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# TABULAR HISTORY AND ANALYSIS

OF ALL THE UNDOUBTED CASES OF

# TYPHOID AND TYPHUS FEVER

TREATED AT THE

# BOSTON CITY HOSPITAL,

FROM THE DATE OF ITS OPENING, JUNE 1, 1864, TO JUNE 1, 1869.

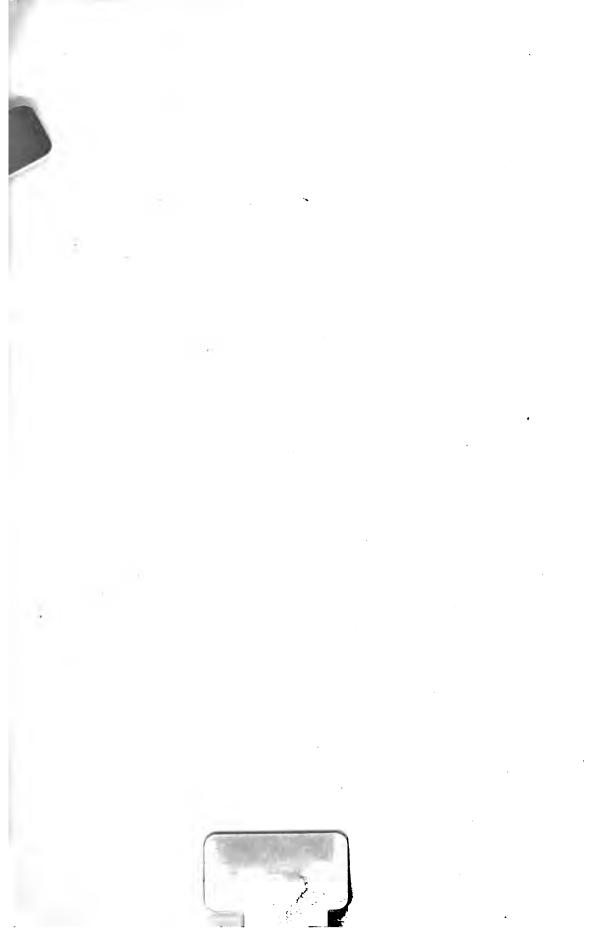
By J. BAXTER UPHAM, A. M., M. D.,

Late Visiting Physician to the flospital.

"BUEVIS ESSE LABORO!"

REPRINTED FROM THE FIRST QUINQUENNIAL VOLUME OF THE HOSPITAL REPORTS.]

BOSTON: 1870.



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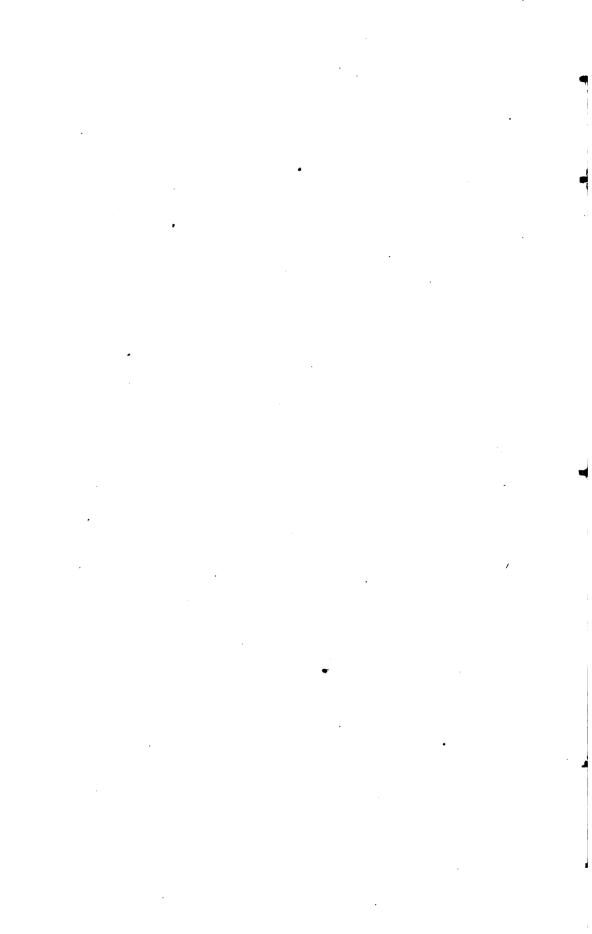
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Essex Institute. Upham, J. Baxter tabular history and analysis of all the date of its Opening, June 1, 1864, to June 1, 1869. undoubted cases of typhoid and typhus fever treated at the Eoston City Hospital, from the

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Bost. 1870.



#### TYPHOID AND TYPHUS FEVER

AS IT OCCURRED IN THE

#### BOSTON CITY HOSPITAL.

BY J. BAXTER UPHAM, M.D.

THE following tables present, in condensed form, the history of all the undoubted cases of typhoid and typhus fever which have been treated in the Hospital, during the first five years from its foundation. They are arranged to exhibit in order the following particulars:—

- 1st. The number of the case, in the chronological order of its admission to the Hospital.
- 2d. The name, sex, nationality and occupation of the patient, and a reference to the volume and page in the hospital record where it may be found.
  - 3d. The patient's age.
  - 4th. The date of admission to Hospital.
- 5th. The period of the disease at which the patient was admitted.
- 6th. The duration of the disease up to the time of convalescence, or death.
  - 7th. The result.
  - 8th. The early and later symptoms.
  - 9th. The treatment.

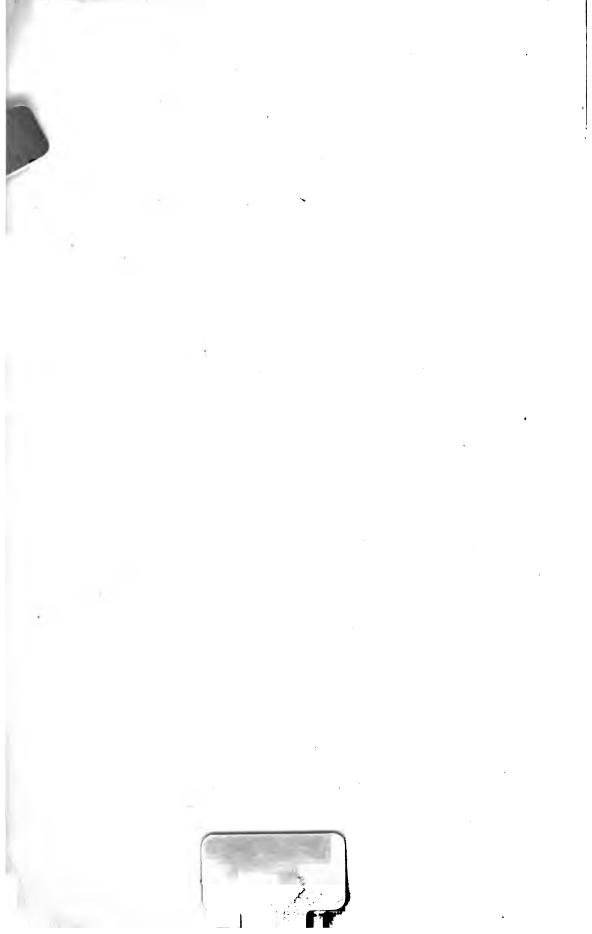
10th. The name of the physician to whose care the patient was committed.

11th. General remarks upon the case.

In the preparation of these tabular sketches, I am greatly indebted to the intelligent and willing assistance of Dr. O. W. Doe, formerly one of the House Officers of the Hospital, whose labor in originally collecting the notes from the clinical records is hereby gratefully acknowledged. I have myself carefully reviewed and revised the tables, inspecting each and every case, and comparing it with the hospital books, so that I can personally vouch for the accuracy of their details as far as they go. I have endeavored to cull from my more extended notes the essential and salient points in each case in so far as the materials at hand would permit, — to give, in briefest phrase, the history of the patient while in Hospital, in such manner as to afford an adequate portraiture of the disease, and at the same time not too much encumber the page.

I have thrown out from the series such cases as from the insufficiency of the original records could not be fully identified as belonging to the fevers of either class. It is to be regretted that in the fatal cases so few post mortem examinations could be obtained,—a defect which materially detracts from the value of the tables as a whole. Nor is the aggregate of cases here presented sufficiently large or the details sufficiently minute to base upon them any positive and infallible conclusions. I can only regard them as waifs thrown upon the shore of the vast mul-

titude of facts and phenomena, now being so carefully and intelligently collected in this and in other countries, upon which we hope to ground at length some rational and definite understanding of these two diseases, or forms of disease, conventionally known as typhoid and typhus fever.



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No. of Case.	Name and Oc- cupation. Vol. and page of		When admitted.	Days ill before en- trance.	Duration till convalescence or death.	븀	SYMPTOMS.
Ĭ6.	Record.	Age.	무별	ų Ž a	Dura	Result.	Early.
11	Wm. C., American teamster. Vol. 2, page	21	1864. Aug. 22.	21.	38 days.	Well.	Vertigo, general malaise, cough, lauguor, restlessness.
12	M. C., Irish servant girl. Vol. 1, page 169.	24	1865. Jan. 9.	21.	34 days.	Well.	Chills followed by heat and sweating, headache, vertigo, pain in bones, sense of fatigue, loss of appetite and strength, epistaxis, constipation.
13	A. L., Irish servant girl. Vol. 1, page 217.	18	Feb. 18.	21.	43 days.	Well.	Chills, headache, vertigo, sense of exhaustion, anorexia, constipation.
14	M. D., Irish servant girl. Vol. 1, page 227.	20	Feb. 24.	28.	43 days.	Well.	Chills followed by heat, dull headache, pain in back and limbs, vertigo, loss of appetite, constipation.
15	F. D., Irish man servant. Vol. 1, page 193.	Not stated.	May 4.	28.	44 days.	Well.	Headache, cough with ex- pectoration, loss of appetite, muscular pains, general malaise.
16	J. O., American teamster. Vol. 1, page	32	July 31.	14.	36 days.	Well.	Chills, feeling of lassitude, &c.
17	J. C., Irish soldier. Vol. 1, page 273.	24	Aug. 15.	4.	30 days.	Well.	Restlessness, vomiting, pyrexia, loss of appetite, thirst, headache.
18	J. K., Irish laborer. Vol. 2, page 196.	43	May 23.	14.	29 days.	Well.	Lassitude, headache, ano- rexia, delirium.
19	F. K., American boy. Vol. 2, page 200.	11	June 2.	7.	21 days.	Well.	Headache, pain in epigastrium, nausea, cough and expectoration.
20	A. R., Nova Scotian medi- cal student. Vol. 2, page 214.	20	June 19.	Not stated.	23 days in hospital.	Well.	Not stated.

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SYMPTOMS.	Treatment,	Name of	Remarks.
Advanced.		Physician.	
Epistaxis, deafness, glossy and dry tongue, increased respiration, cough, insom- nia, delirium, constipation, sudamina, rose spots on ab- domen.	Fever mixture, warm pediluvia at night, ext. col. comp., milk and broths carefully in- creased, quinine dur- ing convalescence.	Homans.	Previous health fair. Pulse 96 at entrance. Some bron- chial irritation during course of fever.
Flushed face, hurried respiration, heavy white coat on tongue, diarrhœa, restlessness, tympanites, tenderness in right illac region, constipation. Rose spots on chest and abdomen.	ver's powders, simple	Borland.	Previous health generally good. Bowels constipated throughout the case. Highest pulse 124, at entrance.
Flushed face, hot but moist skin, furred tongue, tym- panites, tenderness of ab- domen. Rose spots on abdomen at entrance, con- stipation.	ver's powders at night. Rochelle powders, enemata, sponge		Previous health good. Pa- tient continued to work un- til a week before entrance, was retained in hospital two months after recovery from fever for hysteria. Highest pulse rate 96.
Headache, flushed face, hot and moist skin, whitish tongue, slight cough, tender- ness of abdomen, tympan- ites, constipation. Rose spots at entrance.	fever mixture, ene- mata. Tr. hyoscya- mus, cit. of iron and	Borland.	Previous health generally good.
Great exhaustion, cough, tenderness in right iliac re- gion, constipation, rose spots on abdomen.	Fever mixture, mild cathartics, sherry wine.	Morland.	Previous health delicate. Mild case; bronchitis pre- dominating.
Slightly coated tongue, wakefulness, sense of exhaustion, loss of appetite, high colored urine, some tenderness and tympanites. Rose spots on abdomen noted Aug. 2d.	Fever mixture, sponge baths, milk and broths, quinine during con- valescence.	Oliver.	Previous health generally good, complicated with incipient phthisis.
spots noted Aug.:28th.	ture, morphia, p.r.n.	Oliver.	Previous health good, with exception of remittent fever contracted in the South. Pa- tient had been in the army four years. Disease super- vened after a debauch. Pulse 108 at entrance.
chest and abdomen at en- trance.	columbo during con-	Blake.	Previous health good. Highest pulse rate 84.
Hot skin, whitish and pasty tongue, tympanites, tender- ness of abdomen, sudamina over abdomen.	Fever mixture, wine whey, milk and broths.	Blake.	Previous health good. Mild case, complicated with slight attack of pneumonia.
Flushed face, heavily loaded tongue, delirium, tympanites, gurgling in right iliac fossa, tenderness of abdomen, constipation, papular eruption over abdomen, thorax, and other parts of the body.	Mild cathartics, fever mixture, Dover's pow- ders, tinct. of hyoscya- mus, Hoffman's ano- dyne, morphia, port wine, milk, and beef tea.	Reynolds.	Patient had overtasked himself, been irregular in hours for food and sleep; delirious at entrance, and for 11 days afterwards. No true rose spots could be discovered, but a papular eruption scattered over the whole body which the patient said he always had in health.

