	1	3	1	1	2	1	1		1	2
Consumption.....	1,442	1,287	1,113	1,164	1,251	1,401	1,416	1,417	1,406	1,532	1,543	1,519	1,507	1,184	1,352	1,456
Convulsions.....	286	300	253	219	224	214	251	260	258	267	248	265	264	256	231	203
Croup.....	281	268	265	389	550	598	589	572	521	446	392	332	340	308	578	509
Cyanosis.....			1				2					1			1	
Cystitis.....	4	3	5	1	6	6	4	5	5	5	6	6	5	3	5	5
Debility.....	62	62	59	56	61	63	61	53	53	60	62	65	63	59	61	56
Delirium tremens.....	17	15	12	12	15	14	16	16	17	16	18	19	18	13	15	16
Diabetes.....	8	9	8	9	12	13	15	13	12	9	6	12	9	8	13	11
Diarrhœa.....	317	470	549	385	245	135	89	76	63	65	88	190	187	469	159	68
Diphtheria.....	33	23	29	41	56	60	63	44	57	53	52	46	45	31	60	52
Dropsy.....	412	328	310	315	334	350	375	328	346	355	378	422	404	317	353	344
Dysentery.....	361	532	793	653	380	157	106	92	75	71	99	224	216	665	220	79
Dyspepsia.....	27	23	30	23	24	28	25	18	18	20	20	23	63	25	25	19
Enteritis.....	191	219	205	212	186	153	159	159	144	146	170	176	178	212	167	149
Epilepsy.....	14	17	16	10	12	15	12	11	12	16	16	13	14	14	13	13
Erysipelas.....	69	61	60	57	69	85	79	92	84	85	85	90	83	59	76	87
Fever, intermittent.....	101	155	232	290	208	108	81	65	77	72	78	79	84	228	135	72
Fever, remittent.....	312	414	463	495	417	290	205	209	216	224	249	254	268	459	307	217
Fever, typhoid.....	506	500	628	822	845	757	550	461	423	387	379	391	417	654	719	421
Fistula.....			1		1		2			1		1	1		1	
Gastritis.....	36	31	35	31	27	21	25	24	23	29	27	28	30	32	24	25
Gout.....	2								1	1	2	1	1			1
Heart, &c., disease of.....	195	162	121	133	172	185	186	194	186	211	196	207	200	138	181	198
Heat.....	20	71	15	5	3					1	1	2	6	29	1	
Hæmorrhage.....	41	26	29	30	38	37	41	37	45	39	39	38	39	28	37	40
Hepatitis.....	6	4	3	5	7	8	4	6	5	4	5	7	6	4	6	4
Hernia.....	10	9	7	8	11	12	12	11	9	10	9	10	9	8	12	10
Hydrocephalus.....	106	101	109	95	75	81	93	92	94	95	96	101	101	102	83	94
Hydrophobia.....	1	1	2	1	1			1	1							
Ileus.....	2	1	1								2		1	1		
Infantile.....	175	170	180	167	162	164	178	199	180	166	178	167	173	172	168	181
Inflammation.....	40	34	34	26	32	34	34	39	38	40	41	42	40	31	33	39
Influenza.....	6	2	3	4	10	8	13	13	18	16	14	12	11	3	10	16
Insanity.....	16	10	13	13	12	10	14	9	10	10	8	19	14	12	12	10
Intemperance.....	23	23	19	20	27	29	29	26	26	29	27	29	27	21	28	27
Ischuria.....	1		2		1	2	1			1	2	2	1	1	1	1
Jaundice.....	22	16	15	15	17	24	25	23	18	19	17	18	19	15	22	20
Joints, &c., disease of.....	2	4	3	2	1	4	4	3	4	3	2	5	3	3	3	3
Kidney, &c., disease of.....	25	21	24	15	22	23	28	25	23	25	21	19	21	20	24	24
Laryngitis.....	2	1			2	1	2	3	1	4	1	2	1	1	2	3
Liver, disease of.....	85	71	63	64	71	77	76	67	68	75	79	88	84	66	75	70
Lungs, disease of.....	86	69	53	64	89	85	100	124	142	127	125	118	112	61	92	131
Malformation.....	4	3	2	4	4		3	4	3	4	3	2	3	3	2	4
Marasmus.....	24	32	35	33	27	25	19	20	20	19	23	25	24	34	24	19
Measles.....	143	95	75	60	53	51	64	83	105	149	192	181	175	76	56	114
Mortification.....	8	7	7	7	5	9	8	10	7	9	8	6	7	7	7	9
Necrosis.....	6	6	5	6	3	4	4	5	3	5	6	5	5	5	4	4
Neuralgia.....	23	20	24	26	21	25	33	29	22	24	26	27	25	23	26	25
Old age.....	289	251	239	263	264	339	350	359	330	341	334	306	311	251	316	343
Paralysis.....	143	110	112	109	120	144	144	149	138	124	131	139	137	110	135	136
Paramenia.....	4	3	2	3	6	5	2	3	3	4	5	6	5	3	5	3

TABLE XXVI.—Ratio of deaths from each cause to total deaths from all causes in each month—Continued.

NUMBER OF EACH DISEASE TO 10,000 OF ALL DISEASES IN EACH MONTH.

DISEASE.													QUARTER ENDING LAST DAY OF—			
	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	September.	December.	March.
Parotitis.....	3	3	5	1	3	3	4	1	2	5	2	4	3	3	3	3
Pericarditis.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Peritonitis.....	2	2	3	3	3	4	4	1	3	3	3	2	2	3	3	3
Phlebitis.....	2							1		1						
Pleurisy.....	24	15	13	18	24	36	46	44	47	59	47	38	38	15	35	51
Pneumonia.....	513	334	280	354	476	726	866	1,146	1,285	1,182	1,075	718	790	322	680	1,304
Puerperal fever.....	31	26	20	14	32	29	41	38	39	42	39	40	37	22	34	40
Purpura and scurvy.....	2	3		4	1	2	1	1	2	2	1	2	2	2	1	2
Quinsy.....	11	12	11	10	34	25	29	26	21	23	18	15	15	14	20	23
Rheumatism.....	57	42	28	41	40	52	54	62	68	56	66	60	61	36	48	62
Scarlatina.....	637	504	452	517	641	792	889	921	960	911	868	765	768	490	770	930
Serofula.....	88	69	71	64	79	78	76	65	74	75	86	82	85	68	78	71
Skin, disease of.....	44	50	42	44	44	42	61	63	61	51	49	37	43	45	49	58
Small-pox.....	26	24	17	20	22	36	49	57	39	42	46	41	39	20	35	46
Spine, disease of.....	32	30	28	25	34	28	26	26	29	31	34	34	33	28	29	29
Splenitis.....	1	2	2	1	4	3	1	1	2	1	2	1	1	2	3	1
Stomach, disease of.....	9	7	9	8	7	5	6	5	7	7	6	9	8	8	6	6
Stone.....	13	18	17	15	21	23	18	18	20	19	23	16	18	17	21	19
Sudden death.....	24	10	17	17	21	21	27	21	24	21	25	27	26	19	23	22
Syphilis.....	7	8	3	5	6	7	8	5	6	5	7	9	7	5	7	5
Teething.....	196	236	237	176	145	100	92	75	69	82	95	149	142	217	114	76
Tetanus.....	44	44	49	38	45	44	46	49	40	44	44	48	46	44	45	44
Throat, disease of.....	72	74	89	119	122	127	137	92	103	99	101	94	90	94	129	98
Thrush.....	23	37	45	47	42	34	23	19	17	17	21	18	20	43	33	18
Tumor.....	18	21	14	13	18	14	11	19	16	18	17	19	18	16	14	17
Ulcer.....	10	10	8	11	9	12	14	8	7	13	10	9	10	10	11	9
Uterus, &c., disease of.....	8	6	5	6	8	5	5	7	8	4	7	8	7	6	6	6
Whooping-cough.....	279	289	280	281	214	186	180	172	197	224	235	257	255	285	194	200
Worms.....	62	73	76	76	66	49	43	40	42	38	48	61	57	73	53	40
Yellow fever.....	4	5	13	19	96	93	10	3	1	2	2	3	3	12	66	2

PROPORTION OF DEATHS FROM EACH CAUSE IN EACH MONTH.

Table XXVI is calculated on the basis of 10,000 deaths from all causes in each month, and shows the proportionate part which each disease bore in producing the total monthly mortality. This proportion varied in the different months; no two were alike in this respect.

In June, *consumption* was the most effectual agent of destruction, carrying off 14 per cent. of all that perished. *Scarlet fever* was next in order of efficiency, doing 6 per cent. of the work of death. *Pneumonia* and *typhoid fever* each took off 5 per cent.; *dropsy*, 4 per cent.; *convulsions*, *cholera infantum*, *teething*, and other infantile diseases, nearly 8 per cent.; *cholera*, *diarrhæa*, and *dysentery*, 8 per cent.; *fevers* of all kinds, 9 per cent.; *croup*, 2.81 per cent.; *measles*, 1.4 per cent.; *whooping cough*, 2.79 per cent.

In July, *consumption* still led the way, and caused about 13 per cent. of the mortality of the month; *typhus fever*, one-twentieth; *intermittent* and *remittent fever*, the same; *scarlet fever*, the same; *cholera*, *dysentery*, and *diarrhæa*, one-tenth; *cholera infantum*, *teething*, *convulsions*, and other infantile complaints, the same; *croup*, *measles*, and *whooping-cough*, more than 6 per cent.

In August, *consumption*, still the chief cause of death, yet caused a smaller proportion of the month's mortality than in July—only 11 per cent. *Dysentery* was next in fatality, taking away about 8 per cent. *Diarrhæa* and *cholera* destroyed 6.5 per cent.; *fevers* of all kinds, 13 per cent.; *cholera infantum*, *teething*, *convulsions*, and *infantile*, took away 10 per cent.; *scarlet fever*, 4.5 per cent.; *croup*, *measles*, and *whooping cough*, 6 per cent.

In September, *consumption* was about as effective as in August; fever, *typhus*, *remittent*, and *intermittent*, caused 16 per cent. of all the mortality of the month. *Cholera infantum*, *convulsions*, *teething*, and other infantile diseases, *diarrhæa* and *dysentery*, about 17 per cent.; *croup*, *measles*, and *whooping cough*, 7 per cent.; *scarlet fever*, 5 per cent.; and *pneumonia*, 3.5 per cent.

In October, *consumption* increased to 12.5 per cent.; *scarlatina*, to 6.4 per cent.; *pneumonia*, to 4.7 per cent.; *croup*, to 5.5 per cent.; *cholera infantum*, *diarrhæa*, *dysentery*, *convulsions*, *teething*, and other infantile diseases, diminished to 8.6 per cent.; *measles* and *whooping cough*, 2.8 per cent.; *typhus fever*, 8 per cent.; *remittent* and *intermittent*, 6.2 per cent.

In November, *consumption* still increased to 1,401 in 10,000 deaths in the month, and this proportion was maintained through December, January, and February with very slight variations. *Pneumonia* increased to 7.2 per cent. and *scarlet fever* to 7.9 per cent.; *typhoid fever* to 7.5 per cent.; *croup* was about 6 per cent.; *cholera infantum* was reduced to 5 in 1,000; *diarrhæa*, *dysentery*, *convulsions*, *teething*, and other infantile diseases, to 7.6 per cent.

In December, *scarlet fever* followed next after *consumption*, causing 8.9 per cent. of the mortality of the month, and *pneumonia* 8.6 per cent. *Typhoid* and other fevers diminished. *Croup* and *convulsions* were the same as in November. *Diarrhæa*, *dysentery*, *cholera infantum*, and *teething* very much less.

In January, *pneumonia* increased its proportion to 11 per cent.; *croup*, *scarlet fever*, *intermittent* and *remittent fever*, and *measles* the same. *Typhoid fever*, *diarrhæa*, *dysentery*, *cholera infantum*, and *teething* diminished.

In February, *pneumonia* caused nearly 13 per cent. of all the deaths; *scarlet fever*, 9.6 per cent.; *typhoid fever*, 4.6 per cent.; *whooping-cough*, nearly 2 per cent.; *croup*, 5.2 per cent.

In March, *consumption* destroyed 15.3 per cent. of all that died; *pneumonia*, nearly 12 per cent.; *scarlet fever*, 9 per cent.; *typhoid fever*, less than 5 per cent.; *intermittent* and *remittent fever*, about 3 per cent.; *cholera infantum*, *diarrhæa*, *dysentery*, *convulsions*, *teething*, *infantile*, less than 7 per cent.; *croup*, 4.4 per cent.

In April, as in March and May, the proportion of mortality produced by *consumption* was 15 per cent.; by *pneumonia*, 10.7 per cent.; by *scarlet fever*, 8.6 per cent.; by *typhoid fever*, 3.8 per cent.; *remittent* and *intermittent*, 3.3 per cent.; *cholera*, *convulsions*, *diarrhæa*, *dysentery*, *teething*, and *infantile* diseases, 7 per cent.

In May, the proportion of *consumption* was 18 per cent.; of *pneumonia* and *scarlet fever*, 7 per cent.; of *typhoid fever* 4, and other fevers 3, per cent.; *whooping-cough*, 2.5; *measles*, *cholera*, *diarrhæa*, *dysentery*, 3.5, and *convulsions*, 3.3 per cent.

The proportions in the total mortality which some diseases bore varied but little through all the months of the year. That of *consumption* was 11 to 12 per cent. in two months, 12 to 13 in two, 14 to 15 in five, and 15 in three months. *Disease of the brain*, unspecified, was 139 to 188 in 10,000 in all the months. *Cancer* varied from 81 to 105 in 10,000; *cephalitis*, from 228 to 371; *convulsions*, from 214 to 300; *debility*, from 53 to 65; *delirium tremens*, from 12 to 19; *dropsy*, from 310 to 422; *erysipelas*, from 57 to 92; *gastritis*, from 21 to 36; *hydrocephalus*, from 75 to 109; *infantile*, from 160 to 199; *intemperance*, from 19 to 29; *jaundice*, from 18 in September to 25 in December. All diseases of the *liver*, from 81 in August to 113 in May and June. *Old age*, 306 to 359 from November to May, and 239 to 259 from June to October. *Palsy* was nearly the same daily through November, December, January, and February, and varied only from 110 in May to 149 in January; *scrofula*, from 64 to 86; *disease of spine*, from 26 to 34; *tetanus*, 44 in each of five months—the lowest month 39, and the highest 49.

TABLE XXVII.—Ratio of deaths in each age to total deaths in each district.

DISTRICT I. MAINE, NEW HAMPSHIRE, VERMONT, MASSACHUSETTS, RHODE ISLAND, CONNECTICUT, AND NEW YORK.				DISTRICT II. MICHIGAN, WISCONSIN, MINNESOTA, AND NEBRASKA.				DISTRICT III. NEW JERSEY AND PENNSYLVANIA.			
Age.	Males.	Females.	Persons.	Age.	Males.	Females.	Persons.	Age.	Males.	Females.	Persons.
Under 1 year .....	1,770	1,556	1,667	Under 1 year .....	2,370	2,072	2,178	Under 1 year .....	1,983	1,809	1,902
1 to 2 years.....	630	773	803	1 to 2 years.....	1,007	955	983	1 to 2 years.....	894	871	883
2 to 3 years.....	530	520	525	2 to 3 years.....	668	683	675	2 to 3 years.....	605	622	613
3 to 4 years.....	345	360	353	3 to 4 years.....	393	445	417	3 to 4 years.....	411	451	459
4 to 5 years.....	248	247	248	4 to 5 years.....	287	280	284	4 to 5 years.....	277	318	296
Total to 5 years.....	3,725	3,458	3,596	Total to 5 years...	4,627	4,436	4,539	Total to 5 years...	4,172	4,073	4,126
5 to 10 years.....	607	612	612	5 to 10 years.....	686	813	745	5 to 10 years.....	720	784	750
10 to 15 years.....	237	284	259	10 to 15 years.....	311	300	306	10 to 15 years.....	293	336	313
15 to 20 years.....	354	467	408	15 to 20 years.....	353	430	389	15 to 20 years.....	332	429	377
20 to 25 years.....	439	530	483	20 to 25 years.....	429	566	492	20 to 25 years.....	455	544	496
25 to 30 years.....	507	598	551	25 to 30 years.....	416	534	470	25 to 30 years.....	405	490	444
30 to 40 years.....	851	902	875	30 to 40 years.....	726	866	791	30 to 40 years.....	766	783	774
40 to 50 years.....	728	649	690	40 to 50 years.....	645	632	639	40 to 50 years.....	677	547	617
50 to 60 years.....	679	560	622	50 to 60 years.....	638	497	584	50 to 60 years.....	614	467	546
60 to 70 years.....	708	644	677	60 to 70 years.....	553	416	490	60 to 70 years.....	647	540	597
70 to 80 years.....	676	601	683	70 to 80 years.....	401	318	362	70 to 80 years.....	573	589	580
80 to 90 years.....	401	471	435	80 to 90 years.....	158	144	151	80 to 90 years.....	290	343	314
Over 90 years.....	83	124	103	Over 90 years.....	31	41	36	Over 90 years.....	50	69	59
0 to 20 years.....	4,924	4,826	4,877	0 to 20 years.....	5,978	5,981	5,980	0 to 20 years.....	5,518	5,624	5,567
20 to 60 years.....	3,205	3,241	3,223	20 to 60 years.....	2,876	3,097	2,978	20 to 60 years.....	2,917	2,832	2,879
60 to 80 years.....	1,384	1,335	1,360	60 to 80 years.....	954	734	852	60 to 80 years.....	1,220	1,129	1,177
Over 80 years.....	484	595	538	Over 80 years.....	189	185	187	Over 80 years.....	340	412	373

MORTALITY OF THE UNITED STATES.

TABLE XXVII.—Ratio of deaths in each age to total deaths in each district—Continued.

DISTRICT IV. OHIO, INDIANA, ILLINOIS, IOWA, AND KANSAS.				DISTRICT V. DELAWARE, MARYLAND, DISTRICT OF COLUMBIA, VIRGINIA, AND NORTH CAROLINA.				DISTRICT VI. KENTUCKY, TENNESSEE, AND MISSOURI.			
Age.	Males.	Females.	Persons.	Age.	Males.	Females.	Persons.	Age.	Males.	Females.	Persons.
Under 1 year.....	2,207	2,012	2,115	Under 1 year.....	2,452	2,149	2,303	Under 1 year.....	2,452	2,198	2,332
1 to 2 years.....	1,151	1,133	1,142	1 to 2 years.....	1,010	912	962	1 to 2 years.....	1,111	1,071	1,092
2 to 3 years.....	734	742	738	2 to 3 years.....	578	519	549	2 to 3 years.....	625	608	617
3 to 4 years.....	447	476	461	3 to 4 years.....	310	313	311	3 to 4 years.....	379	339	360
4 to 5 years.....	318	337	327	4 to 5 years.....	216	224	220	4 to 5 years.....	249	279	263
Total to 5 years.....	4,858	4,703	4,784	Total to 5 years.....	4,568	4,119	4,347	Total to 5 years.....	4,818	4,497	4,666
5 to 10 years.....	774	907	837	5 to 10 years.....	594	625	609	5 to 10 years.....	715	769	741
10 to 15 years.....	300	365	331	10 to 15 years.....	323	374	348	10 to 15 years.....	348	421	383
15 to 20 years.....	381	474	425	15 to 20 years.....	399	495	446	15 to 20 years.....	432	572	498
20 to 25 years.....	460	524	490	20 to 25 years.....	482	559	520	20 to 25 years.....	541	651	593
25 to 30 years.....	397	457	426	25 to 30 years.....	360	491	425	25 to 30 years.....	430	505	466
30 to 40 years.....	678	784	728	30 to 40 years.....	642	792	716	30 to 40 years.....	714	782	746
40 to 50 years.....	582	485	536	40 to 50 years.....	601	582	591	40 to 50 years.....	570	514	544
50 to 60 years.....	523	404	469	50 to 60 years.....	570	502	536	50 to 60 years.....	497	407	455
60 to 70 years.....	483	369	438	60 to 70 years.....	592	567	580	60 to 70 years.....	427	346	389
70 to 80 years.....	346	317	332	70 to 80 years.....	511	450	481	70 to 80 years.....	290	297	294
80 to 90 years.....	176	151	164	80 to 90 years.....	266	301	283	80 to 90 years.....	161	166	163
Over 90 years.....	30	35	32	Over 90 years.....	86	137	111	Over 90 years.....	50	66	57
0 to 20 years.....	6,315	6,450	6,379	0 to 20 years.....	5,885	5,614	5,752	0 to 20 years.....	6,314	6,261	6,289
20 to 60 years.....	2,648	2,656	2,652	20 to 60 years.....	2,657	2,928	2,790	20 to 60 years.....	2,755	2,861	2,805
60 to 80 years.....	829	706	770	60 to 80 years.....	1,103	1,017	1,061	60 to 80 years.....	717	643	683
Over 80 years.....	206	186	196	Over 80 years.....	352	438	394	Over 80 years.....	211	232	220

TABLE XXVII.—Ratio of deaths in each age to total deaths in each district—Continued.

DISTRICT VII. SOUTH CAROLINA, GEORGIA, FLORIDA, AND ALABAMA.				DISTRICT VIII. MISSISSIPPI, LOUISIANA, ARKANSAS, AND TEXAS.				DISTRICT IX. OREGON, CALIFORNIA, DAKOTA, NEW MEXICO, UTAH, AND WASHINGTON.			
Age.	Males.	Females.	Persons.	Age.	Males.	Females.	Persons.	Age.	Males.	Females.	Persons.
Under 1 year.....	2,659	2,506	2,586	Under 1 year.....	2,021	2,144	2,076	Under 1 year.....	1,679	2,104	1,837
1 to 2 years.....	1,157	1,021	1,092	1 to 2 years.....	958	997	976	1 to 2 years.....	690	1,236	893
2 to 3 years.....	577	545	562	2 to 3 years.....	574	628	595	2 to 3 years.....	550	698	605
3 to 4 years.....	294	308	301	3 to 4 years.....	334	375	352	3 to 4 years.....	335	457	380
4 to 5 years.....	217	236	226	4 to 5 years.....	242	295	266	4 to 5 years.....	259	391	308
Total to 5 years.....	4,905	4,617	4,767	Total to 5 years.....	4,131	4,441	4,270	Total to 5 years.....	3,514	4,889	4,025
5 to 10 years.....	571	616	592	5 to 10 years.....	684	822	746	5 to 10 years.....	511	854	638
10 to 15 years.....	354	416	384	10 to 15 years.....	400	479	436	10 to 15 years.....	176	278	214
15 to 20 years.....	445	505	473	15 to 20 years.....	492	630	554	15 to 20 years.....	226	462	314
20 to 25 years.....	552	583	566	20 to 25 years.....	688	662	677	20 to 25 years.....	597	594	596
25 to 30 years.....	379	432	404	25 to 30 years.....	608	547	581	25 to 30 years.....	1,061	641	905
30 to 40 years.....	651	767	707	30 to 40 years.....	1,008	909	963	30 to 40 years.....	1,941	1,080	1,621
40 to 50 years.....	541	564	552	40 to 50 years.....	774	570	682	40 to 50 years.....	955	438	763
50 to 60 years.....	476	423	451	50 to 60 years.....	531	355	452	50 to 60 years.....	609	335	507
60 to 70 years.....	525	451	490	60 to 70 years.....	369	297	336	60 to 70 years.....	245	226	238
70 to 80 years.....	340	322	332	70 to 80 years.....	183	152	169	70 to 80 years.....	89	75	84
80 to 90 years.....	158	183	170	80 to 90 years.....	75	80	77	80 to 90 years.....	39	80	54
Over 90 years.....	97	113	104	Over 90 years.....	50	50	50	Over 90 years.....	30	42	35
0 to 20 years.....	6,276	6,156	6,219	0 to 20 years.....	5,708	6,373	6,008	0 to 20 years.....	4,428	6,484	5,193
20 to 60 years.....	2,600	2,772	2,682	20 to 60 years.....	3,612	3,044	3,356	20 to 60 years.....	5,166	3,091	4,394
60 to 80 years.....	865	773	822	60 to 80 years.....	552	449	505	60 to 80 years.....	334	301	322
Over 80 years.....	255	226	274	Over 80 years.....	125	130	127	Over 80 years.....	69	122	89

MORTALITY OF THE UNITED STATES.

TABLE XXVIII.—Proportion per 10,000 of those entering on each period who die in that period, and of those who survive to the next.