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No. of Case.	Name and Oc- cupation. Vol.		When admitted.	Days ill before en- trance.	Duration till convales- cence or death.	뵨	SYMPTOMS.
No. 0	and page of Record.	Age.	Mag 4	Q of t	Dur till co ce or d	Result.	Early.
21	A. F. L., Swede, black- smith. Vol. 2, page 262.	25	1865. Aug. 8.	49	68 days.	Well.	Headache, pyrexia, pain at epigastrium, sense of ex- haustion, loss of appetite and sleep, some tendency to diarrhœa, general malaise.
22	Z. O., Amercan, widow. Vol. 3, page	28	Apr. 11.	Not stated.	5 days in Hospital.	Dead.	Not stated.
23	E. H., American laborer. Vol. 3, page	25	Sept. 7.	14	34 days.	Well.	Loss of appetite, headache, vertigo, nausea, anorexia, chills.
24	I. G., Irish servant girl. Vol. 3, page 216.	26	Sep. 16.	7	21 days.	Well.	Chills, sense of languor and weakness, pain in back and limbs, general malaise.
25	B. H., Irish housekeeper. Vol. 3, page 226.	24	Sept.23.	7	14 days.	Well.	Loss of appetite, epistaxis, headache, vertigo, pain in limbs and back.
26	W. F., Irish boy. Vol. 3, page 244.	15	Oct. 6.	Not stated.	32 days in Hospital.	Well.	Not stated.
27	P. L., New Brunswick carpenter. Vol. 5, page 13.	35	Oct. 28.	10	33 days.	Well.	Headache, pain in back ringing in the ears, loss of appetite, malaise, diarrhœa.
28	T. B., American seaman. Vol. 5, page	30	Nov. 15.	12	20 days.	Well.	Chills, anorexia, lassitude.
29	S. M., female. Occupation not stated. Vol. 5, page 53.	23	Nov. 20.	Not stated.	5 days in Hospital.	Dead.	Not stated.
30	J. J. Swede machinist. Vol. 5, page 56.	26	Nov. 20.	8	24 days.	Well.	Headache, vertigo, las- situde.
81	J. F., Irish carpenter. Vol. 5, page 71.	20	Nov. 27.	9	40 days.	Well.	Chills, followed by heat, headache, cough with rusty expectoration, diarrhea.

Advanced.	Treatment.	Name of Physician.	Remarks.
Auvanceut			
tion alternating with diar- rhea, delirium.	Fever mixture, sim- ple enemata, Dover's powders, mild cathar- tics, whiskey.		Previous health good. Pulse at entrance 120.
Marked tenderness of ab- domen, tympanites, invol- untary dejections, delirium, subsultus tendinum. Rose spots on abdomen at en- trance.	Turpentine stupes, sponge bath, Hoff- man's anodyne, car- bonate of ammonia, stimulants.	Morland.	Patient delirious at time of entrance, with a pulse of 118, which increased to 160 before death. Post mortem not obtained.
Epistaxis, accelerated res- piration, slightly coated tongue, tympanites, gur- gling in right iliac, mild delirium, rose spots on ab- domen noted Sept. 8th.	tract of hyoscyamus and camphor, whis- key 3 ss every three	Oliver.	Previous health poor. Hy- gienic surroundings of the patient at home bad. High- est pulse rate 96.
Hot skin, moist, moderately coated tongue, slight tremors about the mouth, wakefulness, restlessness, tenderness in both iliac regions, regular bowels.	phor, sponge bath at	Oliver.	Previous health good — a mild case.
Nausea, vomiting, sleepless- ness, persistent headache, slightly coated tongue, pain and tenderness in abdomen.	Fever mixture, sponge bath with hyoscya- mus and camphor aa grs. ij at night.	Oliver.	Previous health good. Very mild case.
Flushed face, deafness, dry skin, slight cough, moder- ately coated tongue, diar- rhoa, tenderness in right iliac, rose spots on abdo- men at entrance.	and broths.	Oliver,	Pulse 96 at entrance. Patient confused and unable to give intelligible answers to questions.
Hot and moist skin, much thirst, dry cough, restless- ness, tendency to diarrhea, tenderness in right iliac, scanty eruption of rose spots.	Castor oil, fever mix- ture, flaxseed tea, milk diet.	Oliver.	Previous health generally good. Pulse 96 at entrance. Disease supervened after sleeping in a cold room.
Dry cough, light, brownish coat on tongue, loss of ap- petite and strength, diapho- resis, constipation.	bath, ext. hyoscya-	Oliver.	Pulse 100 at entrance. Very mild case.
Dry and brown tongue, sordes on teeth, muscular twitching of face, tender- ness over abdomen, dilated pupils, delirium, subsultus tendinum.	Brandy, beef tea, morphia p. r. n.	Oliver,	Patient was delirious at time of entrance, with pulse of 144; pulse 152 day before death.
Persistent headache, hot and moist skin, great thirst, slight cough, brownish coat on tongue, insomnia, scanty exhibition of rose spots noted Nov. 21st.	Ext. of hyoseyamus and camphor aa grs ij at night; milk and broths, tinct. cinch. ferri.	Oliver and Borland.	Previous health good. Pulse 80 at entrance.
Flushed face, brownish dry coat on tongue, thirst, mild delirium, sordes on teeth and lips, diarrhea, tender- ness and tympanites, abun- dant eruption of rose spots on chest and abdomen no- ted Dec. 2d, sudamina.	night, wine whey, milk and beef tea, mild astringents, fo-	and Borland.	Previous health generally good. Pulse 100. Respira- tion 36 at entrance. High- est temperature 103-5; con- valescence greatly pro- longed by complication with pneumonia, involving lower half of both backs.

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No. of case.	Name and Oc- cupation. Vol. and page of record.	Age.	When dmitted.	Days III before en- trance.	Duration till convales- cence or death.	Besult.	SYMPTOMS.  Early.
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82	D. N., American errand boy. Vol. 6, page	16	1865. Dec. 25.	11	100 days.	Dead.	Chills followed by heat general muscular pains, malaise, tinnitus aurium slight delirium.
83	J. B., American teamster. Vol. 6, page	23	Sept.20.	21	39 days.	Dead.	Headache, insomnia, "pain in bones," epistaxis, anor- exia, lassitude.
34	H. B., American seam- stress. Vol. 6, page 58.	21	Oct. 14.	10	55 days.	Well.	Chills, epistaxis, headache, tinnitus aurium, anorexis, nausea.
85	P. D., Irish shoemaker. Vol. 6, page 74.	16	Oct. 24.	7	24 days.	Well.	Chills, fugitive pains, lassitude, headache, anorexia, epistaxis, vomiting, diarrhea, pain in bowels, back and feet, insomnia with delirium.
86	M. C., Irish servant girl. Vol. 6, page	21	Nov. 9.	13	59 days.	Well.	Headache, epistaxis, slight cough, pain in limbs, ano- rexia, malaise, abdominal disturbance.
87	C. C., Irish hostler. Vol. 6, page 202.	21	Dec. 1.	7	28 days.	Well.	Headache, malaise, cough, diarrhœa, pain in back and limbs, vomiting.
<b>\$</b> 8	J. McD., American errand boy. Vol. 6, page 270.	16	Dec. 15	14	48 days.	Well.	Headache, epistaxis, deaf- ness, tinnitus aurium, pain at epigastrium, malaise.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.	
Flushed face, anxious look, dry and yellow coat on tongue, sordes on teeth, accelerated and compressible pulse, restlessness, tympanites, tenderness over abdomen and chest on the 26th, delirium, sudamina over abdomen, large bedsores, tendency to sloughing wherever there was pressure.	iron and cod liver oil substituted, whiskey,	Borland.	Previous health poor. Pulse at entrance 120. When disease terminated legs were greatly cedematous, whole body covered with hed sores, left hip dislocated, and patient extremely emaciated. Scrofulous diathesis. Death from exhaustion. Post mortem not permitted.	
Dry and fissured tongue, sordes, hot skin, diarrheas, insomnia, wild delirium, subsultus, rose spots on abdomen at entrance, involuntary and bloody dejections.	Fever mixture, Do- ver's powders, enema of starch and opium, milk, beef tea.	Reynolds.	Previous health good. Pulse at entrance 96. No abdom- inal symptoms other than diarrhea, gradual progres- sion of disease. Post mor- tem not obtained.	
Tinitus aurium, warm and moist skin, parched tongue, slight sordes, restlessness, diarrhæa alternating with constipation, some cough with moist râles, nervous agitation, slight pain and tenderness of abdomen.	ver's powder at night, simple enemata, ape- rients. cod liver oil.	Reynolds.	Previous health good. Pulse remained about 84 through- out case. Complicated with hysteria.	
Hot and moist skin, moderately coated tongue, cough and expectoration, dry râles throughout chest, disturbed sleep, delirium, some diarrhea and tenderness over lower part of abdomen.	muicents, beer tea, milk diet.	Reynolds.	Previous health good. Pulse 108 at entrance. Highest respiration 48. Complicated with bronchitis. Patient resided in a dry and healthy locality.	
Flushed face, tongue coated in centre, dry skin, cough, sonorous râles, tendency to diarrhœa, abdomen full and resonant, occasional pain in iliac regions, delirium, ner- vous agitation.	phine p. r. n., demul- cents, opiate enemata, whiskey, brandy, qui-	Reynolds and Upham.	Previous health generally good. Pulse at entrance 104. Complicated with bronchitis and suppuration of parotid and cervical glands, which greatly retarded convalescence.	
Flushed face, apathetic look, headache, pain in back, sense of exhaustion, dry and cracked tongue, hot and dry skin with occasional diaphoresis, slight cough, gurgling in illac fossae, disturbed sleep, tympanites, pain in abdomen, rose spots on abdomen noted on 10th, constipation.	muo.	Reynolds and Upham.	Previous health good. Place of residence dry and healthy. Pulse 120 at entrance; rheumatism in subacute form developed itself three weeks after entrance.	
Epistaxis, apathetic look, exhaustion, hot and dry skin, loaded tongue, slight cough, dry râles, restlessness, delirium at night, some nervous agitation and subsultus, tympanites, gurgling in right iliac, rose spots noted at entrance, sudamina, constipation.	tine stupes, ice to head, milk diet, chicken broth.	Upham.	Previous health good. Pulse 104 at entrance. Highest temperature 105.	

of Case.	Name and Oc- cupation. Vol-		When dmitted.	Days ill before en- trance.	Duration till convales- cence or death.	ij.	SYMPTOMS.
No. 0	and page of Record.	Age.	W ube	V S E	Du de la company	Result.	Early.
89	A. M., Nova Scotia blacksmith. Vol. 8, page 22.	19	Dec. 28.	5	26 days.	Well.	Chills followed by heat, vomiting, stiffness and soreness of muscles.
40	W. K., American errand boy. Vol. 7, page 22.	12	1866. Apr. 5.	. 12	22 days.	Well.	General malaise, slight cough, headache, abdomi- nal pains, sleeplessness, constipation.
41	D. R., Irish laborer. Vol. 7, page 182.	25	Apr. 14.	8	30 days.	Dead.	Chills, followed by fever, cough, diarrhea, insomnia.
42	C. B., Nova Scotia female nurse. Vol. 7, page 192.	25	Apr. 23.	42	56 days.	Well.	Not stated.
43	F. B., German sea- man. Vol. 8, page 64.	20	1866. Jan. 9.	2	31 days.	Well.	Chills, followed by heat, headache, pain in bowels, epistaxis, constipation.
44	—. C., female. Occupation not stated, Vol. 9, page 14.	Not stated.	May 24.	21	24 days.	Dead.	Not stated.
45	A. B., child. Vol. 9, page 18.	Not stated.	May 25.	14	20 days.	Well.	Not stated.
46	Q. R., American shop girl. Vol. 9, page	17	May 26.	14	22 days.	Well.	Headache, pain in back, general malaise, vomiting constipation.
47	S. C., Scottish tailor. Vol. 9, page 97.	17	July 2.	8	18 days.	Well.	General malaise, chills followed by heat, headache, anorexia, diarrhœa.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Stupid and apathetic look, headache, tongue heavily loaded with a creamy coat, soreness in muscles of neck	Fever mixture, Dover's powder, mild cathartics, foot bath, milk diet.	Dr. Upham.	Previous health good. Attacked after exposure.
Dry and brown tongue, tendency to delirium, intermittent pulse, slight gurgling in right illac, constipation, rose spots on chest and abdomen noticed at entrance.	powder, flaxseed tea, sherry wine, brandy, broths, quinine dur-	Morland.	Previous health good. Pulse 92 at entrance; in three days it fell to 68, and was intermitting; but became regular under the use of stimulants.
Cough, with frothy sputa, dry and loaded tongue, in- somnia, diarrhea with oc- casionally bloody dis- charges, slight tenderness below umbilicus, tym- panites, sordes, delirium.	Sweet spirits of nitre, flaxseed tea, opium, astringents, wine, whiskey, carbonate of	Morland.	Previous health good. Pa- tient arrived from Ire- land three weeks previously, reports a little sickness on board ship, fared poorly on the passage. Pulse 170 day before death.*
Hot and dry skin, disturbed sleep, tongue furred in centre, deafness, tinnitus aurium, headache, constipa- tion, pain in abdomen,	ture, Dover's powder, sponge bath, sweet spirits of nitre, wine	Morland.	Previous health feeble. Illness supervened after watching five consecutive nights with a typhoid fever patient.
Apathetic face, dry and hot skin, slight cough, hurried respiration, tongue loaded in centre, disturbed sleep, tympanites, pain in right liac, gurgling, diarrhea and constipation alternately, rose spots noted Jan. 14.		Upham.	Previous health generally good. Patient was fully convalescent February 21, when he went out and indulged in liquor, and came back with relapse of fever.
Confused intellect, hot skin, dry and brown tongue, teeth loaded with sordes, great tenderness over abdomen, rose spots on chest and abdomen at entrance.		Morland.	The patient was nearly in morabund condition at time of entrance, but lingered for three days.  Post mortem not obtained.
Hot and dry skin, loaded tongue, sordes on teeth, restlessness, stupor, con- stipation, rose spots on chest at entrance.	Enemata, sweet spirits of nitre, sponge bath,	Morland.	Patient was in a state of stupor at time of entrance, pulse 124. A rapid improvement followed.
Headache, cough, whitish coat on tongue, tenderness in right iliac, rose spots on chest noted May 28, constipation.	Fever mixture, sherry wine, milk, beef tea, quinine.	Morland.	Previous health poor. A mild case.
Slightly coated tongue, some diarrhæa and tender- ness, rose spots on abdo- men at entrance.	Sponge baths, fever mixture, flaxseed tea, sherry wine, 3 <sup>viii</sup> . daily, quinine.	Morland.	Previous health good. Disease commenced two days after bathing at the public haths.