DISTRICTS.	OF ALL ENTERING THE FIRST PERIOD—BIRTH TO 20 YEARS.						OF ALL ENTERING THE SECOND PERIOD, 20 TO 60 YEARS.						OF ALL ENTERING THE THIRD PERIOD, 60 TO 80 YEARS.					
	Died.			Survived.			Died.			Survived.			Died.			Survived.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
I .....	4,924	4,826	4,877	5,075	5,173	5,122	6,313	6,266	6,291	3,683	3,734	3,703	7,405	6,916	7,165	2,594	3,083	2,834
II .....	5,978	5,981	5,980	4,021	4,018	4,019	7,153	7,707	7,409	2,846	2,292	2,590	8,343	7,978	8,194	1,655	2,020	1,805
III .....	5,518	5,624	5,507	4,481	4,375	4,432	6,514	6,474	6,496	3,485	3,525	3,503	7,816	7,322	7,588	2,183	2,677	2,411
IV .....	6,316	6,450	6,379	3,684	3,549	3,620	7,187	7,483	7,325	2,812	2,516	2,674	8,005	7,911	7,904	1,994	2,088	2,035
V .....	5,885	5,614	5,752	4,114	4,385	4,247	6,459	6,678	6,570	3,540	3,320	3,429	7,581	6,987	7,289	2,410	3,013	2,710
VI .....	6,314	6,261	6,289	3,685	3,738	3,710	7,478	7,653	7,562	2,521	2,346	2,437	7,726	7,347	7,552	2,273	2,652	2,447
VII .....	6,277	6,156	6,219	3,723	3,843	3,781	6,965	7,211	7,095	3,014	2,768	2,904	7,718	7,227	7,468	2,281	2,772	2,511
VIII .....	5,708	6,373	6,008	4,291	3,626	3,991	8,418	8,396	8,409	1,582	1,603	1,590	8,144	7,739	7,977	1,855	2,260	2,022
IX .....	4,428	6,484	5,193	5,571	3,515	4,806	9,272	8,791	9,138	727	1,208	857	8,275	7,111	7,829	1,724	2,888	2,170

TABLE XXIX.—Proportion of deaths and population in ages.

DISTRICTS.	DEATHS.				POPULATION.			
	Under 20.	20 to 60.	60 to 80.	Over 80.	Under 20.	20 to 60.	60 to 80.	Over 80.
I .....	48.77	32.23	13.60	538	44.65	49.02	570	54
II .....	59.80	29.78	8.52	187	51.34	45.21	322	16
III .....	55.67	28.79	11.77	373	50.22	44.88	448	35
IV .....	63.79	26.52	7.70	196	53.54	42.87	331	21
V .....	57.52	27.90	10.61	394	53.48	41.76	422	45
VI .....	62.89	28.05	6.83	220	55.79	40.89	298	26
VII .....	62.19	26.82	8.32	274	56.21	40.08	330	33
VIII .....	60.08	33.56	505	127	54.63	42.75	238	17
IX .....	51.93	43.94	322	89	34.03	64.30	148	10

TABLE XXX.—Comparative distribution of population and mortality.

DEATHS IN THE SAME PROPORTION OF POPULATION IN EACH DISTRICT.

Districts.	Under 20.	20 to 60.	60 to 80.	Districts.	Under 20.	20 to 60.	60 to 80.
I .....	109	65	233	V .....	107	67	251
II .....	116	63	264	VI .....	113	68	229
III .....	110	66	263	VII .....	110	66	249
IV .....	119	61	232	VIII .....	110	79	212

Tables XXVII, to XXXI, show the proportions of mortality that have occurred in the several periods of life in the United States.

Table XXVII, shows the proportion of deaths in each sex in the early quinquennial and decennial periods, and also in the great periods—the forming, the responsible, and the resting age of life.

Table XXVIII, shows the proportion of those of each sex who die in, and of those who survive, each great period of life.

Table XXIX, shows the distribution of mortality and of the population in the districts, side by side, for the convenience of comparison.

Table XXX, shows the comparative distribution of mortality in the same proportions of the living in each age in each district.

MORTALITY IN THE PERIODS OF LIFE.

Table XXVII, shows in each district the proportions of mortality of each sex that fell upon each period of life. The proportions of mortality were larger among the males than among the females in infancy and childhood, from birth to the end of the fifth year, and in full manhood and first old age, from 40 to 80, in all the districts. But from 5 to 40, and in most of the districts in later old age, when past four-score years, the proportions were greater among the females.

The proportions of early and late mortality, and those in the middle age, differed in the several districts. In the newer States, with a preponderance of childhood and youth, there was, of course, a large mortality in those ages, simply because

there were among them more subjects of death. In the northeast 36 per cent. and in the northwest 45 per cent. of the deaths were under 5; 48 per cent. in the northeast and 59 per cent. in the northwest were under 20. In District III, 41 per cent. were under 5, and 55 per cent. under 20. In District IV, 47 per cent. were under 5, and 63 per cent. under 20. In District V, 43 per cent. were under 5, and 57 per cent. under 20. In District VI, 46 per cent. were under 5, and 62 per cent. under 20. In District VII, 47 per cent., and in District VIII, 42 per cent., were under 5. In District VII, 62 per cent., and in District VIII, 60 per cent. of those who died, were in the forming period of life.

The proportions of mortality in the great periods of life—the forming, the active and responsible stage, and old age, under 20, 20 to 60, and 60 to 80—had a very similar relation in all the districts to the proportions of the living.

In the same proportion among the living in each district the deaths were shown in Table XXX, to be, in I, 109; II, 116; III, VII, and VIII, 110; IV, 119; V, 107; and VI, 113. In the same proportion of the living in the working stage, 20 to 60, the proportions of death were, in I, 65; II, 63; III, 66; IV, 61; V, 67; VI, 68; VII, 66; VIII, 79. In the same proportion of living in the first old age, 60 to 80, the proportions of deaths were, in District I, 233; II, 264; III, 263; IV, 232; V, 251; VI, 229; VII, 249; and VIII, 212.

Table XXVIII, shows among the deceased in each district of those who entered each stage of life the number and proportion that survived and entered the next stage. Thus, of 10,000 who were born and entered the first stage—the forming period—under 20, in District I, 4,877 died in that stage, and 5,122 survived and entered the next—the responsible and productive period of life.

Of 10,000 who entered the second period—the busy stage of life—6,291 died within it, and 3,703 survived and entered, at 60, on the period of comparative rest in the first old age. Of 10,000 that entered on this third stage, this beginning of old age, 7,165 died within its twenty years, and 2,834 survived and entered, at 80, upon the last old age.

The proportion of those that survived these periods successively, in District III, were respectively 4,432, 3,503, and 2,411. In District V, the survivors of these three periods were 4,247, 3,429, and 2,710; in District VII, 3,781, 2,904, and 2,511.

Proceeding southward from the north through the old States, whose people have completed many generations, there is a general and gradual diminution of the proportions that survive the several stages in which they have entered. Of 10,000 that entered the first in both regions, 512 passed through safely and entered the second, 190 passed to the third, and 53 to the fourth stage, in the colder climate; while of the same number who entered the first stage in the warmer climate, 378 went through it and entered the second—the stage of action; 109 survived to the third—the period of relaxation and comparative rest; and 27 went into full old age.

In the west a proportionate distribution of population being disturbed by immigration, there is less regularity in the proportions of death and less opportunity of observing the relations of life and death to the climate. The extreme northwest and southwest have each increased very rapidly by immigration. In both about the same proportions of the population are in infancy, childhood, and youth. These proportions are in 10,000 of all ages in these districts—under 5, northwest, 1,682; southwest, 1,638. Under 15, northwest, 4,139; southwest, 4,363. Under 20, northwest, 5,734; southwest, 5,462. In these districts the records of mortality showed that of 10,000 of all who entered the first period of life, 5,980 in the northwest and 6,008 in the southwest sank beneath the dangers of growth and development, and failed to enter on the stage of vigor and action. 2,978 in the northwest and 3,356 in the southwest perished in that period of labor, and failed to pass their three-score years and enter on the period of old age; 187 passed to full age and entered on their fifth score of years in the northwest, and 127 enjoyed the same fulness of years in the southwest.

Table XXXI, shows the average duration of life of all who, in each district, died in each of the several stages of being.

TABLE XXXI.—Average age of persons dying under 20, between 20 and 60, 60 and 80, and over 80, in each of the districts.

UNITED STATES.

District.	Under 20.	20 to 60.	60 to 80.	Over 80.	District.	Under 20.	20 to 60.	60 to 80.	Over 80.
No. 1.....	4.18	38.71	72.87	85.64	No. 6.....	4.00	37.35	71.96	84.43
No. 2.....	3.83	38.45	71.25	85.56	No. 7.....	3.86	37.68	71.24	87.33
No. 3.....	4.01	38.51	72.38	85.37	No. 8.....	4.49	30.89	70.79	87.46
No. 4.....	3.96	37.81	71.53	85.41	No. 9.....	3.67	36.24	70.39	87.35
No. 5.....	3.95	38.41	72.40	86.45					

Those who died in District I, under 20, had enjoyed an average of 4.18 years, including the infants of a day or a week, and the almost mature at 19. Passing the forming stage, those who died in the responsible period enjoyed an average of 38.71 years. In this they labored and contributed to the support of their families and dependents, or added to their substance, through an average period of 18.71 years in the northeast, 18.45 in the northwest, 17.68 years in the southeast, and, as will be seen in the table, a very similar period in the other districts, except in the southwest, where the average period of labor of those who died in that stage was 10.89 years. Besides those who died in the responsible and productive stage of labor, in the midst of their usefulness, there was the large but variable proportion in the different districts who passed through this entire stage, and after laboring forty years and contributing the results to their own estates and to the commonwealth, they entered

## MORTALITY OF THE UNITED STATES.

the period of rest in the first old age at 60. Those who enter the stage of effective labor and responsibility, including both those who sink in its progress and those who survive it, constitute the sustaining and contributing class. They perform the main work, transact the principal business, and sustain the chief responsibilities of the world. They support their own and principally the other ages. They constitute the strength and create the wealth of the nation.

TABLE XXXII.—Average years lived in periods.

DISTRICT.	UNDER 20.		20 TO 60.		60 TO 80.	
	By all who entered it.	For one who passed it.	By all who entered it.	For one who passed it.	By all who entered it.	For one who passed it.
No. I.....	12.22	23.98	26.64	71.74	14.89	52.53
No. II.....	10.33	25.69	24.03	92.78	13.18	66.42
No. III.....	11.09	25.03	26.03	74.31	14.21	58.96
No. IV.....	9.76	26.97	23.74	68.77	13.25	65.11
No. V.....	10.78	25.40	25.81	75.27	14.45	53.35
No. VI.....	9.99	26.93	22.79	93.50	13.92	56.90
No. VII.....	9.96	26.34	24.16	83.19	13.88	55.31
No. VIII.....	10.64	26.75	15.51	97.59	12.65	62.56
No. IX.....	11.51	23.95	18.27	213.03	12.47	57.47

Table XXXII, shows the average number of years enjoyed in each stage by all who entered it, including both those who sank in its course and those who passed through all its years. It shows also the number of years that were lived in each stage for every one who survived it. Thus although those who died under 20 had an average life of 4.18 years, and all that lived in that period enjoyed 12.22 years, yet for every one who passed, there was an average of 23.98 years of life before passing the age of 20; or, in order that one should be matured and pass into the working stage, there was an amount of preparatory life equal in District I, to 23.98 years, in District II, to 25.69 years, in Districts III, and V, to somewhat over 25 years, in Districts IV, and VI, to nearly 27 years.

In the laborious and contributing stage in District I, those who perished in it had had an average of 18.71 years of working life, and all who entered it, including both those who died in it and those who passed through it, had each an opportunity of laboring, on an average, 26.66 years, and for every one that passed through, there had been 71.74 years of action and responsibility. The average of years of labor in the several districts was, in I, and III, 26; in V, 25; in II, and VII, 24; in IV, 23; in VI, 22; and in VIII, 15 years.

If there were no death until the fulness of old age was attained, and every child that is born should pass through the forming and the working and the maturer stages, then every twenty years spent in the forming stage would result in forty years of labor and profit to the worker and the community in the working and responsible stage. But as this boon of uninterrupted life is not granted to man, it is a matter of the deepest interest to ascertain how near to this fulness of life and completeness of effective power any people have approached, and whether there is any difference in this amount of vital enjoyment and effectiveness in different populations, and whether that difference is due to causes that are, in any degree, within the control of man, or are the essential conditions of life.

As all that are born do not pass safely through the stage of development and growth and become working and sustaining men and women, and as all that pass through this period of formation and enter the working stage do not live and labor through forty years to old age, it is important to determine how many must be born in order to produce one or a thousand profitable workers, and how many years must be spent in the forming stage for one that shall be completed and thrown upon the productive stage.

Looking at this in the light of political economy, as a matter of advantage to the body politic, or of profit to the commonwealth, considering the cost of producing an effective population, and its worth when produced, it is manifest that all the burden and expense of support, growth, and development, from birth to maturity, including sustenance, care, and education, not only of those who live to become workers, but of those who perish in the process, must be charged to the cost of production, and the amount of labor they contribute afterwards must be considered as return or payment received and put into the credit side of their account. The number of years that have been or must be spent in the period of growth compared with the number allowed for labor, the number of working years that will grow out of any definite number of developing years, will show the relative cost and value, the relative weakness and power of any population, and this may be made the basis of comparison of any two countries, districts, or States, whose populations are stationary or are equally progressive.

TABLE XXXIII.—Showing the number of years of life spent in the forming and productive periods by those who died in each district in the year 1859-'60.

District.	Under 20.	Ratio.	20 to 60.	Ratio.	District.	Under 20.	Ratio.	20 to 60.	Ratio.
I.....	1,131,446	1,000	1,255,283	1,109	VI.....	491,500	1,000	416,010	846
II.....	165,388	1,000	154,668	935	VII.....	368,150	1,000	337,599	917
III.....	417,889	1,000	434,623	1,040	VIII.....	455,128	1,000	263,970	579
IV.....	663,446	1,000	583,967	878	IX.....	65,639	1,000	50,064	762
V.....	483,261	1,000	492,123	1,018					

Table XXXIII, is made up from the mortality of 1860. The second column shows the number of years that were lived in each district under 20, including both those who survived and those who perished in that stage. The fourth column shows the number of years that were spent in the working stage, including both those who labored through the forty years and those who fell in the course of that period. The third and fifth columns show the comparative years of development and labor, of cost and profit.

Thus it is seen that there is a difference in the several districts between the east and the west due to the difference of distribution of the living population, and between the north and the south due to, or connected with, the difference of climate. From this record it is shown, that while a thousand years spent in development in the northeastern district resulted in eleven hundred and nine years of effective action, the same number of years of growth resulted in nine hundred and seventeen years in the southeast.

TABLE XXXIV.—Proportion per 10,000 of those entering on each period who die in that period, and of those who survive to the next.

STATES.	Period.	OF ALL ENTERING THE FIRST PERIOD, BIRTH TO 20 YEARS.		OF ALL ENTERING THE SECOND PERIOD, 20 TO 60 YEARS.		OF ALL ENTERING THE THIRD PERIOD, 60 TO 80 YEARS.	
		Died.	Survived.	Died.	Survived.	Died.	Survived.
Massachusetts .....	1841-1850 .....	4, 613	5, 387	5, 960	4, 040	6, 425	3, 575
Massachusetts .....	1851-1863 .....	5, 733	4, 267	6, 355	3, 645	7, 069	2, 931
Vermont .....	1857-1861 .....	4, 379	5, 621	4, 959	5, 041	6, 510	3, 490
Connecticut .....	1848-1864 .....	4, 496	5, 504	5, 670	4, 330	6, 964	3, 036
Kentucky .....	1852-1859 .....	6, 152	3, 848	7, 336	2, 664	7, 446	2, 553
South Carolina .....	1856-1859 .....	6, 216	3, 784	6, 520	3, 480	7, 335	2, 665
New Jersey .....	1850-1862 .....	5, 702	4, 298	6, 441	3, 559	7, 455	2, 545
Rhode Island .....	1853-1863 .....	4, 780	5, 220	6, 202	3, 798	7, 177	2, 823

TABLE XXXV.—Proportion per 10,000 of those entering on each period who die in that period, and of those who survive to the next.

COUNTRIES.	OF ALL ENTERING FIRST PERIOD, BIRTH TO 20 YEARS.		OF ALL ENTERING SECOND PERIOD, 20 TO 60 YEARS.		OF ALL ENTERING THIRD PERIOD, 60 TO 80 YEARS.	
	Died.	Survived.	Died.	Survived.	Died.	Survived.
England .....	5, 033	4, 966	5, 369	4, 630	7, 523	2, 476
Ireland .....	5, 008	4, 991	6, 598	3, 401	8, 166	1, 833
Scotland .....	4, 759	5, 240	5, 002	4, 997	7, 141	2, 858
Norway .....	4, 196	5, 804	4, 883	5, 117	7, 408	2, 592
Sweden .....	4, 621	5, 378	5, 083	4, 916	8, 245	1, 754
France .....	3, 992	6, 007	4, 980	5, 019	7, 970	2, 029
Saxony .....	5, 521	4, 479	5, 348	4, 652	8, 503	1, 497
Austria .....	6, 777	3, 223	5, 827	4, 173	8, 493	1, 507
Prussia .....	5, 436	4, 564	5, 474	4, 526	8, 424	1, 576
Portugal .....	4, 767	5, 233	4, 993	5, 007	7, 983	2, 017

TABLE XXXVI.—Showing, in 10,000 that enter each period of life, the number that survive and pass to the next period.

FORMING AND DEVELOPING PERIOD, AGE UNDER 20.	SUSTAINING, CONTRIBUTING PERIOD, AGE 20 TO 60.		FIRST OLD AGE, AGE 60 TO 80.					
	Enter.	Survive.	Enter.	Survive.	Enter.	Survive.		
France, 1853-60 .....	10, 000	6, 007	Prussia .....	10, 000	5, 474	Massachusetts, 1841-50 .....	10, 000	3, 575
Vermont, 1857-61 .....	10, 000	5, 621	Saxony .....	10, 000	5, 348	Vermont, 1857-61 .....	10, 000	3, 490
Connecticut, 1858-64 .....	10, 000	5, 504	Vermont, 1857-61 .....	10, 000	5, 041	Connecticut, 1858-61 .....	10, 000	3, 035
Massachusetts, 1841-50 .....	10, 000	5, 387	France, 1853-60 .....	10, 000	5, 019	Massachusetts, 1851-63 .....	10, 000	2, 931
Sweden, 1851-61 .....	10, 000	5, 378	Portugal .....	10, 000	5, 007	S. Carolina, colored, 1857-58 .....	10, 000	2, 858
Scotland, 1855-61 .....	10, 000	5, 240	Scotland, 1855-61 .....	10, 000	4, 997	Scotland, 1855-61 .....	10, 000	2, 858
Portugal .....	10, 000	5, 233	Sweden, 1851-61 .....	10, 000	4, 916	District I, United States .....	10, 000	2, 834
Rhode Island, 1853-63 .....	10, 000	5, 220	England, 1851-60 .....	10, 000	4, 630	Rhode Island, 1853-63 .....	10, 000	2, 823
District I, United States .....	10, 000	5, 122	Connecticut, 1858-64 .....	10, 000	4, 330	Kentucky, colored, 1852-59 .....	10, 000	2, 821
Ireland, 1841-51 .....	10, 000	5, 053	Austria, 1862 .....	10, 000	4, 173	District V, United States .....	10, 000	2, 710
Ireland, 1831-41 .....	10, 000	4, 991	Ireland, 1831-41 .....	10, 000	4, 041	New Jersey, 1850-62 .....	10, 000	2, 545
England, 1851-60 .....	10, 000	4, 966	Massachusetts, 1841-50 .....	10, 000	4, 040	District VII, United States .....	10, 000	2, 511
S. Carolina, whites, 1857-58 .....	10, 000	4, 922	Rhode Island, 1853-63 .....	10, 000	3, 798	Kentucky, whites, 1852-59 .....	10, 000	2, 492
District IX, United States .....	10, 000	4, 806	District I, United States .....	10, 000	3, 703	England, 1851-61 .....	10, 000	2, 476
Prussia .....	10, 000	4, 564	Massachusetts, 1851-63 .....	10, 000	3, 645	District VI, United States .....	10, 000	2, 447
Saxony .....	10, 000	4, 479	New Jersey, 1850-62 .....	10, 000	3, 559	District III, United States .....	10, 000	2, 411
District III, United States .....	10, 000	4, 432	District III, United States .....	10, 000	3, 503	S. Carolina, whites, 1857-58 .....	10, 000	2, 239

## MORTALITY OF THE UNITED STATES.

TABLE XXXVI.—Showing, in 10,000 that enter each period of life, &amp;c.—Continued.

FORMING AND DEVELOPING PERIOD, AGE UNDER 20.			SUSTAINING, CONTRIBUTING PERIOD, AGE 20 TO 60.			FIRST OLD AGE, AGE 60 TO 80.		
	Enter.	Survive.		Enter.	Survive.		Enter.	Survive.
New Jersey, 1850-62.....	10,000	4,298	District V, United States.....	10,000	3,429	District IX, United States.....	10,000	2,170
Massachusetts, 1851-63.....	10,000	4,267	South Carolina, colored, 1857-58..	10,000	3,417	Ireland, 1841-51.....	10,000	2,154
District V, United States.....	10,000	4,247	Ireland, 1831-41.....	10,000	3,401	District IV, United States.....	10,000	2,035
District II, United States.....	10,000	4,019	South Carolina, whites, 1857-58..	10,000	3,380	France, 1853-60.....	10,000	2,029
Kentucky, whites, 1852-59.....	10,000	4,005	District VII, United States.....	10,000	2,904	District VIII, United States.....	10,000	2,023
District VIII.....	10,000	3,991	Kentucky, whites, 1852-59.....	10,000	2,780	Portugal.....	10,000	2,017
District VII.....	10,000	3,781	District IV, United States.....	10,000	2,674	Ireland, 1831-41.....	10,000	1,833
District VI.....	10,000	3,710	District II, United States.....	10,000	2,590	District II, United States.....	10,000	1,805
District IV.....	10,000	3,620	District VI, United States.....	10,000	2,437	Sweden, 1851-61.....	10,000	1,754
Kentucky, colored, 1852-59.....	10,000	3,371	Kentucky, colored, 1852-59.....	10,000	2,258	Austria, 1862.....	10,000	1,576
South Carolina, colored, 1857-58..	10,000	3,250	District VIII, United States.....	10,000	1,590	Prussia.....	10,000	1,576
Austria, 1862.....	10,000	3,223	District IX, United States.....	10,000	857	Saxony.....	10,000	1,497

Table XXXIV shows the proportion of those who died in, and of those that survived, the great periods of development, action, and early rest, and entered upon the next following, in those States which have recorded and published these facts.

Table XXXV shows the same in respect to ten European nations where such records were obtained as could be used for this purpose.

Table XXXVI shows the proportions of the survivors of the first, second, and third periods in the several districts, States, and countries in the order of their number. It is seen that the relative proportions of survivors of the three periods are not the same for these States, districts, and nations. France has the largest proportion that survive the forming period, and therefore stands first in that class, but holds the fourth rank in the proportion that pass through the working stage, and the twenty-first rank in the proportion of those that pass through the third period to full old age.

Austria, which stands at the foot of the list as to safety in early life, is the tenth in proportionate security in the working periods, and again falls to near the foot of the list in the proportion that remain to the last old age.

These proportionate distributions of mortality necessarily have relation to the distribution of population, and vary with it. Where that is progressive, and is increasing by excess of birth, there is a larger element of childhood and youth, and a larger proportion of the living and more subjects of death in the forming period. When it becomes stationary, the early classes are smaller, and the maturer and later classes are proportionately larger. Whatever change happens in the distribution of the population is followed by a corresponding distribution of mortality.

This is shown by comparing the proportions of the two periods of Massachusetts mortality given in Table XXXVI. In the first, the proportion that survived the forming stage was 5,387 in 10,000, and the State then stood near the head of the list of that class of survivors; but in the latter part of that period and in the next decade of years, there was a great increase of foreign population. This at first mainly increased the proportion in the working stage, but their very general—almost universal—early marriages, and the great fecundity of their marriages,\* suddenly increased the numbers and proportion of children and the subjects of death in the forming period; consequently the proportion of mortality increased, and that of the survivors of that class diminished to 4,267 in 10,000 in the next period under observation—1851 to 1863.

\* The population in Massachusetts was:

1850.....	Native.	Foreign.	
1855.....	830,066	164,448	
1860.....	887,106	245,263	
Average of 10 years.....	970,960	260,106	
The births were—	896,022	223,272	
1849-1853.....	Native.	Foreign.	Mixed
1854-1859.....	81,277	47,267	1,494
1859-1863.....	80,882	71,043	8,841
	76,229	77,422	11,639
The ratios of the average of these periods are—	Native.	Foreign.	One parent foreign.
1849-1853.....	63.02	35.96	1.02
1854-1858.....	50.38	44.12	5.50
1859-1863.....	46.06	46.89	7.05
Population to an annual birth—			
Native.....	57	Foreign.....	14
The marriages were, from 1853 to 1863, inclusive—			
Native.....	74,504	Foreign.....	41,788
Population to one marriage—			
Native.....	112	Foreign.....	53

The general diffusion of wealth, or of the means of protection and sustenance, and the general education and degree of intelligence, are very important elements in the consideration of questions of vitality of infancy and childhood. In those countries where the records of ignorance and education are kept side by side with the record of early mortality, it is found that these run almost parallel with each other, or so nearly parallel as to show that the proportion of those who pass safely through the perils is increased with the proportion of those that have sufficient education to give them thrift and the power of intelligent management of the children, as well as of substance.

In Vermont, Massachusetts, Connecticut, and Rhode Island, where property is more equally diffused, and where are fewer that are so poor as to suffer from destitution, where almost every family has comfortable shelter and sufficient food, and where all the natives are taught in school, there the proportionate mortality in early life was lower than in many other States or countries.