<sup>\*</sup> AUTOPSY. Moderate rigor; fibrinous coagulum in left auricle and ventricle of heart; posterior portions of both lungs somewhat frisble, but crepitant; liver and kidneys normal; apleen enlarged; mesenteric glands prominent, but little enlarged; Peyers patches in lower portion of lieum, raised and ulcerated, sometimes extending to the muscular coat. A few small circular ulcers in upper portion of large intestine.

No. of Case.	Name and Oc- cupation. Vol. and page of record.	Age.	When admitted.	Days ill before en- trance.	Duration till conva- lescence or death.	Result.	SYMPTOMS.  Early.
48	T. H., Irish laborer. Vol. 9, page 231.	29	Sept. 4.	3	23 days.	Dead.	Chills followed by fever with perspiration, head-ache, general soreness of muscles, tenderness in iliac fossae.
49	A. W., American servant girl. Vol. 9, page 242.	19	Sept. 7.	14	27 days.	Well.	Chills followed by heat, headache, diarrhœa.
50	M. M., Irish laborer. Vol. 9, page 248.	31	Sep. 12.	10	30 days.	Well.	Chill, pain at epigastrium, vomiting, headache.
51	S. B., Nova Scotian ser- vant girl. Vol. 9, page 262.	24	Sep. 18.	14	41 days.	Well.	Chills followed by fever, malaise, headache,diarrhœa.
52	M. H., New Brunswick harness maker. Vol. 9, page 279.	21	Sep. 24.	9	36 days.	Well.	Chill, headache, nausea, epistaxis, tendency to diarrhœa.
53	R. R., American shop girl. Vol. 10, page 106.	28	Apr. 28.	17	34 days.	Well.	Pain in back and limbs, feverishness, anorexia, great thirst.
54	T. C., American errand boy. Vol. 10, page 194.	14	May 28.	8	18 days.	Well.	Pain in back and at epigastrium, chills, headache, sense of weakness.
55	C. S., Nova Scotian painter. Vol. 10, page 214.	24	June 4.	21	50 days.	Well.	Chill followed by heat, stiffness in cervical muscles, lassitude, general malaise.
56	M. K., Irish servant girl. Vol. 11, page 1.	17	Sep. 26.	12	28 days.	Well.	Chill, headache, lassitude, diarrhœa, anorexia.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Hot and dryskin, headache, insomnia, constipation, delirium, pain in iliac regions, involuntary dejections.	oil, sponge baths, ene-	Dr. Oliver.	Previous health good. Pulse 64 at entrance. Disease supervened after working in a damp cellar. Highest pulse rate 132. Temperature 105°. Disease steadily increased in severity from day of entrance.
Vertigo, vomiting, loss of appetite, pain at epigastrium, tenderness in left iliac, diarrhœa.	Chalk mixture, lau- danum, boiled milk, tinct. cinchona comp.	Oliver.	Previous health poor. Diarrhoea had existed two weeks before entering hospital.
Flushed face, moist and hot skin, tongue coated in centre, diarrhœa, tympan- ites, tenderness of abdomen, rose spots noted on 16th.	sponge baths, mor- phine, chalk mixture,	Oliver.	Previous health good. Highest pulse rate 92. Temperature 101° 3'.
Faintness, pain in abdomen, diarrhoa, insomnia. Rose spots over abdomen at entrance.	montetions over sh	Oliver.	Previous health generally good. Pulse 100, temperature 104° 5′ at entrance. Highest temperature 105° 5′. Patient was exposed to typhoid fever four weeks before entrance.
Anorexia, slightly coated tongue, hot and moist skin, gurgling over whole abdomen, tenderness in iliac fossae, rose spots at entrance, constipation, followed by diarrhea.	Fever mixture, sponge baths, castor oil, mild astringents and opi- ates p. r. n.	Oliver	Previous health feeble. Pulse 88, temperature 103° 5' at entrance.
Dull and apathetic look, loaded tongue, confusion of intellect, disturbed sleep, hot and dry skin, great thirst, constipation, abdomen full, tender, rose spots on chest and abdomen noted 29th.	Castor oil, fever mix- ture, wine whey.	Blake.	Previous health fair. Pulse at entrance 124.
Hot and dry skin, moderate thirst, moist and moderate- ly loaded tongue, slight ep- istaxis, rose spots on abdo- men at entrance, constipa- tion.	Fever mixture, castor oil, milk, beef tea.	Blake.	Previous health good. Pulse 100, temperature 104° at en- trance, pulse gradually fell to 56.
Warm and moist skin, moist, slighly coated tongue, moderate thirst. sense of considerable exhaustion, bowels slightly constipated.	Mild cathartics, fever mixture, quinine.	Blake.	Previous health generally good. Pulse 84 at entrance. Patient was attacked after exposure to severe storm.
Moist, slightly coated tongue, vertigo, restlessness at night, tenderness in right iliac, constipation, gurgling.	Fever mixture, cam- phor and hyoscya- mus,castor oil, sponge bath at night, milk diet.	Oliver.	Previous health good. Pulse 88 and temperature 101° 5′ at entrance. Highest pulse 1ate 116. Highest temperature 106°. Patient was doing well till Oct. 19, when a relapse took place from sitting in a draught.

No. of Case.	Name and Oc- cupation. Vol. and page of record.	Age.	·When admitted.	Days ill be- fore entrance.	Duration till convalescence or death.	Result.	SYMPTOMS.  Early.
57	A. R., American tailoress. Vol. 11, page 33.	21	Oct. 12.	7	82 days.	. Well.	Headache, feverishness, vomiting, pain in abdomen, diarrhœa.
58	A. S., German cabinet maker. Vol. 11, page 37.	28	Oct. 13.	12	21 days.	Well.	Headache, vertigo, pyrexia, constipation.
59	N. C., English servant girl. Vol. 11, page 66.	23	Oct. 27.	6	34 days.	Well.	Chills, headache, vertigo, constipation.
60	A. T., American servant girl. Vol. 11, page 72.	14	Oct. 80.	7	38 days.	Well.	Violent headache, pains throughout body, feverish- ness, anorexia, vertigo.
61	W. N., Irish shoemaker. Vol. 11, page 75.	40	Nov. 2.	12	34 days.	Well.	General malaise, chills, headache, vomiting, diar- rhœa.
62	M.R., English servant girl. Vol. 11, page 110.	19	Nov. 12.	28	40 days.	Well.	Nausea, vomiting, slight pain in abdomen, diarrhœs.
63	C.O., German tailor. Vol. 11, page 125.	1 22	Nov. 13.	9	28 days.	Dead.	Headache, chills, slight cough, vertigo, vomiting, diarrhœa.
64	F. H., Irish laborer. Vol. 11, page 138.	33	Nov. 21.	16	40 days.	Well.	Chills, headache, pain in back and limbs, vomiting, diarrhœa.
65	J. F., Irish laborer. Vol. 11, page 76.	26	Aug. 2.	14	22 days.	Well.	Pain in bones and back, headache, epistaxis, slight cough, anorexia, sense of weakness, general malaise.
66	M. W. Irish servant girl. Vol. 11, page 86.	20	Aug. 4.	8	15 days.	Well.	Cramps in abdominal mus- cles, pain in back, chills, headache, nausea and vom- iting, anorexia.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Headache, cough, epistaxis, tenderness and gurgling in iliac fossae, rose spots on abdomen noted Oct. 16th.	Sponge baths, beef	Oliver.	Patient was transferred from surgical ward where she had been under treat- ment for fracture. Temper- ature ranged about 100°. Pulse about 96; complicated with incipient phthisis.
Dry and slightly coated tongue, tenderness of abdo- men, constipation, rose spots on abdomen noted Oct. 14.		Oliver.	Previous health good. Pulse 80, temperature 103° at en- trance. Highest tempera- ture 104°. A mild case.
Slight coat on tongue, dis- turbed sleep, cough with thick yellow sputa, soreness of chest, constipation. Rose spots noted Nov. 1st.	tures, tr. of columbo, iron during convalescence.	Oliver.	Previous health feeble. Disease supervened on exposure while insufficiently clad. Case complicated with incipient phthisis.
Hot and moist skin, slightly coated tongue, disturbed sleep, headache, vertigo, cough, constipation, tender ness of abdomen, gurgling in right iliac fossa, rose spots on abdomen noted Nov. 4th.	Castor oil, fever mix- ture, camphor, and hyoscyamus, sponge baths, Dover's pow- ders, laxatives, cod liv- er oil, opiate fomenta- tions to inflamed gland	Oliver and Borland.	Previous health poor. Pulse 96, temperature 104° 5' at entrance. Phthiss was hereditary in the family. Patient had a suppurating giand in axilla which greatly prolonged convalescence.
Tinnitus aurium, anorexia, vomiting, cough, vertigo, tenderness and gurgling in right iliac, diarrhœa, rose spots noted Nov. 5th.	Fever mixture, demul- cents, chalk mixture, morphia p. r. n. milk	Oliver and Borland.	Previous health good. Pulse 88 at entrance. Tempera- ture ranged about 99°. Pa- tient remained in hospital until April 10th, for the treatment of complications consisting of pleuro-pneu- monia with pericarditis.
Chills, headsche, vertigo, vomiting, dry cough, tenderness in right iliac, constipation.	Castor oil, sponge	Oliver.	Previous health generally good. Patient died in Feb- ruary following, with Addi- son's disease.
Headache, dizziness, sense of weakness, white coat on tongue, tenderness and gurgling in right iliac fossa, one or two rose spots noted on abdomen at entrance.	flax-seed tea, stimu- lants.	Oliver.	Previous health poor. Patient was doing well until pneumonia, affecting lower portions of both backs, supervened.
General muscular pains, disturbed sleep, mild delir- ium, cough, occasional vom- iting, gurgling in right illac, sudamina, rose spots on ab- domen noted at entrance.	and hyoscyamus, milk diet.	Oliver and Borland.	Previous health good. Pulse 80. Temperature 104° at entrance.
Urgent thirst, restlessness, apathetic look, hot and dry skin, later diaphoresis, moderately coated tongue dry and brown in centre, gurgling in right iliac fossa, constipation, rose spots on abdomen at entrance.	mata, wine whey, beef tea, whiskey.	Reynolds.	Previous health good. Pulse 72 at entrance, at no time higher than 96.
Offensive breath, moist and lightly coated tongue, head-ache, vertigo, fulness and tenderness of abdomen, pain in left iliac region, urgent thirst, constipation.	der, milk and beef tea,		Previous health good. Pulse 80 at entrance. Highest pulse rate 116.

case.	Name and Oc- cupation. Vol.		en ted.	Il be- trance.	ation till alescence death.	14	SYMPTOMS.
No. of case.	and page of record.	Age.	When admitted.	Days ill be- fore entrance	Duration till convalescence or death.	Result.	Early.
67	M. F., Irish servant girl. Vol. 12, page 130.	21	Aug. 18.	4	16 days.	Well.	Chills, headache, anorexia, vomiting, pain in back and at epigastrium, constipation.
68	M. K., Irish laborer. Vol. 12, page 168.	35	Aug.29.	14	37 days.	Well.	Chills, followed by heat, epistaxis, anorexia, thirst, insomnia.
69	J. H., Irish blacksmith. Vol. 12, page 190.	18	Sept. 3.	4	12 days.	Well.	Chills, followed by heat, headache, soreness in joints, anorexia, urgent thirst, dia- phoresis, constipation.
70	C. G., American servant girl. Vol. 12, page 198.	28	Sept. 5.	14	30 days.	Well.	Loss of appetite, chills and heat alternately, slight vomiting, thirst, headache, soreness over chest, slight cough.
71	O. K., Ger- man shop boy. Vol. 14, page 16.	19	Oct. 16.	11	20 days.	Dead.	Languor, malaise, feverishness, headache, pain in back and limbs, anorexia, cough.
72	M. W., Irish laborer. Vol. 14, page 48.	41	Nov. 2.	14	34 days.	Well.	Chills, rigors, malaise, weak- ness, prostration, frequent epistaxis, diarrhœa.
73	K. C., Irish servant girl Vol. 14, page 82.		Nov. 13.	14	34 days.	Well.	Headache, malaise, nausea, vomiting, muscular pains, weakness, epistaxis, diar- rhœa.

SYMPTOMS.	Treatment.	Name of	Remarks.
Advanced.		Physician.	
Flushed face, vertigo, constipation and diarrheas alternately, moist thin coat on tongue, thirst, disturbed sleep, pain at epigastrium, vemiting, "two or three doubtful-looking rose spots on abdomen," noted Aug. 19.	ver's powder, ene- mata, opium supposi- tories, milk, beef tea,		Previous health good. Puls 84 at entrance, at no tim higher. Disease supervened on exposure to cold and wet
Flushed face, dull look, warm and moist skin, dry yellowish brown coat on tongue, sordge on teeth, great thirst, diaphoresis, cough, tympanites, tenderness in both iliac fossae, constipation, rose spots on chest and abdomen at entrance.	wer's powder, ene- mata, whiskey, milk, beef tea, iron during	Reynolds.	Previous health generally good. Pulse 84 at entrance Highest pulse rate 96. Tem perature 105. Attacked after exposure to severe storm.
	Dover's powder, fever mixture, enemata, mor- phia, p. r. n. whiskey.	Reynolds.	Previous health good. Pulse at no time above 96,
ly coated tongue, offensive breath, restlessness, vertigo, exhaustion, increased heart's impulse incoming tympon.	Dover's powder, lemonade, fever mix- ture, morphia, bro- mide of potash, tinct. verat. vir., carb. of iron, and manganese.	Reynolds.	Previous health generally good. Pulse 104, tempera- ture, 10°55' at entrance. Pulse at times varied from 88 to 116 in course of a few minutes.
on tongue, urgent thirst, diarrhea, low-muttering delirium, tympanites, gur- gling in illae fossae, rose spots on abdomen noted on	Fever mixtare, Dover's powder, opiate enemata, opium suppositories, epts. turpentine, ellx. opil. aa gtt. x every three hours, brandy, bromide of potassium, milk and beef tea.	Reynolds.	Previous health good. Pulse 130, and respiration 28 at entrance. Highest tempera- ture 105°. Bloody discharge commenced two days after entrance, and continued un- til death.*
Sense of weakness and ex- haustion, moist and warm surface, dry, brown hard tongue, husky voice, urgent thirst, diarrhoza, restless- ness. On 23d is noted "an eruption of a papular char-	Dover's powder, sweet spirits of nitre, astringents, tinct. ferri chlor., bromid. potass, chyosey. and camph., brandy and beef tea.	Reynolds.	Previous health good. Pulse at no time above 96. Highest temperature 104° 5'. Attack- ed after exposure to cold and wet.
Sense of great weakness, vertigo, disturbed sleep, muscular pains, tinnitus, aurium, deafness, moderately furred tongue, slight cough, epigastric pain and tenderness, constipation.	nixture, quinine and	Reynolds and Upham.	Previous health good. Disease supervened on ex- posure to wet. Pulse 80, temperature 99 at entrance, with but little subsequent variation. The case was complicated with gastric fritiation, which prolonged the convalescence.

<sup>\*</sup>Autopsy.—Moderate rigor; hypostatic lividity of depending parts; much fibrinous coagulum in right side of heart; lungs, in depending portions of lower lobes, friable, not crepitant, splenified; liver large, friable; weight 15 oz. Kidneys healthy. Extensive ulceration of lower portion of ileum, involving three or four of Peyer's patches next the valves, the ulcers extending frequently through the mucous membrane. Large intestine somewhat congested; solitary glands distinct.

No. of case.	Name and Oc- cupation. Vol.	1	When admitted.	III be-	Duration till convales- cence or death.	1	вумртомв.
No. 0	and page of record.	Age.	A p	Days III be- fore entrance.	till co cen de	Result.	Early.
74	J. D., Irish laborer. Vol. 14, page 94.	21	Nov. 19.	7	24 days.	Well.	Chills and heat, headache, muscular pains, general malaise, epistaxis, vertigo, anorexia.
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75	G. E., Nova Scotian black- smith. Vol. 13, page 84.	25	1867. Jan. 29.	11	31 days.	Well.	Chill, headache, epistaxis, muscular pains, cough, pain in abdomen, diarrhœa.
76	M. L., New Brunswick servant girl. Vol. 15, page 26.	21	Apl. 10.	4	61 days.	Well.	Headache, chills, muscular pains, nausea, constipation.
77	D. M., Irish laborer. Vol. 15, page 30.	22	Apl. 11.	3	47 days.	Well.	Headache, chills, great weakness, urgent thirst, loss of appetite, constipation.
78	F. C., American servant girl. Vol. 15, page 36.	18	Apl. 12.	6	48 days.	Well.	Chills, headache, nausea and vomiting, epistaxis, diarrhœa.
79	K. P., Irish servant girl. Vol. 15, page 54.	 25	Apl. 16.	16	33 days.	Dead.	Loss of appetite, nauses, vomiting, general malaise.
80	M. L., New Brunswick servant girl. Vol. 15, page 68.	21	Apl. 17.	10	48 days.	Well.	Chills, heat, diaphoresis, vomiting, muscular pains, malaise.

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Advanced.	Treatment.	Name of Physician.	Remarks.	
Dull look, chills, vertigo, anorexia, dry and hot skin, subsequent diaphoresis, urgent thirst, restlessness, thick yellowish white coat on tongue, some fullness and tenderness of abdomen, gurgling in right iliac fossa.	mixture, beef tea, milk diet.	Reynolds and Upham.	Previous health good. Pulse 76, temperature 104 at en- trance, highest pulse-rate 96, highest temperature 105.	
Headache, vertigo, epistaxis, cough and frothy expectoration, afterwards rusty; urgent thirst, anorexia, exhaustion, deafness, dry and hot skin, moist and moderate coat on tongue, gurgling, tenderness of abdomen, constipation alternating with diarrhea, sudamina, rose spots on abdomen and lower part of chest at entrance.	der, Honman's and- dyne, enemata, astrin- gents, milk diet, wine, whiskey and milk punch.	Borland.	Previous health good. Pulse 104, temperature 103° 5′, respiration 36 at entrance, case complicated with pneu- monia, involving lower half of both backs,first noticed on Feb. 2d.	
Violent headache, nausea,	Dover's powder, fever mixture, leeches to temples, ice, sponge baths, wine and qui- nine.	Morland.	Previous health good. Patient had taken care of a sister "sick with typhoid fever," three weeks before entrance. Pulse 100 at entrance, with but little variation, subsequent complication with hysteria and functional disease of the heart, which delayed convelsemence.	
Flushed face, warm and moist skin, moist, yellowish white coat on tongue, thirst, epistaxis, profuse diapho- resis, rose spots on abdo- men, noted Sept. 16th.	ianongo hetha arom i	Morland.	Previous health fair. Pulse 92 at entrance. A child in same house with this patient was "ill with fever." Case complicated with pleurisy.	
Hot and dry skin, great thirst, epistaxis, deafness, yellowish, pasty coat on tongue, tympanites, tender- ness of adomen, diarrhea, delirium, involuntary de- jections, rose spots on abdo- men, noted April 16th.	fomentations to abdo- men, sherry, brandy, carbonate of ammonia		Previous health good. Pulse 120 at entrance.	
Dull look, epistaxis, cough, râles. tympanites, gurgling in, right iliac fossa, delirium subsultus, involuntary dejections, rose spots at entrance.	stupes, sherry, brandy, carbonate of ammo-	Morland.	Previous health good. Pulse 96 at entrance, gradually rising to 132. Highest res- piration 44. Complicated with bronchitis.*	
Heavy look, moist white	Castor oil, fever mix- ture, ice, infusion of cinchona, wine, milk, beef tea.	Morland.	Previous health feeble. Disease supervened after nursing a sister sick with typhoid fever.	

<sup>\*</sup>Autorst.— Moderate rigor, lividity, mucous membrane of trachae and bronchi reddened. Ulcerations in lower six feet of ileum, penetrating in some cases to the peritoneal coat. Peyer's patches well defined, large intestines ulcerated, spleen large and soft.

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No. of Case.	Name and Oc- cupation. Vol.	. 1	When Admitted.	Days ill before en- trance.	Duration till convaler- cence or death.	#	SYMPTOMS.
No.	and page of record.	Age.	A dr.	Q A	고 를 을 수	Besult.	Early.
81	C. P., English salesman. Vol. 15, page 114.		May 10.	Not stated.	12 days in Hospital.	Dead.	Not stated.
82	J. H., Swede, carriage trim- mer. Vol. 15, page 234.	30	July 9.	24	43 days.	Well.	Headache, epistaxis, ma- laise, sense of weakness.
83	J. T., New Brunswick servant girl. Vol. 15, page 256.	20	July 15.	14	33 days.	Well.	Headache, chills, pain in back, malaise.
84	E. Y., American servant girl. Vol. 16, page	17	Feb. 15.	14	33 days.	Well.	Headache, muscular pains, malaise, pyrexia, sense of weakness.
85	M. S., Irish servant girl. Vol. 16, page 117.	14	Feb. 25.	28	36 days.	Well.	• Headache, vertigo, pain at epigastrium, also in neck and back.
86	J. C., New Brunswick laborer. Vol. 16, page 139.	27	Mar. 1.	28	45 days.	Well.	Chills, pyrexia, loss of appetite, lassitude, cough.
87	M. F., Nova Scotia cook- maid. Vol. 16, page 157.	34	Mar. 4.	10	30 days.	Well.	Pain in back and limbs, headache, general malaise, sense of exhaustion, ano- rexia, chills, followed by heat and nausea.
88	Q. D., American servant girl. Vol. 17, page 14.	16	July 27.	4	39 days.	Well.	Headache, pain in legs, ano- rexia, thirst, vomiting, pain at epigastrium, diarrhœa.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.	
Hebetude, epistaxis, dry and caked tongue, violent delirium, diarrhœa, iuvoluntary dejections, diaphoresis, subsultus, jactitation, "8 or 10 doubtful rose spots" at entrance.	stimulating enemata, wine, brandy, carbon- ate of ammonia, milk,	Morland.	Patient was delirious at entrance. Pulse 130.*	
Loss of appetite, great thirst, tongue dry, fissured; hebetude, epistaxis, gurgling in right iliac fossa, tympanites, constipation, rose spots on abdomen at entrance.	wine, beef tea, milk	Morland.	Pulse 108. Patient very lit- tle delirious at entrance.	
Headache, flushed face, warm, moist skin, creamy white coat on tongue, loss of appetite, thirst, vomiting, constipation, tympanites.	Ice, Dover's powder, enemata, infusion of serpentaria, sherry, beef tea, milk diet.	Morland and Oliver.	Previous health good. Mild case.	
Headache, epistaxis, flushed face, hot, dry skin, anorexia, thirst, creamy coat on tongue, sordes on teeth, slight cough with some rusty expectoration, tenderness of abdomen, tympanites, constipation, wandering delirium, rose spots on abdomen noted on the 18th.	ver mixture, ice, cas- tor oil, wine whey,	Upham.	Previous health delicate. Pulse 120. Temperature 105°. Respiration 32 at entrance. Case complicated with pneumonia, involving lower third of right back.	
Headache, pain at epigastrium, sense of great weak- ness, vertigo, pain in back of neck and lumbar region, moist and hot skin, moist and lightly coated tongue, disturbed sleep, tenderness, gurgling in iliac fossæ, con- stipation.	ver mixture, castor oil, brandy, oil of tur- pentine in emulsion, sherry wine instead of brandy, broths, milk-	Upham and Blake.	Previous health good. Pulse 30 at entrance, soon becoming irregular and intermitting. Case complicated with neuralgic troubles and gastric irritation, which greatly retarded convalescence.	
Tongue thickly coated, in- clining to be dry; headache, cough with expectoration, sense of exhaustion, dis- turbed sleep, gurgling in iliac regiou, constipation, rose spots on chest and ab- domen, noted March 5th.	fever mixture, wine-	Upham and Blake.	Previous health poor. Pulse 92 at entrance. Highest temperature 104°. No acute symptoms at any time during disease. This patient had incipient phthisis.	
Epistaxis, vertigo, nausea, vomiting, muscular pains, exhaustion, cough, dry and thickly coated tongue, tendency to stupor, diarrhea alternating with constipation, tenderness in iliac fosse, gurgling, rose spots, March 5th.	Dover's powder, fever mixture, castor oil, demulcents, milk, wine-whey, brandy.	Upham and Blake.	Previous health generally good. Pulse 100. Temperature 101-5° at entrance. Highest pulse-rate 120. Complicated with bronchitis and tonsillitis.	
Deafness, hebetude, moist, dirty brown tongue, cough, delirium, gurgling in right iliac fossa, marked tender- ness, diarrhea, rose spots July 31st.	Dover's powder, de- mulcents, ice, mild astringents, milk, qui- nine, cod liver oil.	Morland and Oliver.	Previous health good. Pulse 116 at entrance. Highest temperature 104-5°. Com- plicated with incipient phthisis.	

<sup>\*</sup>Autopay. — Hypostatic lividity; a little subarachnoid effusion, a drachm of serum in each lateral ventricle, blood fluid in heart, hypostatic congestion of lungs. Peyer's patches large and distinct, with superficial ulcerations, most marked near cascum, traces of ulcerations in large intestines, mesenteric glands reddened, mucous membrane of stomach injected, spleen soft and large.