The same causes, intelligence and thrift, secured from the labors and management of middle life a general means of comfort and support in old age, which is one of the causes of the large proportion who, after entering the period of comparative rest at sixty, passed safely through it, and were found in full old age, beyond their fourscore. The reports of the large proportion of the colored population who seem to have survived their eightieth year must be taken with some limitations, for reasons that will be found in a subsequent part of this report.

MORTALITY OF IMMIGRANTS.

The whole population, native and foreign, is included together in the statements and tables of this report. No distinction of nativity is made, nor is it easy to determine the comparative vitality and mortality of the natives and the strangers in the land; yet some approximation to the rate of mortality among the foreigners in this country may be obtained by comparing the facts in the seventh and eighth censuses with those in the reports of immigration.

The census of 1850, and the immigration reports of the ten next succeeding years, show the number of foreigners that were here during that decade, and who should be here in 1860, if no death had intervened. The eighth census, of 1860, shows the number that were found here on the 1st of June of that year. The difference between these numbers—those who were here within the ten years preceding June 1, 1860, and those who were found living here at the latter date—is the loss, which, for want of any other explanation of their disappearance, may be assumed as the number of deaths during that period.

The number of foreigners who were to be accounted for, and of those of whom an account was given, was—

	Males.	Females.	Total.
Present June 1, 1850 .....	1, 239, 434	1, 001, 101	2, 240, 535
Arrived and remained in ten years, to June 1, 1860 .....	1, 526, 848	1, 107, 092	2, 633, 940
Present June 1, 1860 .....	2, 766, 282	2, 108, 193	4, 874, 475

It has already been stated, in the introduction, that, besides those who expressed their intention of residing elsewhere, possibly, and even probably, others who had declared their intention to remain had afterwards left the country. These lessened the numbers of those who otherwise would have been exposed to the chances of disease and death in this country.

In Boston the population was—

	Native.	Foreign.
1845 .....	87, 262	27, 104
1850 .....	75, 322	63, 466
1860 .....	114, 050	63, 791
Average of 10 years, 1850-1860 .....	94, 686	63, 628

The births in fifteen years, from 1850 to 1864, were—

American parents .....	22,720	Foreign parents .....	51,967
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Marriages—

American bride .....	14,718	Foreign bride .....	18,706
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Deaths, 1849 to 1864, except three years, when the distinctions were not reported—

Of American parentage .....	20,394	Of foreign parentage .....	30,648
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There are three Catholic cemeteries in the vicinity of Boston, in which, within a few years, 17,900, principally the members of foreign families, have been buried. The Mount Auburn is the resting-place of a large portion of the deceased of the American and more prosperous families. The following table shows the numbers and proportions of the several ages buried in these cemeteries:

Ages.	Catholic cemeteries.	Mt. Auburn.	Ratio of each age to total of all ages.		Ages.	Catholic cemeteries.	Mt. Auburn.	Ratio of each age to total of all ages.	
— 1 .....	5, 688	1, 500	2, 887	1, 163	60 — 80 .....	804	2, 037	407	1, 579
— 5 .....	11, 486	3, 605	5, 830	2, 796	80 + .....	135	623	67	481
— 20 .....	13, 230	5, 126	6, 713	3, 974	All ages .....	17, 900	12, 893		
20 — 60 .....	5, 531	5, 107	2, 802	3, 956					

In 10,000 of all ages of each sex the number in the marriageable and productive age between 20 and 40 was, in the population of Massachusetts in 1860, males, 3,396; females, 3,555. Among the immigrants, 1850 to 1860, males, 5,296; females, 4,478.

## MORTALITY OF THE UNITED STATES.

On the contrary, there were several thousands, natives of the British provinces, who came, not by sea, but by land, across the border, and added to the number of foreigners here. Moreover, the British emigration reports say, that many natives of Great Britain and Ireland went from those islands to Canada, on account of the facilities offered for emigrating to that province, but after arriving, carried out a previous, but concealed, intention of proceeding to the United States and there remaining. This is corroborated by comparing the numbers of natives of Great Britain and Ireland who, according to the census of Canada, were there in 1861 with the number who were there in 1851, together with those who, according to the British and Irish emigration reports, sailed for the Canadas in the ten years, 1851 to 1861. The loss was very much greater than can be accounted for by any ordinary rate of mortality, and was caused, doubtless, in great measure, by the further migration across the border into the United States.

Calculating the decrement or loss of those of each age who arrived in each year during the period between their arrival and 1860, according to the rate of loss shown in the English Life Table for these ages and periods, and for those who were here in 1850, according to the rate of decrement found in the same table, the whole calculated loss, according to these rates, was only about one-half the actual loss. Applying the rates found in the Irish Life Table, which are much higher, still the result is less than the actual loss.

Assessing the total loss upon the several ages and periods, taking the number of foreign males who were here June 1, 1850, also the numbers who arrived in each year thereafter with the intention of remaining, and calculating the average period between the date of arrivals of each year and the census of 1860, or the duration of the possible residence of these immigrants here within that decade, the columns of Table XXXVII were obtained.

TABLE XXXVII.—Showing the arrival of male immigrants and their calculated mortality in the ten years ending with May, 1860.

YEARS.	How long.	Number exposed.	Survive June 1, 1860.	Die before June 1, 1860.	YEARS.	How long.	Number exposed.	Survive June 1, 1860.	Die before June 1, 1860.
Here June 1, 1850.....	Years. 10	1,239,434	931,935	307,499	Arrived 1856-'57.....	Years. 3½	123,202	111,587	11,705
Arrived 1850-'51.....	9½	181,194	138,203	42,991	1857-'58.....	2½	119,173	110,982	8,191
1851-'52.....	8½	210,382	165,114	45,268	1858-'59.....	1½	70,482	67,536	2,946
1852-'53.....	7½	206,012	166,360	39,652	1859-'60.....	½	71,469	70,458	1,011
1853-'54.....	6½	222,629	184,979	37,650					
1854-'55.....	5½	210,637	180,077	30,560	Total.....		2,766,282	2,225,379	540,903
1855-'56.....	4½	111,578	98,148	13,430					

\* The average time from the arrival of the passenger, in the year ending May 31, until that date, was found, by calculating from the National Quarterly Returns and the New York monthly immigration reports, to be slightly over six months.

This is an actual rate of 2.815 per cent. mortality among the male immigrants.

In the same manner Table XXXVIII was made, showing the arrival, residence, and probable mortality of the female immigrants.

TABLE XXXVIII.—Showing the arrivals of female immigrants and their calculated mortality in the ten years ending with May, 1860.

YEARS.	How long.	Number exposed.	Survive June 1, 1860.	Die before June 1, 1860.	YEARS.	How long.	Number exposed.	Survive June 1, 1860.	Die before June 1, 1860.
Here June 1, 1850.....	Years. 10	1,001,101	880,308	120,793	Arrived 1856-'57.....	Years. 3½	89,993	85,924	4,069
Arrived 1850-'51.....	9½	124,302	110,003	14,299	1857-'58.....	2½	85,147	82,333	2,814
1851-'52.....	8½	158,628	142,165	16,463	1858-'59.....	1½	49,940	49,074	866
1852-'53.....	7½	156,642	142,173	14,469	1859-'60.....	½	55,360	54,903	457
1853-'54.....	6½	162,570	149,437	13,133					
1854-'55.....	5½	141,202	131,446	9,756	Total.....		2,108,193	1,906,307	201,886
1855-'56.....	4½	83,308	78,541	4,767					

This would make an actual rate of 1.453 per cent. mortality among the female immigrants.

It is to be considered that the immigrants are composed almost entirely of persons in youth and early and middle manhood, the healthiest period of life, and include very few in the most perilous ages—infants and old people. They should, therefore, have much less sickness and mortality than other population.

Table XXXIX shows the distribution of the immigrants and the populations of the United States, England and Ireland in 1841, before, and in 1861, after, the great emigration.

TABLE XXXIX.—Showing the distribution of populations.

DISTRIBUTION OF WHITE POPULATION IN 100,000 OF ALL AGES.

AGE.	IMMIGRANTS.		UNITED STATES, 1860.		ENGLAND, 1861.		IRELAND, 1841.		IRELAND, 1861.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Under 5 years .....	7,666	9,781	1,510.7	1,546.1	1,363.3	1,307.9	1,576.3	1,474.6	1,242.3	1,153.7
5 to 10 years .....	7,190	9,083	1,293.9	1,327.6	1,180.0	1,138.1	1,361.7	1,282.2	1,092.5	1,018.6
10 to 15 years .....	6,678	8,044	1,149.9	1,162.7	1,068.0	1,015.8	1,235.8	1,155.7	1,079.2	983.3
15 to 20 years .....	15,571	18,722	1,013.7	1,109.5	991.1	947.2	1,132.3	1,197.6	1,161.8	1,160.3
20 to 30 years .....	35,403	32,564	1,815.9	1,847.9	1,695.3	1,753.3	1,704.7	1,816.4	1,759.9	1,785.3
30 to 40 years .....	17,562	12,218	1,357.9	1,249.0	1,290.5	1,321.0	1,133.7	1,178.7	1,007.8	1,053.0
40 to 50 years .....	6,556	6,300	887.6	807.7	1,020.0	1,030.7	835.3	847.8	948.4	1,039.6
50 to 60 years .....	2,022	2,613	535.9	503.1	697.8	708.8	595.3	616.2	818.2	832.6
60 to 70 years .....			289.8	290.0	444.3	477.9	279.4	273.7	587.7	637.8
70 to 80 years .....	705	675	111.9	119.5	201.4	284.9	115.7	115.0	222.9	233.9
80 to 90 years .....			27.5	32.6	44.8	59.2	27.5	28.0	70.1	29.2
Over 90 years .....			2.9	4.3	2.6	4.7	4.6	5.6	9.2	12.7

The rate of the mortality or loss of the males was thus seen to be 2.815 per cent. on these healthy ages. The rate in England on males of these ages was 1.567 per cent. If these immigrants were distributed throughout the ages in the same proportion as the population at home, and included the perilous ages at the extremes of life, and the rates of mortality of these were as high as those of their actual ages, then the total rate would be 4.261 per cent.

The total rate of the female class was 1.453 per cent. in the total of the healthy ages. Correcting for the difference of distribution through the ages, and including the usual proportion of the unhealthy ages, the total rate would be 2.106 per cent.

The male rate is higher than in fixed populations; the female rate is lower. The rates were, in—

	Males.	Females.
England .....	2.321	2.173
Scotland .....	2.149	1.963
Ireland .....	3.456	3.515
Sweden .....	2.330	2.120
Immigrants .....	4.261	2.106

This great discrepancy of loss between the male and female immigrants is worthy of consideration, and probably would be diminished if an accurate record could be obtained of all those who, when they arrived, intended to remain, but afterwards changed their plan and returned, or went elsewhere. It is probable that more males than females were among the returned immigrants. This would diminish the proportion of males that were to be accounted for. Again, among those natives of the British provinces who come across the border, the females apparently predominate. They have more inducements to leave their homes to find domestic employment in the families of the United States, and many find occupation as operatives in factories. This would increase the number to be accounted for and increase the rate of loss. These considerations would diminish the difference between the number of those males whose presence here was recorded in the Seventh Census and the immigration reports and those reported in the Eighth Census, and, on the contrary, they increase the same in respect to the females, and remove in part the discrepancy between the losses and the apparent rates of mortality of the sexes. Then some deduction would be made from the calculated rate of the male and some addition to the female rate of mortality. Nevertheless, it is found in those places that publish the record of the mortality of foreign males and females in this country that the rate of males is greater than that of females.

Among foreigners the rate of mortality of males was, in New York, 24 per cent. and in Boston 26 per cent. greater than that of females in the years 1856 to 1864.

According to the Irish Life Table, the decrement of life at home was slightly greater among females than among males at all ages, except between 40 and 50 and between 80 and 90. A great majority of the Irish immigrants and a very large part of the others are of the poorer classes, among whom life is generally shorter and death more frequent. In this country a large proportion live in the most densely crowded and unhealthy parts of the cities, in small and unventilated rooms, tenements, or dwellings, on narrow, often filthy and undrained streets, lanes, and alleys. Often whole families occupy single rooms, where all the operations of life are carried on, and the sick and the dying have no other place. The married women and children, and the men, when at home, are compelled to dwell in and breathe this unhealthful atmosphere. Their strength is not so well sustained by digestible and nutritious food, well selected and prepared for the table. The men are engaged in the hardest labors and often in unhealthful conditions and circumstances, in wet, in mud, exposed to excessive cold and storms and heat. Whatever of danger or disease follows these hardships and severe labors, they fall more upon the foreigners than upon the Americans, and cause more sickness and impair more life among them.