4	Name and Oc-			e å	4 S F		SYMPTOMS.
No. of Case.	cupation. Vol. and page of Record.	Age.	When admitted.	Days ill before en- tránce.	Duration till convaler cence or death.	Result.	Early.
89	M. H., N.Brunswick, laborer. Vol. 17, page 68.	19	Aug. 8.	6	20 days.	Well.	Headache, epistaxis, vertigo, nausea, chills, diarrhœa.
90	J. W., Irish school-boy. Vol. 17, page 136.	10	Aug. 24.	14	31 days.	Well.	Chills, nausea, loss of appetite and strength, diarrhœa, pain in abdomen.
91	A. J., American servant girl. Vol. 17, page 246.	18	Oct. 14.	13	22 days.	Well.	Chills, headache, restless- ness, anorexia, disturbed sleep, muscular pains.
92	B. C., Irish laborer. Vol. 17, page 250.	28	Oct. 15.	14	27 days.	Well.	Chills, headache, epistaxis, anorexia, muscular pains, constipation.
. 93	J. C., Irish carpenter. Vol. 17, page	23	Oct. 16.	18	28 days.	Well.	Chill followed by heat, anorexia, slight pains in chest, disturbed sleep, thirst, constipation.
94	P. H., Irish laborer. Vol. 17, page 266.	25	Oct. 19.	14	24 days.	Well.	Chill, epistaxis, soreness of muscles, "heaviness," gen- eral malaise, diarrhœa.
95	M. N., Irish servant girl. Vol. 18, page 20.	24	Apr. 24.	8	20 days.	Well.	Loss of appetite, headache, vertigo, malaise, anorexia, muscular pains, pyrexia, urgent thirst.
96	M. G., Nova Scotia servant girl. Vol. 18, page	28	1867. May 11.	6	38 days.	Well.	Chills followed by weakness, heat, epistaxis, headache, slight cough, nausea, pain in back and limbs, diarrhesa.
97	J. W., Nova Scotia carpenter. Vol. 18, page 22.	Not stated.	July 14.	28	44 days.	Well.	Chills followed by heat, headache, cough, pain in back, limbs, and abdomen, vomiting, diarrhea.
98	M. L., Irish servant girl. Vol. 19, page 32.	40	Oot. 29.	21	31 days.	Well.	Chill, headache, anorexia, cough, disturbed sleep.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.	
Moist and slightly coated tongue, warm and moist skin, insomnia, gurgling, sudamina, rose spots on ab- domen Aug. 11.	Hyoscyamus and cam- phor at night, milk, beef tea.	Oliver.	Pulse 80 at entrance; but little subsequent variation. Highest temperature 102°.	
Moist and slightly coated tongue, cough, gurgling in right iliac fossa, sudamina, constipation, rose spots on abdomen at entrance.	Milk, beef tea.	Oliver.	Previous health good. Pulse 130 at entrance; afterwards fell as low as 52.	
Flushed face, dull look, warm and moist skin, dirty white coat on tongue, thirst, hebetude, delirium, constipation, abdomen swollen, tenderness in iliac fossae, rose spots on chest and abdomen noted at entrance.	Castor oil, fever mix- ture, sponge baths, tinct. hyoscyamus, laudanum fomenta- tions to abdomen, milk, beef tea.	Oliver.	Pulse 104 at entrance, highest pulse-rate 128, highest temperature, 103.	
Loss of appetite, muscular pains, bad taste in mouth, fetid breath, dull look, moist, slightly coated tongue, diaphoresis, constipation, gurgling in iliac fossae.	diet.	Oliver.	Previous health generally good. Pulse 100. Patient sat up during most of the time.	
Warm and moist skin, moist and highly coated tongue, epistaxis, headache, pain in chest, constipation, pain and gurgling in iliac fossae, rose spots on chest and abdomen at entrance.	Castor oil, sponge baths, camphor and hyoscyamus, morphia p. r. n. beef tea, milk	Oliver.	Previous health good. Patient transferred to surgical department for treatment of abscesses. Case complicated with erysipelas.	
Moist and cool skin, moist and slightly coated tongue, some thirst, diaphoreis, insomnia, constipation.	mixture, castor oil,	Oliver.	Previous health good. Pulse 84 at entrance, with but little subsequent variation.	
Dull look, hot and dry skin brown, 'thickly coated tongue, headache, disturbed sleep, vomiting, pain at epi- gastrium, constipation, tym- panites, rose spots on abdo- men and thorax.	Fever mixture, Dover's powder, enema- ta, sinapism to epigas- trium, citrate of mag- nesia, wine whey, beef tea, milk diet, quinine.	Blake.	Previous health good. Higherst pulse-rate 102.	
Flushed face, bot and dry skin, dry and brown tongue loss of appetite, thirst, dis- turbed sleep, nervous agita- tion, constipation, tympan- ites, rose spots noted May 18th.	Dover's powder, fever mixture, enema- ta, wine whey, beef tea, milk diet, infu-	Blake.	Previous health delicate. Pulse at entrance, 108; ranged at about 84 after the first week.	
Flushed face, confused in tellect, hot and dry skin slightly coated tongue bronchial râles, thirst, con stipation, tympanites, gur gling, tenderness in ilia fossæ, rose spots noted a entrance.	Enemata, Dover's powder, tinct. ferrichlor, quinine, brandy, wine whey, milk diet.	Blake.	Previous health good. Pulse 96 at entrance.	
Moist and cool skin, dirty white coat on tongue, ano rexia, scanty urine, gur gling in right iliac fossa, con stipation.	Castor oil, milk, beef	Oliver.	Previous health good. A	

Case.	Name and oc-			P pe	n till cence th.	<u> </u>	SYMPTOMS.
No. of case.	cupation. Vol. and page of record.	Age.	When	Days ill be- fore entrance.	Duration till convalescence or death.	Result.	Early.
<b>9</b> 9	E. W., American female nurse. Vol. 20, page 14.	60	Aug. 6	. 12	25 days.	Dead.	Pains in joints and limbs, "chills, followed by fever," headache, slight cough with expectoration, nausea, vomiting.
100	W. O'B., Irish varnisher. Vol. 20, page 160.		1867. Sept. 6.	7	34 days.	Well.	Chills, followed by much heat, diaphoresis, nervous tremors, dull pain in chest, pains in iliac regions, general malaise.
101	M. H., Irish servant girl. Vol. 20, page 186.	22	Sept. 7.	14	36 days.	Dead.	Headache, epistaxis, pain m back and limbs, vomiting, pain and swelling in epi- gastrium, exhaustion.
102	G. B., American hack driver. Vol. 20, page 180.	23	Sept. 9.	• 9 .	19 days.	Dead.	Chills followed by heat, headache, cough, pains throughout body, diarrhea, vomiting.
103	H. S., Ger- man clerk. Vol. 20, page 204.	22	Sept.12.	26	50 days.	Well.	Chills, vertigo, lassitude, slight cough, epistaxis, diarrhœa.
104	S. D., American servant girl. Vol. 20, page 260.	21	Sept.30.	14	48 days.	Dead.	General malaise, subsequently chills followed by heat, pain throughout body, headache, general muscular pains, abdominal distress, constipation.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Flushed face, nausea, vomiting, dry and dirty brown tongue, frequent chills, diaphoresis, difficult micturition, urgent thirst, constipation, insomnia, restlessness, noisy delirium, involuntary dejections, mixed with small coagula of blood.	mata, fever mixture,	Reynolds.	Previous health poor. Pulse 112 at entrance.
Much exhaustion, hurried breathing, slightly coated tongue, afterwards dry and brown, sordes on teeth and lips, restlessness, pain in hypochondriac regions, diaphoresis, cough, constipation, gurgling in left illac region, violent delirium; rose spots on abdomen, noted on the 10th.	Dover's powders, fever mixture, enema- ta, bromide of potash, sherry wine, whiskey, milk diet.	Reynolds.	Previous health poor. Patient had, for three weeks previously, suffered from pain in iliac regions. Pulse 84 at entrance, highest rate 120, highest temperature, 105° 5′ on the 12th day.
Flushed face, hot skin, heb- etude, deafness, epistaxis, brown dry tongue, sordes on teeth, pain in chest, cough, slight crepitus, pain and tenderness at epigas- trium, also in right iliac region, with gurgling, pro- fuse diaphoresis, vomiting, diarrhæa, nervous agitation delirium, coma; rose spote on abdomen, noted on the	Fever mixture, Dover's powder, morphia p. r. n., Hoffman's anodyne, whiskey, brandy, milk diet.	Reynolds.	Previous health generally good. Patient came to this country six months previously; subsequent health poor. Pulse 96, temperature 103° 5' at entrance; highest temperature 106° 5' on the 15th, highest pulse rate 152, the day before death. This case was complicated with gastric irritation and pneumonia.
Flushed face, deafness great exhaustion, disturbed sleep, dry and brown tongue, sordes on teeth fetid breath, great thirst hebetude, much tympanites gurgling and tenderness ir right iliac fossa, diarrheas involuntary dejections, violent delirium, rose spots or abdomen, noted on the 10th	Fever mixture, bran- dy, sherry wine, beef tea.		Previous health good. Pulse 104, temperature 106° 2', respiration 36 at entrance. Pulse ranged from 80 to 128. Patient was a large, stout, plethoric person, at- tacked after exposure to wet. Post mortem exami- nation not obtained.
Epistaxis, vertigo, grea exhaustion, flushed face dull look, dry and brown tongue, sordes on teeth, dis turbed sleep, tenderness and gurgling in right iliac fossa delirium; rose spots on ches and abdomen at entrance.	sherry wine, beef tea.	Reynolds.	Previous health good. Pulse 100 at entrance, after the first two days continued about 80. Highest temperature 106°.
Flushed face, exhaustion sense of heaviness in head anorexia, cough, tenderness pain at epigastrium, dirty brown tongue, sordes of teeth, fetid breath, vomiting diarrhea, noisy delirium sloughing over sacrum, in voluntary dejections, hem orrhage from the bowels.	Fever mixture, bran- dy, wine whey, car- bonate of ammonia, boiled milk, beef tea, morphine, supposito- ries.	l	Previous health poor. Pulse 104 at entrance, 160 the day before death; highest tem- perature 105° 5'.*

<sup>\*</sup>Autopsy.—Marked emaciation, bed sores on hips and sacrum, thoracic organs healthy, abdomen distended, stomach normal, liver pale, showing fat globules under the microscope, spleen somewhat softened, numerous ulcerations in lower six feet of ileum, three or four of Peyer's patches injected, large intestines studded with ulcerations of the size of a pea, some involving all but the outer cost.

Case.	Name and Oc- cupation. Vol.		When admitted.	Days ill before en- trance.	Duration till convaler- cence or death.		SYMPTOMS.
No. of	and page of record.	Φge.	M Pe	Defor	till co	Result.	Early.
105	A. H., Irish cook-maid. Vol. 22, page 14.	24	Oct. 8.	14	20 days.	Well.	Chills followed by heat, pro- fuse diaphoresis, exhaus- tion, anorexia, headache, thirst, constipation.
106	P. W., Nova Scotian carpenter. Vol. 22, page 22.	26	Oct. 9.	4	g days.	Dead.	Chills followed by heat, diaphoresis, exhaustion, headache, epistaxis, pain in back and limbs, abdominal pains, diarrhœs.
107	F. F., American car- penter. Vol. 22, page 150.	22	Nov. 7.	14	27 days.	Well.	Headache, pain in chest, cough, hurried respiration, malaise.
108	J. M., American errand-boy. Vol. 22, page 270.	15	Dec. 16.	Not stated.	9 days in hospital.	Dead.	General malaise, loss of appetite, chills, headache, pain in back and limbs, cough with expectoration.
109	J. S., English watch maker. Vol. 24, page 24.	21	Dec. 23.	21	46 days.	Well.	Headache, pain in back, general malaise, epistaxis, abdominal pains, constipation.
110	S. C., English housekeeper. Vol. 21, page 156.	26	1868. Feb. 15.	14	38 days.	Well.	Chills followed by heat, diaphoresis, pain in legs, headache, vomiting, insomnia, abdominal pains, constipation.
111	M. C., Irish laborer. Vol. 23, page 18.	21	Mar. 13.	13	60 days.	Well.	General malaise, headache, chills, anorexia, muscular pains, diarrhœa.
112	C. J., Irish housekeeper. Vol. 23, page 124.	40	Mar. 31.	25	56 days.	Well.	Chills, headache, nausea, vomiting, pyrexia, abdomi- nal pain, diarrhœa.