The foreign unmarried females are very generally occupied in domestic service, doing household work in families where they have sufficient and digestible food, comfortable shelter, and usually better air for respiration than is found in the dwellings of the foreign laborers' families. Hence the higher rate of mortality of foreign males both over the females of their own nations and over the American of both sexes.

## MORTALITY OF THE WHITE AND COLORED POPULATION.

In all the statements and calculations of mortality in this report, the whites and blacks are included. No distinction is made between them as to deaths or their causes; yet it is very apparent that they have different susceptibilities of the attacks of disease and different liabilities to death. There are few records which contain all the deaths which occurred within any known number of the living of these two races by which the rate of mortality could be determined. These few are found in cities in which all the deaths are reported to the municipal authorities and recorded.

In Table XL, such records as could be obtained are gathered and presented from eleven cities in the United States. These include living populations equal to 38,902,644 whites and 3,216,789 blacks living one year, among whom 1,070,850 whites and 111,872 blacks died. These are all the facts that have been found and can be used as reliable bases for determining the rate of mortality. These are not offered as decisive of the question of the actual liability of either race to death, but as showing the comparative liability of the two races in the places and in the years quoted in the table.

TABLE XL—Showing the number of deaths and rate of mortality of whites and blacks.

CITY.	PERIOD OF OBSERVATION.		SUM OF ANNUAL POPULATION.			NUMBER OF DEATHS.			LIVING TO 1 DEATH.			RATE OF MORTALITY.		
	Specific years.	No. of years.	White.	Colored.	Total.	White.	Colored.	Total.	White.	Colored.	Total.	White.	Colored.	Total.
Boston .....	1725 to 1774, and 1855 to 1864 .....	60	2,634,585	84,678	2,719,263	71,856	5,958	77,814	36.65	14.21	34.94	2.72	7.03	2.86
New Bedford .....	1861, 1862, and 1863 .....	3	66,236	4,893	71,129	1,550	179	1,729	42.73	28.78	41.35	2.34	3.65	2.43
Providence .....	1840 to 1863 .....	24	940,727	35,210	975,937	20,744	1,306	22,050	45.83	26.96	45.26	2.20	3.70	2.25
New York .....	1821, 1824 to 1829, 1831 to 1836, 1838 to 1863 .....	39	16,306,090	553,665	16,859,755	512,007	22,692	534,699	31.85	24.39	31.71	3.13	4.09	3.17
Buffalo .....	1854 to 1857, and 1859 to 1863 .....	9	670,246	7,104	677,350	17,167	154	17,321	39.04	45.48	39.10	2.56	2.16	2.55
Philadelphia .....	1821 to 1863 .....	43	12,425,719	759,308	13,185,027	283,732	27,417	311,149	43.79	27.65	42.37	3.32	3.61	2.35
Baltimore .....	1818, 1824, 1825, 1827 to 1831, 1833, 1834, 1836 to 1863 .....	38	4,304,472	893,110	5,197,582	107,233	27,750	134,983	40.14	32.18	38.50	2.49	3.10	2.59
Washington .....	1849 to 1860 .....	12	458,436	126,696	585,132	9,082	2,811	11,893	50.47	45.07	49.19	1.98	2.21	2.03
Charleston .....	1822 to 1860 .....	39	533,412	624,765	1,158,177	13,950	16,860	30,810	38.95	37.05	37.59	2.61	2.69	2.66
New Orleans .....	1849, 1850, 8 months of 1855, 1856, and 1860 .....	4½	538,950	119,207	658,157	32,123	6,217	38,340	16.77	19.17	17.17	5.96	5.21	5.82
Memphis .....	1851, 1852, and 1853 .....	3	23,771	8,153	31,924	1,406	428	1,834	16.09	19.05	17.41	5.91	5.24	5.74
Eleven cities .....			38,902,644	3,216,789	42,119,433	1,070,850	111,872	1,182,622	36.33	28.75	35.61	2.75	3.47	2.87

So far as these facts go, they show that the blacks are more subject to the chances of death than the whites; the rate of mortality in the times and places quoted being 2.75 among the whites, and 3.47 among the blacks. It is seen that this difference is the greatest against the blacks in the north, but it diminishes and finally vanishes in the south. In the West Indies, among the British troops reported by Colonel Tulloch in Table XLIII, the difference is reversed, and the whites were the most subject to death.

## DISEASES OF THE TWO RACES.

Table XL shows only the mortality. Most of the records from which it was obtained make no mention of the causes. Other records covering a wider ground show the fatal diseases of the whites and colored people, but these are not complete accounts of all the deaths in the places and in the years in which they occurred. The Seventh Census—1850—shows the causes of death of the whites and blacks separately in the United States for a single year. The reports of South Carolina show the same for four years, and of Kentucky for eight years, those of New York for eighteen years, and of New Orleans for two years.

With these facts Table XLI is made. These include the deaths of 444,837 whites and 93,397 blacks, and the diseases that produced them.

MORTALITY OF THE UNITED STATES.

281

TABLE XLI.—Showing the mortality of whites and blacks in the United States, 1849-1850, (Kentucky, 8 years; South Carolina, 4 years; New York city, 18 years; and New Orleans, 2 years;) the number of deaths from each cause, and their proportion to the total from all causes.\*

CAUSES OF DEATH.	NUMBER OF DEATHS.		RATIO IN 1,000,000 DEATHS.		CAUSES OF DEATH.	NUMBER OF DEATHS.		RATIO IN 1,000,000 DEATHS.	
	White.	Colored.	White.	Colored.		White.	Colored.	White.	Colored.
Total specified	544,837	93,397	999,998	999,999	Hydrophobia	45	6	82	64
Zymotic	229,819	39,586	421,810	423,845	Stricture of urethra	1,365	68	2,505	728
Constitutional	120,687	15,446	221,509	165,379	Syphilis	657	149	1,207	1,595
Local	139,455	23,686	255,953	253,603	Total enthetic	2,667	223	3,794	2,387
Developmental	34,410	7,757	63,155	83,052	Delirium tremens	1,867	61	3,426	633
Violent	20,466	6,922	37,563	74,114	Intemperance	1,792	177	3,289	1,895
Miasmatic	220,893	36,307	405,419	388,727	Privation				
Enthetic	2,067	223	3,793	2,387	Rickets	48	39	88	417
Dietic	3,940	289	7,231	3,094	Scurvy	233	12	427	128
Parasitic	2,919	2,767	5,357	29,625	Total dietic	3,940	289	7,230	3,093
Total zymotic	229,819	39,586	421,810	423,845	Thrush	1,009	192	1,851	2,055
Dietetic	18,086	5,190	33,192	55,567	Worms	1,910	2,575	3,505	27,570
Tubercular	102,601	10,256	188,315	109,809	Total parasitic	2,919	2,767	5,356	29,625
Total constitutional	120,687	15,446	221,509	165,379	Anæmia	107	9	196	96
Disease of nervous system	61,306	7,552	112,517	80,854	Cancer	3,179	346	5,834	3,704
Disease of organs of circulation	8,016	886	14,712	9,486	Dropsy	13,891	4,766	25,495	51,029
Disease of organs of respiration	42,593	11,074	78,175	118,569	Gout	79	5	144	53
Disease of organs of digestion	21,154	3,311	38,826	35,450	Mortification	830	64	1,523	685
Disease of urinary organs	3,308	276	6,071	2,955	Noma				
Disease of organs of generation	730	207	1,339	2,216	Total diethetic	18,086	5,190	33,192	55,567
Disease of organs of locomotion	1,445	242	2,652	2,591	Consumption	70,893	7,771	130,117	83,203
Disease of skin	903	138	1,657	1,477	Hydrocephalus	11,936	395	21,907	4,529
Total local	139,455	23,686	255,953	253,603	Scrofula	3,073	1,473	5,642	15,771
Children	9,806	2,105	17,998	22,538	Tabes mesenterica	16,699	617	30,649	6,606
Adults	7,111	1,320	13,051	14,133	Total tubercular	102,601	10,256	188,315	109,809
Old people	11,613	3,745	21,314	40,097	Apoplexy	10,184	944	18,691	10,107
Nutrition	5,880	587	10,792	6,284	Cephalitis	13,013	1,376	23,884	14,732
Total developmental	34,410	7,757	63,155	83,052	Chorea	75	19	137	203
External	20,466	6,922	37,563	74,114	Convulsions	25,531	2,466	46,859	26,403
Cholera	31,962	5,786	58,663	61,950	Epilepsy	1,074	202	1,971	2,162
Cholera infantum	22,097	1,417	40,557	15,171	Insanity	574	91	1,053	974
Cholera morbus	2,591	223	4,755	2,387	Palsy	5,259	561	9,652	6,006
Diarrhoea	13,013	1,749	23,884	18,726	Tetanus	1,213	1,020	2,226	10,921
Dysentery	31,758	3,869	58,288	41,425	Neuralgia	410	46	752	492
Croup	18,661	3,131	34,250	33,523	Disease of brain and nerves	3,973	827	7,292	8,854
Diphtheria	1,529	9	2,806	96	Total nervous system	61,306	7,552	112,517	80,854
Erysipelas	4,742	273	8,703	2,923	Aneurism	252	26	462	278
Fever	21,475	6,378	39,415	68,289	Pericarditis	23	9	42	96
Fever, congestive	1,018	347	1,868	3,715	Phlebitis	79	2	144	21
Fever, intermittent	1,924	272	3,531	2,912	Disease of heart	7,662	849	14,062	9,090
Fever, remittent	1,911	313	3,507	3,351	Total organs of circulation	8,016	886	14,710	9,485
Fever, typhoid	14,053	4,693	25,793	50,247	Asthma	926	258	1,699	2,762
Fever, typhus	4,644	157	8,523	1,680	Bronchitis	6,722	2,094	12,337	22,420
Fever, yellow	1,277	35	2,343	374	Laryngitis	1,962	197	3,601	2,109
Fever, scarlet	23,721	1,681	43,537	17,998	Pleurisy	2,404	783	4,412	8,383
Whooping-cough	8,060	3,255	14,793	34,851	Pneumonia	27,576	7,172	50,613	76,796
Measles	6,980	1,426	12,811	15,268	Hydrothorax	1,029	97	1,888	1,038
Quinsy	1,284	313	2,356	3,351	Disease of lungs	1,974	473	3,623	5,064
Rheumatism	1,500	363	2,753	3,886	Total organs of respiration	42,593	11,074	78,173	118,566
Small-pox	6,306	462	11,574	4,946					
Mumps	46	11	84	117					
Influenza	341	144	625	1,541					
Total miasmatic	220,893	36,307	405,419	388,727					

\* This table is arranged according to Dr. Farr's latest classification, which is now used in the Registration Reports of England, Massachusetts, and Vermont.

## MORTALITY OF THE UNITED STATES.

TABLE XLI—Showing the mortality of whites and blacks in the United States, &amp;c.—Continued.

CAUSES OF DEATH.	NUMBER OF DEATHS.		RATIO IN 1,000,000 DEATHS.		CAUSES OF DEATH.	NUMBER OF DEATHS.		RATIO IN 1,000,000 DEATHS.	
	White.	Colored.	White.	Colored.		White.	Colored.	White.	Colored.
Dyspepsia.....	894	119	1,640	1,294	Carbuncle.....	88	17	161	189
Dirt-eating.....	18	118	33	1,263	Leprosy.....	13	6	23	64
Gastritis.....	1,975	204	3,624	2,184	Ulcer.....	622	93	1,141	995
Enteritis.....	7,637	868	14,017	9,293	Skin, disease of.....	180	22	330	235
Colitis.....	10	2	18	21	Total skin.....	903	138	1,655	1,476
Ileus.....	11	1	20	10	Cyanosis.....				
Intussusception.....	83	2	152	21	Malformation.....	1,229	93	2,255	995
Hernia.....	367	149	673	1,595	Spina bifida.....	1		1	
Piles.....	50	12	91	198	Teething.....	4,422	1,817	8,116	19,454
Fistula.....	26	7	47	74	Premature birth.....	4,154	195	7,624	2,087
Ulceration.....	343	4	629	42	Total children.....	9,806	2,105	17,996	22,536
Bowels, disease of.....	2,712	926	4,977	9,914	Paramenia.....	70	36	128	385
Peritonitis.....	223	30	409	321	Child-birth.....	3,643	1,011	5,686	10,824
Ascites.....	91	4	167	42	Puerperal fever.....	3,398	273	6,238	2,923
Hepatitis.....	1,157	68	2,123	728	Old age.....	11,613	3,745	21,914	40,097
Jaundice.....	1,011	66	1,835	706	Debility, atrophy.....	5,880	587	10,792	6,284
Disease of liver.....	3,211	294	5,893	3,147	Accident.....	7,284	1,882	13,369	20,150
Disease of spleen.....	12	2	22	21	Fracture.....	660	46	1,211	492
Stricture—colic.....	1,323	435	2,428	4,657	Burns and scalds.....	2,902	1,602	5,326	17,152
Total organs of digestion.....	21,154	3,311	38,818	35,441	Lightning.....	54	40	99	428
Cystitis.....	263	43	482	460	Steam.....	6		11	
Diabetes.....	335	19	614	203	Powder.....	6		11	
Ischuria.....	5	7	9	74	Fire-arms.....	49	4	89	42
Nephritis.....	260	9	477	96	Railroad.....	107	1	196	10
Stone.....	675	92	1,238	985	Drowning.....	4,367	869	8,015	9,304
Kidney, disease of.....	1,954	91	2,925	974	Poison.....	557	305	1,022	3,265
Bladder, disease of.....	176	15	323	160	Frozen.....	64	47	117	503
Total urinary organs.....	3,308	276	6,068	2,972	Exposure and neglect.....	103	11	189	117
Uterus, disease of.....	730	207	1,339	2,216	Strangulation.....	25	3	45	32
Hip disease.....	259	19	475	203	Suffocation*.....	1,167	1,819	2,141	19,476
Arthritis.....					Drinking cold water.....	18	4	33	42
Spine, disease of.....	1,042	208	1,912	2,327	Sunstroke.....	700	38	1,284	406
Joints, disease of.....	96	13	176	139	Suicide.....	1,331	73	2,442	781
Bones, disease of.....	48	2	88	21	Homicide.....	672	67	1,233	717
Total locomotive organs.....	1,445	242	2,651	2,590	Murder.....	373	84	684	899
					Executed.....	21	27	38	289
					Total external causes.....	20,466	6,922	37,555	74,105

\* Mostly children. The English call these "overlaid," suffocated in bed.

Thus it is seen that the proportion which the several causes have in the production of the total mortality is unlike, in the two races, in regard to every fatal disease that is reported.

In order to show this difference more clearly, the proportionate force of mortality among the whites attached to each disease, 1,000 is assumed as a basis, and the force of the same among the blacks is calculated and their proportion determined, as shown in the following table:

TABLE XLII.—Showing the comparative proportions of whites and blacks that die from each cause, arranged in order of relative intensity.

Causes of death.	Whites.	Blacks.	Causes of death.	Whites.	Blacks.	Causes of death.	Whites.	Blacks.
	Suffocation.....	1,000		9,097	Cold water, drinking.....		1,000	1,272
Ischuria.....	1,000	8,244	Syphilis.....	1,000	1,230	Atrophy and debility, (order).....	1,000	582
Worms.....	1,000	7,865	Brain, disease of, (not specified).....	1,000	1,214	Homicide.....	1,000	581
Parasitis, (order).....	1,000	5,530	Measles.....	1,000	1,191	Intemperance.....	1,000	576
Tetanus.....	1,000	4,906	Drowned.....	1,000	1,168	Convulsions.....	1,000	564
Rickets.....	1,000	4,739	Spine, disease of.....	1,000	1,164	Hydrothorax.....	1,000	549
Lightning.....	1,000	4,323	Carbuncle.....	1,000	1,130	Apoplexy.....	1,000	547
Frozen.....	1,000	4,298	Thrush.....	1,000	1,110	Liver, disease of.....	1,000	534
Dirt-eating.....	1,000	3,827	Epilepsy.....	1,000	1,097	Ileus.....	1,000	500
Burns and scalds.....	1,000	3,224	Adults, disease of, (order).....	1,000	1,083	Cholera morbus.....	1,000	500
Poison.....	1,000	3,194	Cholera.....	1,000	1,055	Bladder, disease of.....	1,000	492
Paramenia.....	1,000	3,000	Zymotic, (class).....	1,000	1,005	Anæmia.....	1,000	489
Scrofula.....	1,000	2,795	Local, (class).....	1,000	990	Urinary organs, (order).....	1,000	487
Leprosy.....	1,000	2,782	Croup.....	1,000	979	Fire-arms.....	1,000	472
Influenza.....	1,000	2,466	Locomotive organs, (order).....	1,000	977	Puerperal fever.....	1,000	468
Teething.....	1,000	2,397	Miasmatic, (order).....	1,000	958	Mortification.....	1,000	449
Whooping-cough.....	1,000	2,356	Remittent fever.....	1,000	955	Malformation.....	1,000	442
Hernia.....	1,000	2,355	Spleen, disease of.....	1,000	954	Dietic, (order).....	1,000	428
Pericarditis.....	1,000	2,285	Cystitis.....	1,000	954	Small-pox.....	1,000	427
Dropsy.....	1,000	2,001	Insanity.....	1,000	924	Hip disease.....	1,000	427
Bowels, disease of.....	1,000	1,999	Digestive organs, (order).....	1,000	913	Scarlet fever.....	1,000	413
Congestive fever.....	1,000	1,989	Skin, (order).....	1,000	891	Fracture.....	1,000	406
Violent.....	1,000	1,973	Ulcer.....	1,000	872	Jaundice.....	1,000	380
External causes.....	1,000	1,972	Intermittent fever.....	1,000	824	Cholera infantum.....	1,000	374
Typhoid fever.....	1,000	1,936	Stone.....	1,000	795	Gout.....	1,000	368
Colic.....	1,000	1,918	Dyspepsia.....	1,000	789	Hepatitis.....	1,000	343
Pleurisy.....	1,000	1,900	Joints, disease of.....	1,000	789	Kidney, disease of.....	1,000	333
Old age.....	1,000	1,881	Peritonitis.....	1,000	784	Erysipelas.....	1,000	330
Bronchitis.....	1,000	1,801	Diarrhœa.....	1,000	784	Diabetes.....	1,000	329
Fever, (not specified).....	1,000	1,732	Hydrophobia.....	1,000	780	Suicide.....	1,000	319
Diathetic, (order).....	1,000	1,674	Constitutional, (class).....	1,000	747	Sunstroke.....	1,000	316
Generative organs, disease of.....	1,000	1,655	Brain and nervous system, (order).....	1,000	718	Scurvy.....	1,000	300
Uterus, disease of.....	1,000	1,655	Skin, disease of, (not specified).....	1,000	712	Stricture of urethra.....	1,000	290
Asthma.....	1,000	1,625	Dysentery.....	1,000	711	Premature birth.....	1,000	274
Child-birth.....	1,000	1,615	Strangulation.....	1,000	711	Ascites.....	1,000	251
Executed.....	1,000	1,605	Enteritis.....	1,000	663	Bones, disease of, (not specified).....	1,000	227
Fistula.....	1,000	1,574	Neuralgia.....	1,000	654	Tubercles mesenterica.....	1,000	215
Accident.....	1,000	1,572	Heart, disease of.....	1,000	645	Nephritis.....	1,000	201
Respiratory organs, disease of.....	1,000	1,516	Circulatory organs, (order).....	1,000	644	Typhus fever.....	1,000	197
Pneumonia.....	1,000	1,515	Consumption.....	1,000	640	Delirium tremens.....	1,000	192
Chorea.....	1,000	1,481	Cancer.....	1,000	634	Yellow fever.....	1,000	190
Quinsy.....	1,000	1,422	Ethnetic, (order).....	1,000	629	Phlebitis.....	1,000	159
Rheumatism.....	1,000	1,411	Palsy.....	1,000	622	Intussusception.....	1,000	146
Piles.....	1,000	1,406	Cephalitis.....	1,000	619	Ulceration.....	1,000	66
Mumps.....	1,000	1,393	Exposure and neglect.....	1,000	619	Railroad.....	1,000	52
Lungs, disease of, (not specified).....	1,000	1,392	Gastritis.....	1,000	603	Diphtheria.....	1,000	34
Developmental, (class).....	1,000	1,315	Aneurism.....	1,000	601	Steam explosion.....	1,000	0
Murder.....	1,000	1,314	Laryngitis.....	1,000	585	Powder explosion.....	1,000	0
Children, disease of, (order).....	1,000	1,307	Tubercular, (order).....	1,000	583			

It thus appears that the proportionate force of mortality differs with the two races, and sometimes this difference is very great. Some diseases are more fatal to the whites and others are more fatal to the blacks, and this difference varies from suffocation, which is proportionately nine times as destructive to the blacks as to the whites, and diminishes to cholera, which is nearly equally fatal to both races, and again increases with an excess of mortality among the whites to diphtheria, which causes a proportion of the whole mortality thirty times as great among the whites as that among the blacks.

These deductions are confirmed by the report of Captain (afterwards Major General) Alexander M. Tulloch, on the mortality and its causes among the white and colored soldiers of the British army in the West Indies during twenty years—from 1817 to 1836—from which the following table is compiled, condensed, and calculated:

TABLE XLIII.—Mortality of British troops in fourteen West India colonies, 1817–1836.

AGGREGATE STRENGTH—WHITES, 227,405; BLACKS, 97,774.

DISEASES.	DEATHS.		DEATHS TO 1,000,000 LIVING.		DEATHS TO 1,000,000 FROM ALL CAUSES.		DISEASES.	DEATHS.		DEATHS TO 1,000,000 LIVING.		DEATHS TO 1,000,000 FROM ALL CAUSES.	
	Whites.	Blacks.	Whites.	Blacks.	Whites.	Blacks.		Whites.	Blacks.	Whites.	Blacks.	Whites.	Blacks.
Fever, intermittent	355	72	1,561	736	17,718	18,828	Hemorrhage	92	37	404	378	4,591	9,673
Fever, remittent	9,114	206	40,078	2,107	454,881	53,870	Disease of heart	1		4		49	
Fever, continued	1,607	191	7,053	1,953	80,570	49,957	Asthma	9	22	39	225	440	5,753
Fever, yellow	676	18	2,972	184	33,739	4,707	Bronchitis						
Fever, typhus	20		87		998		Laryngitis						
Fever, scarlet	2		8		99		Pleurisy	26	24	114	244	1,297	6,276
Measles		9		92		2,350	Pneumonia	255	333	1,121	3,405	12,727	87,631
Small-pox	1	208	4	2,127	49	54,303	Catarrh	395	212	1,736	2,178	19,714	55,439
Dysentery	2,921	446	12,844	4,561	145,787	116,631	Ascites	186	132	817	1,350	9,283	34,518
Diarrhœa	608	142	2,673	1,452	30,355	37,133	Colic	41	15	179	152	2,045	3,022
Cholera morbus	53	23	233	2,352	2,645	6,014	Dyspepsia	55	5	241	51	2,745	1,307
Whooping-cough							Enteritis	91	29	400	296	4,541	7,583
Quinsy	11	8	48	81	549	2,092	Gastritis	51	7	224	71	2,545	1,530
Erysipelas	14	6	61	61	1,569	17,520	Hæmorrhoids	8	1	35	10	399	261
Rheumatism	40	67	175	685	1,996	17,520	Hepatitis	343	78	1,508	797	17,119	20,397
Syphilis	12		52		598		Hernia	2	5	8	51	99	1,397
Stricture urethra		2		20		523	Jaundice	26	1	114	10	1,297	261
Hernia		1		10		261	Peritonitis	16	7	70	71	798	1,830
Delirium tremens	399	17	1,754	173	19,914	4,445	Prolapsus ani						
Scurvy	2		8		99		Splenitis	6	3	26	30	299	784
Worms	1	1	4	10	49	261	Physconia		2		20		523
Cancer	2		8		99		Urinary	11	2	46	20	545	522
Dropsy	221	62	971	634	11,030	16,213	Disease of bones & joints	8	8	34	81	397	2,092
Hydrocele	1		4		49		Abscess	22	19	96	194	1,098	4,962
Consumption	1,499	890	6,596	9,102	74,815	232,740	Fistula	6	8	26	81	299	2,092
Marasmus		2		20		523	Ulcer	32	41	140	419	1,597	10,721
Hydrocephalus	5	4	21	40	249	1,043	Disease of skin	4	14	17	172	198	3,638
Scrofula	10	5	43	51	499	1,307	Atrophy	93	22	408	225	4,641	5,753
Apoplexy	222	93	976	951	11,080	24,320	Tumor	9	5	408	225	4,641	5,753
Cephalitis	35	6	153	61	1,746	1,561	Accident	94	125	410	1,277	5,189	32,687
Convulsions	11	2	48	20	549	523	Burn	14	2	61	20	698	523
Epilepsy	63	20	277	204	3,144	5,230	Poison		2		20		523
Insanity	26	33	133	336	1,296	8,529	Sunstroke	2		8		99	
Palsy	30	32	131	327	1,496	8,365	Wounds	50	33	219	336	2,494	8,629
Tetanus	46	34	202	347	2,295	8,891	Not specified	39	19	29	61	348	1,568
Eyes, disease of	7		30		349		Total all causes	20,036	3,824	88,107	39,110		
Otitis	1												
Aneurism	26	7	114	71	1,297	1,830							
Carditis	8	1	35	10	399	261							

Rate of mortality: Whites, 8.81 per cent., or one in 11.34 living; colored, 3.91 per cent., or one in 25.57 living.