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SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Flushed face, hot and dry skin, anorexia, thirst, dry and thinly coated tongue, cough, insomnia, tympanites; rose spots on abdomen noted Oct. 11th.	mixture, enemata, Hoffman's anodyne,	Revnolds	Previous health good.
Sense of great exhaustion, hot, moist skin, dry, red. fissured tongue, nervous agitation, intense abdominal pains, flatulence, tympanites, tenderness, subsultus, diarrhœa, noisy deilrium.	brandy, turpentine stupes, morphia, p.r.n.	Reynolds.	Previous health good. Pulse 96. Temperature 104° at entrance. A brother was "sick with typhoid fever" in the same house with this patient. Pulse 106 the evening before death, at which time the patient complained of extreme abdominal pain. Autopsy not obtained.
Headache, dry, thinly coated tongue, disturbed sleep, diarrhœa, bloody dejections, tenderness in right illac fossa, rose spots on abdomen noted Nov. 16th.	Fever mixture, Dover's powder, astringents, bromide of potassium, whiskey, quinine, tincture of gentian during convalescence.	Reynolds and Upham.	Previous health generally good. Pneumonia existed for ten weeks previous to the development of typhoid fever. Patient had not fully recovered when attacked with fever.
Flushed face, apathetic look, cough, dry and brown tongue, sorders on teeth and lips, tympanites, gurgling, rose spots on abdomen, noted Dec. 17th, involuntary dejections, tenderness, subsultus, delirium, coma.	Castor oil, Dover's powder, fomentations, stimulating enemata, brandy, wine whey, milk, beef tea.	Upham.	Previous health good. Pulse 108, respiration 23 at entrance. Patient unable to give much account of himself owing to his delificus condition. Symptoms gradually increased in severity until death. Case complicated with pneumonia. Post mortem not obtained.
Flushed face, coated tongue, inclining to dry, moist surface, nervous agitation, abdominal pain and tympanites, gurging in right illac fossa, role spots on chest and abdomen at entrance, constipation.		Upham.	Previous health good. Pulse 88, regular at entrance; con- tinued the same until Jan. 1st when it fell to 60, irregu- lar and intermittent; after four days it resumed its former rate.
Flushed face, stupid expression, dry, hot skin, thirst, loaded, dry, fissured tongue, nausea, gurgling, and tenderness in right litac fossa, rose spots noted Feb.  11th, delirium.	ta of beef tea, milk, beef tea, milk punch.	Borland.	Pulse 128, temperature 104, patient delirious at time of entrance Case complicated with pregnancy.
Epistaxis, deafness, flushed face, moist, creamy coat on tongue, urgent thirst disturbed sleep, hebetude. fullness of abdomen, gurgling, tympanites, rose spots on abdomen at entrance, afterwards on extremities and back, wandering deilrium, diarrhœa, furunculi.	sherry wine, sesqui, carb. of ammonia, brandy substituted for sherry, quinine during	Borland and Bowditch.	Previous health generally good. Pulse 84 at entrance; frequent attacks of epistaxis for two weeks after entrance. Considerable deafness remained at time of leaving hospital. Case complicated with furunculi, which retarded convalescence.
Hot and dry skin, moist, londed tongue, cough with râles, tympanites, tenderness throughout abdomen, nervous agitation, violent delirium, rose spots at entrance, diarrhea, followed by constipation, furunculi.	astringents, enemata,	Borland and Bowditch.	Patient lives in a damp lo- cality, having a foul odor in consequence of defective drainage. Her daughter is also sick with fever.

No. of Case.	Name and oc- cupation. Vol. and page of record.	Age.	When admitted.	Days iil be- fore entrance.	Duration till conva- lescence or death.	Result.	SYMPTOMS.  Early.
	M. J., American girl. Vol. 23, page 128.	12	Mar. 31.	32	62 days.	Well.	Chilis, headache, nausea, vomiting, pyrexia, &c.
114	C. A., American school girl. Vol. 23, page 190.	10	April 8.	14	27 days.	Well.	Chills, malaise, vomiting, diarrhœa, cough, pain in left chest.
115	J. M., English printer. Vol. 26, page 230.	26	April 8.	14	. 29 days.	Well.	Chills followed by heat,head- ache, pain at epigastrium, pain in joints, sleeplessness.
116	C. D., Irish laborer. Vol. 27, page 158.	25	June 29.	10	26 days.	Well.	Pain in chest, headache, diarrhœa, malaise.
117	M.W., American mattress- maker (fe- male). Vol. 28, page 172.	15	May 25.	4	43 days.	Well.	Severe pain in head, neck and chest, pyrexia, thirst, constipation.
118	A. W., Irish servant girl. Vol. 28, page 244.		June 9.	21	79 days.	Well.	Pyrexia, followed by diaphoresis, great exhaustion, vomiting, disturbed sleep, diarrhos, malaise.
119	K. D., American house- keeper. Vol. 29, page 126.	20	Aug. 20.	10	32 days.	Well.	Headache, general malaise, muscular pains, diarrhœa.
120	H. P., Irish blacksmith. Vol. 29, page 132.	80	Aug. 21.	14	85 days.	Well.	Chills, lassitude, disinclina- tion for work, headache, malaise, diarrhœa.
121	J. C., American carpenter. Vol. 29, page	22	Aug. 24.	10	24 days.	Well.	Headache, chills, nausea, epistaxis, pain in back and limbs.

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Advanced.	Treatment.	Name of Physician.	Remarks.
Loss of flesh, dry, harsh skin, hebetude, moist coated tongue, abdominal tender- ness, sudamina, noisy deli- rium, constipation, furun- culi,	Dover's powder, sweet spts. of nitre, ene- mata, sherry, milk, beef tea.	Bowditch.	Daughter of preceding patient. Hygienic surroundings bad.
Epistaxis, cough, moist, thinly coated tongue, drow- siness, tympanites, tender- ness, rose spots noted April 9th, constipation.	Dover's powder, castor oil, spts. nit.	Bowditch.	Previous health good. Pulse 124, respiration 28 at en- trance.
Hot skin, sense of exhaustion, loss of appetite, thirst, dry, red fissured tongue, diarrhœa, tympanites, gurgling in both iliac fossae, rose spots on thorax, noted April 11th.	of iron, quinine, milk, beef tea.		Previous health fair. Pulse 94 at entrance, highest tem- perature 100° 5'.
Headache, moist and hot skin, exhaustion, disturbed sleep, tinnitus aurium, vomiting, insomnia, rose spots on abdomen, noted July 1st, constipation alternating with diarrhœa, tympanites.	powder, fever mix- ture, sponge baths, bromide of potash, milk and lime water.	Bowditch and Oliver.	Previous health good. Pulse 92 at entrance. Attacked after drinking freely of cold water.
Urgent pain in head, especially in supra-orbital regions, dilated pupils, intolerance of light, marked tenderness over whole of the spine, hot and dry skin, sensitive surface, dry brown tongue, sordes, mild delirium, moaning, swollen and sensitive abdomen; rose spots noted May 29th, diarrhea.	Fever mixture, bro- mide of potassium, Dover's powder, poultices to abdomen, turpentine, wine whey, brandy, milk, quinine during con- valesence.	Blake.	Previous health good. Pulse 124 at entrance. highest pulse-rate 132. Symptoms of cerebro-spinal meningi- tis were observed through- out the case, and greatly retarded convalescence.
Moist, hot skin, loaded and fissured tongue, exhaustion, fullness and tenderness of abdomen, gurgling in iliac fossae, sudamina, rose spots noted June 10th, subsultus, delirium, diarrhosa alternating with constipation.	ver's powder, bromide of potash, turpentine, sherry, brandy, milk,	Blake and Reynolds.	Previous health generally good. Pulse at entrance 108, highest rate 144. Pattent came from Ireland two months previously; was sea-sick on the voyage.
Anxious look, restlessness, hebetude, diaphoresis, dry and slightly coated tongue, diarrhœa, delirium, tender- ness in right iliac fossa.	Brandy, milk, wine whey, morphia at night.	Oliver,	Previous health good. Pulse at entrance 110. The hus- band of this patient was ill with typhoid fever in the hospital.
Flushed face, wild look sensitiveness to sound, cough, moist, pasty tongue, tympanites, tenderness in right iliac, rose spots on abdomen at entrance, constipation followed by diarrhea.	Castor oil, bromide of potash, milk, sherry, beef tea.	Oliver.	Previous health generally good. Pulse 100 at entrance, at no time above 104.
Diaphoresis, cough, dryness of throat, dry, yellowish, slightly fissured tongue, tenderness of abdomen, gurgling, rose spots on ab- domen at entrance.	Milk diet.	Oliver.	Previous health generally good. Pulse at entrance 88, at no time higher.

ase.	Name and Oc-			e e	ion ales-		SYMPTOMS.
No. of Case.	cupation. Vol. and page of record.	Age.	When admitted.	Days ill before en- trance.	Duration till convales cence or death.	Result.	Early.
122	H. M., Irish servant girl. Vol. 29, page 168.	25	Aug. 26.	8	36 days.	Well.	Chills, headache, anorexia, general malaise, constipa- tion.
123	J. J., English — (male). Vol. 29, page 178.	18	Aug. 31.	7	23 days.	Well.	Loss of appetite, headache, vomiting.
124	J. P., Nova Scotia carpenter. Vol. 29, page 190.		Sept. 2.	21	30 days.	Dead.	Loss of appetite, chills, headache, epistaxis, tinnitus aurium, diarrhœa.
125	C. C., American farmer. Vol. 30, page	18	July 29.	5	22 days.	Well.	Sense of exhaustion, general muscular pains, headache, vertigo, pyrexia, thirst, insomnia, diarrhœa.
126	D. D., American school- boy. Vol. 30, page 212.	13	Aug. 1.	· 5	20 days.	Well.	Headache, pain in back, pyrexia, thirst, epistaxis, diarrhœa.
127	N. B., Irish oyster-man. Vol. 30, page 258.	22	Aug. 7.	11.	25 days.	Well.	Severe cough, chills followed by heat, epistaxis, thoracic and abdominal pain.
128	T. H., Irish laborer, Vol. 31, page 8,	24	Sep. 22.	7	17 days.	Well.	Epistaxis, deafness, vertigo, general muscular pains, cough, pain beneath sternum.
129	J. R., American cabinet-maker, Vol. 31, page	27	Sep. 21.	14	32 days.	Dead.	General muscular pains, headache, nausea, anorexia, chills followed by heat, ver- tigo.

#### TYPHOID FEVER.

SYMPTOMS.		Name of		
Advanced.	Treatment.	Physician.	Remarks.	
Joss of strength, moist. slightly control tongue, ten- derness in iliac fossae, tym- panites, constipation.	milk diet timet sin,	Oliver.	Previous health good. Pulse 86 at entrance; highest rate, 96.	
Flushed face, hot and moist skin, heavily loaded tongue, tenderness in right iliac fossa rose spots on abdomen noted Sept. 4th. Diarrhœa, sudamina.	Mild astringents, milk	Oliver.	t'revious health good. Pa- tient arrived from Liverpool in a crowded steamer seven days before entrance. Hy- gienic surroundings after landing, poor.	
Cough with expectoration, thick yellow coat on tongue, moist hot skin, sordes, abdominal 'tenderness, gurgling, constipation, rose spots on abdomen at entrance, contracted pupils, coma.	Castor oil, Dover's powder, opiates, car- bonate of ammonia, milk, brandy, beef tea.	Oliver.	Previous health generally good; pulse 104 at entrance, Patient was delirious throughout; had extreme pain in abdomen for 24 hours before death. A post-mortem examination showed no perforation. Peyer's patenes were greatly congested, those nearest the concum were ulcerated, cocum and upper portion of colon much congested.	
Apathetic look, hot and dry skin, severe pain in back, thin, whitish coat on tongue, tenderness in right lifac fos- sa; rose spots at entrance, diarrhesa.		Blake and Reynolds.	Previous health good. Pulse 108, temperature 104° 8' at entrance. Six days after, pulse had fallen to 84, tem- perature to 100°.	
Flushed cheeks, dull look, hot and dry skin, thin whitish coat on tongue, tenderness in umbilical region, constipation.	Enemata, milk, beer tea.	Reynolds.	Previous health good. Pulse 104, temperature 103°, respi- ration 36 at entrance; at- tacked after bathing in salt water and sleeping in a cool cellar the following night.	
Flushed face, auxious look, pasty tongue, cough with tenacious sputa, diaphoresis, vertigo, tenderness of abdomen, rose spots on chest and abdomen, Aug. 8, diarrhœa.	Dover's powder, fever mixture, demulcents, astringents, stimu- lants.	Reynolds.	Previous health good. Highest pulse-rate 88; highest temperature 104° 5'. Disease supervened on exposure to wet and cold. Case complicated with bronchitis.	
Flushed face, pain in chest, cough, sonorous râles, head-ache, very slightly coated tongue, deafness, gurgling in iliac fossae.	Bromide of potash, jacket-poultice, milk diet	Oliver.	Previous health good. Pulse 56, respiration 32 at entrance; highest pulse-rate 88, highest temperature 101° 5′. Symptoms of pneumonia, involving base of both backs, manifested themselves three weeks before those of typhoid fever.	
Flushed face, great exhaus- tion, moist skin, moist, thickly coated tongue, after- wards dry and fissured, in- tense thirst, vomiting, diar- rheas, fullness and tender- ness of abdomen, rose spots at entrance, delirium, sub- sultus, carphologia, coma.	Dover's powder, sponge baths, laudanum fomentations to abdomen, bromide of potash, astringents, stimulants, milk diet.	Oliver.	Previous health good. Pulse 88; temperature 102° at en- trance. Disease steadily progressed in severity until death.	

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of Case.	Name and Oc- cupation. Vol. and page of	Age.	When admitted.	Days Ill be- fore entrance.	Duration till convales- cence or death.	Result.	SYMPTOMS.
No.	record.		A up	Days fore e	till oc	<u> </u>	Early.
130	T. N., American boy. Vol. 31, page 14.	15	Sept.24	14	61 days.	Well.	Chill, beadache, anorexia, muscular pains, epistaxis, cough, diarrheea.
131	J. B., Irish laborer. Vol. 31, page 24.	33	Sept.28	7	39 days.	Well.	Chills, diarrhœa, anorexia.
132	M. L., Irish servant girl. Vol. 31, page 40.		Admit- ted Oct. 1; fever began Oct. 14.	0	36 days.	Well.	Chills, nausea, epigastric pain, diarrhea, general malaise.
133	B. C., Irish chamber- maid. Vol. 31, page 44.	21	Oct. 8.	9	70 days. ·	Well.	Chill, headache, anorexia, muscular pains, vertigo, epistaxis, deafness.
134	R. M., Irish chamber- maid. Vol. 31, page 46.	21	Oct. 8.	7	26 days.	Well.	Chill, followed by heat, headache, anorexia, vertigo, vomiting, epistaxis, diarrhea.
135	J. C., Irish laborer. Vol. 31, page 50.	23	Oct. 5.	10	30 days.	Well.	Chill, anorexia, vertigo, general pains, diarrhœa.
136	A. S., American house-keeper. Vol. 31, page 136.	22	Oct. 29.	14	21 days.	Well.	Chill, followed by heat, ver- tigo, headache, mild delir- ium, muscular pains, cough, diarrhœa.
30-	E. C., American servant girl. Vol. 32, page 30.	18	Aug. 15.	14	93 . days.	Well.	Headache, general pains, pyrexia, thirst, abdominal tenderness, diarrhœa.