The class of *zymotic*, or *endemic*, *epidemic*, and *contagious diseases* exerts about an equal proportionate destructive force on both races; yet the several divisions of this class differ in this respect. *Asiatic cholera* is more fatal to the blacks, but *cholera infantum* and *cholera morbus*, *diarrhœa* and *dysentery*, and generally the *diseases of the digestive organs*, *erysipelas*, *intermittent*, *remittent*, *typhus*, *yellow* and *scarlet fever*, and *small-pox*, were more fatal to the whites. *Fever*, unspecified, *typhoid*, *whooping-cough*, *quinsy*, and *rheumatism*, were more destructive to the blacks. They suffered more from *asthma*, *bronchitis*, *pleurisy*, *pneumonia*, and most *diseases of the lungs*, but less from *consumption*, than the whites. From all the *diseases of the brain and nervous system*, except *tetanus*, the whites fell in largest proportion. *Scrofula* generally destroyed more blacks, but *tubercles mesenterica* destroyed many more whites. Black children sank more during *teething* than whites. The *urinary diseases* were more fatal to the whites, and *generative disorders* and *childbirth* to the blacks. Diseases of the bones, joints, and skin affected both nearly equally. Accidents, violence, and other external causes were largely destructive to the blacks in proportion to the whites.

The whites and blacks are distributed in different proportions over the ages of life, and thus far, if subject to the same special rates of mortality in specific ages, they are subject to different general rates.

Table XLIV shows the proportionate distribution of all the white and colored population of the country:

MORTALITY OF THE UNITED STATES.

TABLE XLIV.—Showing in 10,000 of each race the number of blacks for every 100 whites of each sex and at each age.

AGE.	MALES.		FEMALES.		AGE.	MALES.		FEMALES.	
	White.	Colored.	White.	Colored.		White.	Colored.	White.	Colored.
—1.....	100	108	100	96	40—50.....	100	83	100	91
1—5.....	100	109	100	108	50—60.....	100	78	100	81
5—10.....	100	110	100	108	60—70.....	100	83	100	81
10—15.....	100	120	100	114	70—80.....	100	75	100	74
15—20.....	100	108	100	104	80—90.....	100	92	100	97
20—30.....	100	98	100	95	90—100.....	100	233	100	175
30—40.....	100	82	100	91	100+.....	100	1,111	100	1,275

A similar difference is found by comparing the population of 1850 and 1860 and determining approximately the survivors from one age to another through the ten years from census to census. If the enumerations are correct, and include all the living when taken, and if none came in except by birth, and none go out except by death, then those who were under 5 in 1850 will be represented by those who are between 10 and 15 in 1860; and those who were between 20 and 30 in 1850 will be represented by those who are between 30 and 40 in 1860—that is, the survivors of the population of any age at any decennial enumeration will be found in the age ten years greater at the next enumeration, and the difference between these numbers will be the number of deaths in that period.

Under the conditions before stated of accurate and complete enumeration with no disturbance from migration outward or inward, this method of comparison may be used to obtain an approximation at least of the rate of mortality, and then the result may be taken as a basis for comparing these rates and the dangers or facts of death in different peoples and in different countries.

The condition of permanence of the same population without emigration or immigration holds in regard to the colored population. None are here except those who were born in the land, and none that were born here have gone abroad; or, if there are any exceptions, they are so few that they would not vitiate the results of any calculation made on this principle.

The whites have been greatly influenced by immigration from abroad, and also by internal migration from section to section of the country; but by very careful analysis of the immigrants between 1850 and 1860, and calculation of their rate of mortality, the approximate number of their survivors at each age in 1860, and by separating these from the total whites of the corresponding ages, the white natives of each age have been approximately determined.

The interchange of native population between the north and south has been shown, in the introduction to this report, to be so nearly equal, and the compensation for the loss of its own people by each section so nearly complete, in the gain received from the other, that, for all purposes of this calculation and deduction, they may be considered the same as if each section of the country had retained all its own children and had received none from the other.

The accuracy and completeness of the enumeration is another and very important and yet less certain element in this consideration. There was very manifestly an incompleteness in the census of the early ages in 1850. The number of children between 10 and 15 reported in 1860 was greater than the numbers of these same children when ten years younger—that is, under 5, in 1850. If both of the statements were true, there was no loss by death of those who were under 5 in 1850, through the ten years to 1860. In some of the other early ages there was either no decrement, or one so small that the first enumeration was manifestly incomplete and unreliable for this purpose, and they are therefore omitted.

By subtracting the numbers reported as between 20 and 30 in 1860 from those reported as between 10 and 20 in 1850, and those between 30 and 40 in 1860 from those between 20 and 30 in 1850, and all in other ages at the latter census from those in the next preceding age, ten years younger, in the former census, the decrement or loss during the decade, in passing from one age to that ten years greater, was obtained. Then, by comparing this decrement or loss with the numbers in the first period in 1850, the rate of decrement was obtained; as, in 1850, there were in the northern States 1,299,299 white males between 20 and 30 years old; in 1860 there were 1,041,191 of the same class and in the same region in 1860; the difference or decrement was 258,108, or 19.86 per cent. In this manner all the decrements were obtained and all the ratios of loss calculated.

## MORTALITY OF THE UNITED STATES.

TABLE XLV.—Showing the rate of decrement of white and colored population during ten years, 1850 to 1860.

AGE.		WHITE.				COLORED.			
1850.	1860.	NORTH.		SOUTH.		NORTH.		SOUTH.	
From—	To—	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
10—20.....	20—30.....	5.60	6.2	10.07	13.75	.....	.....	11.69	13.35
20—30.....	30—40.....	21.69	24.70	20.77	24.55	16.45	21.43	21.16	21.97
30—40.....	40—50.....	13.30	14.45	18.83	17.83	18.28	17.77	19.05	22.02
40—50.....	50—60.....	22.02	20.01	25.44	25.56	27.10	27.18	26.87	30.84
50—60.....	60—70.....	21.20	18.66	31.17	28.86	35.41	31.99	29.55	29.08
60—70.....	70—80.....	40.80	37.30	50.14	47.87	50.81	44.16	58.91	56.29
70—80.....	80—90.....	64.80	60.10	68.62	65.13	62.88	51.71	65.05	60.39
80—90.....	90—100.....	87.30	84.00	86.60	82.13	71.18	65.98	70.44	63.96
90—100.....	100+.....	91.00	91.40	85.91	57.89	57.89	58.29	46.96	41.67

On account of the manifest incompleteness of the enumeration of children in 1850, the earlier ages are omitted in this table. All the others seem to be consistent with the observation of death and with the operations of the law of mortality, with the exception of the reports of the numbers of the colored population in the advanced ages.

There is another element in the census of the blacks which must be considered in any estimate of the value of their life founded upon the ages of the living or the dead. They appear to have a large number in old age, and a much larger proportion of octogenarians, nonagenarians, and especially of centenarians, than the whites.

Table XLIV showed that a much larger proportion of persons living in the extreme ages were reported among the blacks than among the whites.

Table XLV showed that the decrement or apparent loss of life passing from the eighth decade of years to the ninth, from the ninth to the tenth, and from this to the century and beyond, was smaller among the colored than among the white population. This is more distinctly seen in Table XLVI, which is calculated from the preceding, on the basis of a proportionate decrement of 100 among the whites in each decade.

TABLE XLVI.—Showing the rate of decrement of the blacks for every 100 whites in each sex north and south.

AGE.		NORTHERN STATES.		SOUTHERN STATES.		TOTAL UNITED STATES.	
1850.	1860.	Males.	Females.	Males.	Females.	Males.	Females.
—10.....	10—20.....						
10—20.....	20—30.....			115	96	177	126
20—30.....	30—40.....	76	86	101	89	119	88
30—40.....	40—50.....	137	123	101	124	133	141
40—50.....	50—60.....	123	135	105	120	117	141
50—60.....	60—70.....	169	167	94	101	124	126
60—70.....	70—80.....	124	118	117	117	134	138
70—80.....	80—90.....	97	86	95	93	98	96
80—90.....	90—100.....	82	78	81	78	80	76
90—100.....	100+.....	63	63	50	51	53	49

The rate of decrement among the whites gradually increases, following the law of mortality. There is an increase with the progress of age among the blacks, but in the later ages more slowly, and in the last decade the progress is reversed, and the rate of loss and apparently of death is much less between 90 and 100 than between 80 and 90, and in the southern States the last decade of the century was healthier and life was more secure than in any previous period after passing the age of 60.

According to Table XLIV the numbers of the blacks reported in 1860, as compared with the whites, suddenly and largely diminishes after passing 70, and suddenly and largely increases after passing 80. Again it increases very largely after passing 90, and another and enormous increase is reported of those over 100. The proportion of blacks is 25 per cent. less than that of the whites in the age between 70 and 80, but twice as great between 90 and 100, and eleven times as great among the centenarians. The latter numbers are given at the expense of the former. This arises from the common proneness of simple and ignorant people to invest age with extraordinary dignity and respect, which increases with the number of years. Hence there is a charm in age for the subjects themselves, and having no record of birth and no reliable history of life to dispute them, they easily glide into their personal antiquity, which their friends readily and fondly accord to them.

The notions of many of the slaves in respect to numbers and periods are vague, and when the very old are questioned as to their age, they often answer, "More than a hundred," or "More than a hundred." The census marshals must take such evidence as is offered them, and the first are recorded as "between 90 and 100," and the second as "over 100." Those who thus swell the ranks in the extreme decades are taken from the two or three earlier decades, and hence the disproportionate smallness of the numbers from 60 to 80.

## MULATTOES.

In this report the term black is used to include not only the pure black, but also the mulattoes, the quadroon, and all the intermixtures of the Caucasian and the African races, whom the social law places in a single class. The mortality report of the Seventh Census distinguished not only the whites and blacks, but the mulattoes, probably including all the grades of intermixture of the pure races. The mixed race, following the strict law of heritage, might be presumed to inherit the qualities of both parents—their powers and their weaknesses, their susceptibilities and their energies—and we might then look for the diseases of both the whites and blacks, or a modification of both parents, in the children. This is not found in respect to all, but it is noticeable that a considerable part of the diseases present themselves in the mixed race with a proportionate frequency intermediate between that of the father and that of the mother.

The census of 1850 presents the diseases and mortality of the whites, mulattoes, or mixed race, and blacks separately. From these statements the following table has been deduced and calculated, which shows the proportionate numbers which each disease destroyed in each class:

TABLE XLVII.—*Showing the deaths from each cause in 10,000 from all causes among whites, mulattoes, and blacks in the United States, in the year ending May 31, 1850.*

Causes.	Whites.	Mulattoes.	Blacks.	Causes.	Whites.	Mulattoes.	Blacks.
All causes .....				Diarrhoea .....	230	269	207
Zymotic .....	4,836	4,280	4,111	Dropsy .....	371	474	556
Disease—uncertain seat .....	727	803	913	Dysentery .....	834	283	238
Brain and nerves .....	878	856	703	Fever, typhoid .....	458	455	581
Respiratory organs .....	1,983	1,816	1,857	Fever, all others .....	697	817	808
Circulatory organs .....	96	85	57	Gout .....	1.9	2	.7
Digestive organs .....	481	792	855	Whooping-cough .....	152	274	380
Urinary organs .....	42	12	24	Hydrocephalus .....	66	46	23
Cutaneous organs .....	19	9	3	Measles .....	107	100	101
Old age .....	307	315	410	Palsy .....	106	46	63
External causes .....	390	731	834	Pneumonia .....	389	440	679
				Scarlatina .....	339	205	139
All digestive .....	2,908	2,684	2,423	Scrofula .....	51	110	144
All respiratory .....	2,524	2,437	2,652	Small-pox .....	90	90	47
Apoplexy .....	69	85	71	Teething .....	71	163	165
Asthma .....	14	26	26	Tetanus .....	11.9	75	90
Bronchitis .....	96	188	242				
Cephalitis .....	244	234	150	Accident .....	172	217	287
Child-birth .....	107	144	130	Burn .....	38	146	176
Cholera .....	1,362	1,338	1,123	Scalds .....	13	12	47
Consumption .....	1,299	974	674	Drowned .....	78	161	107
Convulsions .....	217	252	214	Suffocation .....	15	100	171
Croup .....	380	335	402	Intemperance .....	21	26	12

It is observable that all the great classes of causes of death as such, except diseases of the urinary organs, held this intermediate rank, destroying a proportion among the mulattoes larger than among one, and smaller than among the other, of the pure races in whom, immediately or remotely, their parentage might be found. This is not a universal rule; there were exceptions among the subordinate divisions, but here are enough to encourage further inquiry when opportunity shall offer.