SYMPTOMS.  Advanced.	- Treatment.	Name of Physician.	Remarks.
Apathetic look, thick, yel lowish coat on tongue, sor des on teeth, cough, coarstrâles in both backs, deaf ness, tenderness and gur gling in right illac, rose spots on abdomen at en trance, diarrhœa.	Bromide of potash chalk mixture, milk diet.	Oliver.	Pulse 108, temperature 103°; respiration 40 at entrance. Disease supervened on exposure to wet. Complicated with bronchitis which retarded convalescence.
Confused intellect, apathetic look, deafness, parchect tongue, sordes on teeth thirst, cough, slight crepi- tus, tympanites, rose spote on abdomen at entrance delirium, constipation.	Castor oil, jacket poultice, mucilagi- nous drinks, opiates,	Oliver.	Highest pulse rate 96. Pneumonia developed itself Oct. 26, involving base of right back.
Flushed face, thin, whitish coat on tongue, muscular pains, epistaxis, vertigo, ten- derness in right iliac, rose spots on abdomen, noted Oct. 24, diarrhœa.	Fever mixture, bis- muth, effervescing powders, milk diet.	Ollver.	Previous health impaired. Highest pulse rate, 120; highest temperature, 104°3′. Patient was admitted for psoriasis. Fever supervened fourteen days after entrance. A patient with typhoid lay in fourth bed from her.
Flushed face, deafness, hot skin, moist, heavily loaded tongue, afterwards dry, sordes on teeth, vomiting, delirium, tenderness, rose spots on abdomen at entrance, constipation, furunculi, abscesses.	baths, bromide of potash, morphia, p. r. n., milk diet, hot fomentations over abdomen, quinine, tinct. cinch. ferri.		Previous health good. Pulse 116 at entrance. Highest pulse rate, 124; highest tem- perature, 106°; convales- cence much retarded by the occurrence of furunculi and abscesses over middle of dorsal vertebræ.
Flushed face, exhaustion, thin white coat on tongue, cough, with scanty expec- toration, chills, vomiting, abdominal tenderness, in- somnia, constipation.	Bromide of potash, sponge baths, mild cathartics, milk diet, pil. ferri. comp. dur- ing convalescence.	Oliver.	Previous health good. Highest pulse rate, 124; highest temperature, 103° 5'. Discase supervened on exposure to wet.
Apathetic look, deafness, moist, thick, yellowish coat on tongue, sordes on teeth, thirst, diaphoresis, tympanites, gurgling, rose spots at entrance, diarrhea.	Sponge baths, astringents, bromide of potash, quinine.	Oliver.	Previous health good. Highest pulse rate, 84; highest temperature, 104°.
Loss of appetite, duil look, disturbed sleep, diaphore- sis, dirty white coat on tougue, slight pain at epi- gastrium, tenderness in liac fossae, mild delirium.	Bromide of potash, milk and beef tea.	Oliver.	Previous health good. Highest pulse rate, 96; highest temperature, 100°.
Great exhaustion, disturbed sleep, cough, intense thirst, flushed face, smooth, dry tongue, afterwards moist and coated in patches, sordes on teeth, abdominal fullness and tenderness, gurgling in right iliac, rose spots on abdomen and thorax at entrance, sloughing over sacrum, delirium, involuntary dejections, diarrhea, alternating with constipation.	sence, tinct. ferri chlor.; later, quinine and porter,phosphates	Reynolds and Sinclair.	Previous health g.od. Pulse at entrance, 127, highest pulse rate, 144. Disease supervened after bathing. Large bed sores o er hips and sacrum appear d early and remained long, greatly retarding convalescence.

of Case.	Name and Oc- cupation. Vol.		When idmitted.	Days ill before en- trance.	Duration till conva- lescence or death	놸	вумртомв.
No. of	and page of record.	Age.	w mps	Day	Dun till co lescer	Rerult.	Early.
138	J. M., American brake- man. Vol. 32, page 46.	22	Aug. 18	6	37 days.	Well.	Headache, chills, alternating with heat, anorexia, thirst, epistaxis, diarrhœa.
139	T. D., Irish currier. Vol. 32, page 58.	21	Aug. 20	7	32 days.	Well.	Chills, followed by heat, thirst, headache, abdominal tenderness, general muscular pains.
140	J. M., American school girl. Vol. 32, page 62.	11	Aug. 21	7	38 days.	Well.	Chilliness followed by heat, headache, thirst, pain in back, abdomin.ll pain, diarrhœa.
141	W B., American matches- maker. Vol. 32, page 128.	19	Sept. 3	8	37 days.	Well.	Vertigo, headache, chill, anorexia, nausea, epistaxis, tendency to diarrhœa.
142	M. M., Irish laborer. Vol. 32, page 146.	18	Sept. 8	14	28 days.	Well.	Headache, diarrhœa, chill, anorexta, malaise.
143	A. M., New Brunswick servant girl. Vol. 32, page 160.	18	Sept. 11	14	28 days.	Well.	Headache, chills, pain in ears and in joints, anorexis, exhaustion, vomiting, diarrhesa.
144	E. J., Irish servant girl. Vol. 32, page 180.	20	Sept. 19	7	21 days.	Well.	Chills, headache, pain in back and limbs, nausea, an- orexia, vertigo.
145	M. J., Irish school girl. Vol. 32, page 196.	12	Sept. 24	7	23 days.	Dead.	Chilliness followed by heat, headache, pain in left chest, cough, diarrhœa.
146	J. T., American car-driver. Vol. 32, page 228.	21	Oct. 8	7	28 days.	Well.	Headache, stiffness of the neck, pain in back, pyrexia.

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SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Apathetic look, confused in- tellect, flushed cheeks, hot and dry skin, ditry yellow- ish coat on tongue, abdomi- nal pains, tympanites, gur- gling, tenderness in right iliac, rose spots on abdomen at entrance, delirium.	Brandy, whiskey, milk, beef tea.	Reynolds.	Previous health good. Pulse 100 at entrance. On Aug. 23d had fallen to 60.
Loss of appetite, moist, heavy coat on tongue, afterwards dry and parched, disturbed sleep, scanty, high-colored urine, vesical irritation, tenderness in right iliac, rose spots on abdomen noted Aug. 28, constipation followed by diarrhea, delirium.	Castor oil, faver mix- ture, Hoffman's ano- dyne, morphine sup- positories, astringents, quinine, brandy, por- ter.	Reynolds.	Previous health generally good. Pulse 108 at entrance. Phlebitis developed itself Sept. 14, at which time patient was apparently otherwise convalescent.
Apathetic look, hot and dry skin, tongue moist, red in centre, afterwards dry and glazed, anorexia, tenderness in iliac fossae, diarrhœa.	Fever mixture, beef essence, brandy, as- tringents, quinine, tar- trate of iron and po- tassa, milk diet.	Reynolds.	Previous health generally good. Pulse 112 at en- trance; highest pulse rate 136. This patient had a slight relapse of fever dur- ing convalescence.
Anxious look, flushed cheeks, tongue moist, with brownish coat in centre, hot and dry skin, diarrhes, vomiting, epistaxis, cough, soncrous râles, abdominal tenderness, nervous agitation, delirium.	Dover's powder, astringents, morphine suppositories, fi. ext. of spiroa, brandy, milk.	Reynolds.	Previous health good. Highest pulse rate 100; highest temperature 104°. Fever supervened on a change from country life to night work in a match factory in town.
Apathetic look, dry skin, brown tongue, sordes on teeth, anorexia, thirst, gur- gling in right iliac, diarrhœa.		Reynolds.	Previous health generally good. Highest pulse rate 80; highest temperature 103° 8'.
Listless and anxious look, flushed cheeks, moist, thick white coat on tongue, disturbed sleep, diaphoresis, dry cough, diarrhœa.	Fever mixture, Do- ver's powder, demul- cents, mild astrin- gents, brandy, porter.	Reynolds.	Previous health generally good. Pulse 132 at entrance. Highest temperature 103° 5'. Complicated with bronchi- tis.
Dull expression, loss of appetite, thirst, disturbed sleep, moist, slightly coated tongue, profuse diaphoresis.	Fever mixture, Do- ver's powder, quinine.	Reynolds.	Previous health good. Highest pulse rate 108; highest temperature 105° 5'. Fever supervened after a season of unusually hard work.
Apathetic look, hot and dry skin, moist, loaded tongue, afterwards dry, brown and cracked, sordes on teeth and lips, urgent cough, hurried respiration, abundant, sono- rous râles, rose spots on abdomen, extreme abdomi- nal tenderness, bloody de- jections, delirium.	Demulcents, morphine suppositories, milk, brandy, beef tea.	Reynolds.	Pulse 140; respiration 44; temperature 104° at en- trance; highest pulse rat. 148; highest temperature 105° Disease supervened on ex- posure to cold and wet. Bronchitis existed as a com- plication.
Flushed cheeks, tongue dry- ish with thick white coat, sordes on teeth and lips, slight diarrhea, restless- ness, diaphoresis, insomnia, slight tenderness of abdo- men, "a few rose colored spots" noted at entrance, active delirium.	Dover's powder, di- luted sulphuric acid, gtt. xx. every 4 hours. Bromide of potassium.	Reynolds.	Previous health generally good. Pulse 104; patient slightly delirious at entrance Highest temperature, 103.

Case.	Name and Oc- cupation. Vol.		When admitted.	Days ill before en- trance.	Duration till convales- cence or death.		SYMPTOMS.
No. of Case.	and page of record.	δge.	W. W.	Day before tran	Dura till con cenc dea	Result.	Early.
147	J. M., Irish laborer. Vol. 32, page 248.	33	Oct. 9.	11	30 days.	Well.	Headache, pain in chest and throat, cough with rusty expectoration, pyrexia, gen- eral febrile symptoms.
148	D. G., American school- boy. Vol. 32, page 250.	15	Oct. 11.	9	33 days.	Well.	Anorexia, headache, pain in back and abdomen, urgent thirst, general pyrexia, epistaxis.
149	J. M., N. Brunswick plasterer. Vol. 34, page 10.	20	Oct. 15.	6	9 days.	Dead.	Loss of appetite, urgent thirst, epistaxis, abdominal pains and tenderness, diar- rhœa, pyrexia.
150	P. K., Irish laborer. Vol. 34, page 14.	21	Oct. 16.	10	33 days.	Well.	Sense of exhaustion, general malaise, anorexia, pain in chest, cough and expectora- tion, diarrhœa.
151	A.R., American servant girl. Vol. 36, page 176.	19	1869. Jan. 16.	21	35 days.	Well.	General muscular pains, anorexia, abdominal tender- ness, diarrhœa.
152	D. G., Irish laborer. Vol. 36, page 200.	25	Jan. 23.	9	27 days.	Well.	General muscular pains pyrexia, thirst, cough.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Drowsy depressed look, dulness of intellect, lividity of face,dry, brown and fissured tongue, sordes on teeth and lips, cough with expectoration, sub-crepitant râles, tendency to diarrhœa, "some rose spots on abdomen and chest," noted at entrance.	Diluted sulph. acid gtt. xx. every four hours, quinine, bran- dy, ale, beef essence, milk.	Reynolds.	Previous health good; pulse 104; temperature 105° at en- trance; highest pulse 120; highest temperature 106°. Pneumonia supervened dur- ing disease. Patient was apparently convalescent Oct. 28 (30th day), after which feverish symptoms again appear'd, accompanied with a large and painful abscess over inner aspect of left thigh which prolonged convalescence.
Apathetic look, hot skin, moist, whitish coat on tongue, afterwards dry and brownish at posterior half, a little sordes on teeth, mild delirium, general tenderness over abdomen, "a few rose-colored spots" noted at entrance, one bloody dejection, subsequent constipation.	acid, sherry wine, milk, beef essence.	Reynolds.	Pulse at entrance 108; tem- perature 104° 5'; highest pulse rate 116; highest tem- perature 105° 5.
Marked prostration, apathetic look, hot and dry skin, dry and brown tongue, sordes on teeth and lips, fulness of abdomen, numerous rose spots on abdomen noted at entrance, insomnia, diarrhoa, contracted pupils, tendency to coma, sinking.	bromide of potassium, astringents, beef essence, boiled milk, brandy. I se every two	Reynolds.	Previous health good. Pulse 96; temperature 105° at entrance; pulse 116, temperature 106° on the 16th. Pulse 148, temperature 106° on the
Appearance of exhaustion, hot and dry skin, hurried respiration, cough with expectoration, dry and brown tongue, sordes on teeth and lips, fulness and tenderness of abdomen, delirium, rose spots on abdomen noted at entrance, diarrhœa.	every four hours, as- tringents, brandy,	Reynolds.	Previous health good. Highest pulse rate 104; temperature 104° 5¹. Patient was delirious for two nights before entrance.
Marked prostration, apathetic look, hot and dry skin, moist, pasty tongue, tenderness of abdomen, constipation.	Dover's powder, brandy, cit. of iron and quinine, milk, beef tea.	Sinclair.	Previous health good. Pulse 96; temperature 102° 5' at entrance.
Sense of debility and exhaustion, epistaxis, headache, cough with expectoration, moderately hot skin, sordes on teeth and lips, thin white coat on tongue, afterwards dry and brown,	liver oil brandy milk	Sinclair.	Previous health generally good; pulse 66 at entrance; highest pulse rate 112; highest temperature 106° 5'. Attacked after exposure to cold and wet. Patient was apparently convalescent Feb. 25th (42d day), after which he suffered from dysurla, with severe vesical irritation which prolonged convalescence.

The whole number of cases of typhoid fever here tabulated is 152. A few more cases could have been added, of the true nature of which there exists in my own mind but little doubt; but the details on record are too meagre to afford any absolute certainty as to their diagnosis. In the consideration and analysis of the table, I will take up the several points in the order in which they are stated.

THE SEX.—Of the 152 cases, 86 were males, 65 were females; the sex of one, a child, was not stated.

THE NATIONALITY.—This was given in 150 cases. Of these, 69 were born in Ireland, 44 in America, 21 in the British Provinces, 7 in England, 5 in Germany, 3 in Sweden, and 1 in Scotland. Of those of foreign birth, seven were noted as having recently arrived in this country.

THE OCCUPATION. — This is recorded in the cases of 81 males and 60 females. Of the males there were 26 common laborers, 7 carpenters, 6 blacksmiths, 5 errand-boys, 3 school-boys, 3 teamsters, 2 seamen, 2 shoemakers, 2 tailors, 1 brakeman, 1 cabinet-maker, 1 car-driver, 1 carriage-trimmer, 1 clerk, 1 currier, 1 farmer, 1 hack-driver, 1 harness-maker, 1 hostler, 1 man-servant, 1 machinist, 1 matches-maker, 1 medical student, 1 oysterman, 1 painter, 1 plasterer, 1 porter, 1 salesman, 1 soldier, 1 shop-boy, 1 wire-roller, 1 watchmaker, and 1 varnisher. Of the females there were 39 servant-girls, 5 housekeepers, 3 school-girls, 3 seamstresses, 2 nurses, 2 cooks, 2 chambermaids, 2 shop-girls, 1 dressmaker and 1 mattress-maker.

THE AGE.—This was stated in 148 cases. The youngest patient, a school-girl, was 10; the oldest, a female nurse, 60 years of age.

There were of the age of 10 years . 2 cases. Between the ages of 10 and 20 years . 43 cases. Between the ages of 20 and 30 years . 83 cases. Between the ages of 30 and 40 years . 12 cases. Between the ages of 40 and 50 years . 7 cases. Between the ages of 50 and 60 years . 0 cases. Of the age of 60 years, 1 case.

The average age of the males was  $23\frac{52}{100}$  years, of the females  $22\frac{21}{100}$  years, of both  $22\frac{96}{100}$  years. Of the patients who recovered,—131 in all,—the age was stated in 128, of whom 71 were males and 57 were females; the average age of the males was  $23\frac{65}{100}$ , of the females,  $21\frac{88}{100}$  years. Of the fatal cases—21 in all—the age was stated in 20, of whom 13 were males and 7 were females. The average age of the former was  $22\frac{85}{100}$ , of the latter  $27\frac{28}{100}$  years; among the latter was the oldest in the series—a nurse aged 60,—if we deduct which, the average age of the six that remain will be  $21\frac{23}{100}$  years.

THE SEASON OF THE YEAR WHEN ADMITTED.— Twenty-seven cases were admitted in the spring months, 35 in the summer, 74 in the autumn and 16 in winter. Of the fatal cases, 5 occurred in spring, 1 in summer, 13 in autumn and 2 in winter.

THE STAGE OF THE FEVER AT WHICH THE PATIENT WAS ADMITTED.—Here it is necessary to guard against the usual disposition on the part of

the patients or their friends, to reckon in even weeks. From an examination of the tables, it appears that 44 were admitted during the first week of the disease, 74 during the second week, 16 during the third week, and 12 during the fourth week, or subsequently; in six cases the time was not stated.

THE DURATION OF THE DISEASE.—In determining the duration of the fever, we have counted from the time of the first occurrence of lassitude, headache, malaise, inaptitude for mental and bodily exertion, or other manifestations of departure from the normal state of health, so far as it could be ascertained from the testimony of the patient or his friends. believe that in this way we have arrived more nearly at the period of the actual invasion of the disease than if we had dated from the time that he "took to his bed." Of course we cannot pretend to absolute accuracy on this point. The disturbing elements, already alluded to under the preceding head, meet us here at the outset, viz., the dulness, incapacity, and ignorance of the patients themselves, or their friends, of whom the information is sought. accession of the fever was for the most part insidious, but sometimes sudden and violent. In fixing upon the day of convalescence, we have been governed by an assemblage of circumstances and symptoms rather than the occurrence of any single sign or condition arbitrarily taken. If, on or about a certain day, it was observed that the temperature and pulse had sunk to nearly their normal standard, the tongue had cleaned, the skin become soft and natural, and

the appetite craved a return to solid and nourishing food, and if these conditions continued with a gradual amendment of strength and spirits, we felt confident in relying upon this as the period of the termination of the fever and the commencement of returning health. As thus obtained, the average duration of the cases which recovered was, for the males  $32_{100}^{25}$  days, for the females  $36_{100}^{91}$  days, for both  $34_{100}^{25}$  days. The duration of 17 of the 21 fatal cases was recorded. Of these 17 cases, 11 were males, 6 were females.

In two cases death took place on the 9th day, in one case on the 19th, in one case on the 20th, in two cases on the 23d, in one case on the 24th, in one case on the 25th, in one case on the 28th, in two cases on the 30th, in one case on the 32d, in one case on the 33d, in one case on the 36th, in one case on the 39th, in one case on the 48th, and in one case on the 100th day. This last was a patient with a scrofulous taint who had dislocation of the hip, and was worn out with exhausting discharges from excoriations and bed sores. The average duration of these fatal cases was for the males  $30_{\frac{90}{100}}$  days, for the females,  $31_{\overline{100}}^{50}$ , for both  $31_{\overline{100}}$  days.\* The duration of the period of convalescence has not been given in The hospital records, however, furnish the data for computing this in 115 cases, of which number 64 are males, and 51 are females. The average in the former is  $15^{25}_{0}$ , in the latter  $19^{31}_{100}$  days,

<sup>•</sup> If the case of D. N., No. 32, be deducted, the average duration of the remaining 16 fatal cases would be  $27\frac{4}{100}$  days.

in both  $17_{150}$  days. The duration of convalescence varied with the previous health and vigor of the patient, with the existence or non-existence of complications or sequelæ, and with the care and watchfulness exercised in the case on the part of the patient himself, and of the physician and nurses in attendance.

THE SYMPTOMS. — These are grouped according to the time of their appearance, whether in the earlier or later period of the fever. And I have thought it the more proper to make this division for the double purpose of presenting them in chronological order, and for the greater reliability which is thereby given to such as come into the advanced category, and are vouched for by the physician in attendance upon the case. Among the many and various symptoms noted in the early stages are chills mostly followed by heat, acceleration of the pulse, inaptitude for mental or bodily exertion, headache, pain in the back, limbs and joints, stiffness or soreness of the muscles, lassitude, general malaise, a sense of weakness and exhaustion, anorexia, thrist, insomnia, vertigo, tinnitus aurium, deafness, nausea, vomiting, cough, epistaxis, abdominal pains, tenderness, diarrhœa and constipation. The relative frequency of these symptoms as applicable to the foregoing series of cases may be seen by the following tabular statements: -

TABLE SHOWING THE RELATIVE FREQUENCY OF SOME OF THE MORE MARKED SYMPTOMS IN THE EARLY STAGES OF THE 131 CASES OF TYPHOID FEVER WHICH TERMINATED IN RECOVERY.

EARLY STAFFORS.	Chills.	Headache.	Pains in back and limbs.	Stiffness or soreness of muscles.	Sense of fatigue, lassi- tude or malaise.	Weakness or exhaustion.	Vertigo.	Tinnitus aurium.	Deafness.	Insomnia.	Epistaxis.	Cough.	Anorexia.	Thirst.	Nausea.	Vomiting.	Abdominal pains.	Diarrhea.	Constination.
Noted in how many cases.	82	100	51	13	39	36	28	8	8	18	85	28	62	19	21	27	88	51	23

TABLE SHOWING THE RELATIVE FREQUENCY OF THE MORE PROMINENT AMONG THE EARLY SYMPTOMS IN 17 OF THE 21 FATAL CASES RECORDED IN THE FOREGOING SERIES:—

EARLY SYMPTOMS.	Chills.	Headache.	Pain in back and limbs.	Soreness of muscles.	Lassitude and malaise.	Weakness & exhaustion.	Vertigo.	Tinnitus aurium.	Insomnia.	Epistaxis.	Cough.	Anorexia.	Thirst.	Nauses.	Vomiting.	Abdominal pains.	Diarrhoa.	Constipation.	Delirium.	Tenderness.	Tympanites.
Noted in how many cases.	12	12	10	1	6	2	2	2	2	5	8	8	1	8	5	3	•	1	1	2	1

In four of the fatal cases the early symptoms are not stated.

It must be borne in mind that it is merely attempted to show here the comparative frequency of such symptoms as were sufficiently marked to attract the

attention of the patients or their friends early in the disease, in most instances before they had come under the observation of the hospital physician. It is only with this understanding that these figures can be of any interest or importance.

Prominent among the symptoms noted in the more advanced stages of the fever may be enumerated the following, viz: chills, headache, apathetic look, flushed face, hot and dry skin, rose spots, sudamina, insomnia, delirium, vertigo, tinnitus, deafness, epistaxis, cough, vomiting, brown and dry tongue, sordes, abdominal pains, tenderness, tympanites, gurgling in iliac fossae, diarrhea, constipation, involuntary dejections, hemorrhage from the bowels, subsultus tendinum and coma-vigil, the relative frequency of which may be seen by the tables below:—

TABLE SHOWING THE RELATIVE FREQUENCY OF THE MORE PROMINENT SYMPTOMS OCCURRING IN THE ADVANCED STAGES OF THE 131 CASES OF TYPHOID FEVER WHICH TERMINATED IN RECOVERY.

ADVANCED STAFFOMS.	Chills.	Headache.	Dulness and apathy.	Flushed face.	Increased heat of surface.	Vertigo,	Tinnitus aurium.	Deafness.	Epistaxis.	Anorexia.	Thirst.	Cough.	Vomiting.	Rose spots.	Sudamina.	Insomnia.	Delirium.	Exhaustion.	Brown and dry tongue.	Sordes.	Abdominal pains.	Tenderness.	Tympanites.	Gurgling.	Diarrhoa.	Constipation.	Involuntary dejections.	Hemorrhage from bowels	Subsultus tendinum.	Coma-vigil.	Excorlation of sacrum.
Noted in how many cases.	5	33	38	42	54	22	5	13	22	20	32	51	18	94	12	54	40	28	39	20	24	82	54	43	48	63	2	2	3	1	1

TABLE SHOWING THE RELATIVE FREQUENCY OF THE MORE MARKED SYMPTOMS OCCURRING IN THE LATER STAGES OF THE 21 FATAL CASES OF TYPHOID FEVER NOTED IN THE FOREGOING SERIES:—

ADVANCED SYMPTOMS.	Chills.	Headache.	Exhaustion.	Apathy.	Flushed face.	Hot skin.	Vertigo.	Deafness.	Epistaxis.	Cough.	Nausea.	Vomiting.	Rose spots.	Sudamina.	Brown and dry tongue.	Sordes.	Insomins.	Delirium.	Abdominal pains.	Tenderness.	Tympanites.	Gargling.	Diarrhœa.	Constipation.	Involuntary dejection.	Hemorrhage from bowels	Subsultus tendinum.	Coma.	Excoriation of sacrum.
Noted in how many cases.	1	<b>2</b>	6	8	7	9	1	2	3	7	1	4	15	2	15	12	6	18	7	15	10	7	10	8	9	в	8	5	2

It appears from the foregoing statements taken together, that chills, headache, anorexia, pain in the back and limbs, epistaxis, a sense of lassitude, exhaustion, abdominal pains and diarrhea, were among the most constant of the early symptoms, being noted respectively in 94, 112, 68, 61, 45, 40, 38, 36 and 58 cases; while in the later stages the symptoms and phenomena more frequently observed were rose spots, abdominal tenderness, tympanites, gurgling in iliac fossae, constipation, diarrhœa, hot skin, delirium, insomnia, cough, brown and dry tongue, &c., these symptoms being noted in 109, 97, 64, 50, 66, 58, 63, 58, 60, 58 and 54 cases respectively. The comparative frequency of constipation, as noted both among the earlier and later symptoms in these tables, is at variance with our previously conceived notions and observations of this disease; indeed, from a closer review of the records, I am inclined to the belief that

in very many cases, absence from diarrhea, or what would in most diseases be termed a normal quietude of the bowels, has here been put to the account of constipation. Naturally enough, such misapplication of terms might get upon the record in a fever where the expectation of the opposite symptom is so constantly present in the mind of the physician. I cannot otherwise explain the frequent mention of a symptom so much opposed to previous observation and experience.

It may be interesting, in this connection, to append a tabular statement showing in condensed form the relative frequency of these more prominent symptoms as noted at some period of the disease, in all the recorded cases, as follows:—

TABLE SHOWING THE RELATIVE FREQUENCY OF THE PROMINENT SYMP-TOMS NOTED AT SOME PERIOD OF THE FEVER IN ALL THE CASES RECORDED IN THE PRECEDING SERIES.

Chills.	Headache.	Pain in back and limbs.	Muscular soreness.	Apathy.	Lassitude and malaise.	Flushed face.	Hot skin.	Anorexia.	Thirst.	Nausea,	Vomiting.	Vertigo.	Tinnitus.	Deafness.	Insomnia.	Delirium.	Epistaxis.	Cough.	Brown and dry tongue.	Ú	Abdominal pains.	Tenderness,	Tympanites.	Gurgling.	Diarrhea.	Constipation.	Rose spots.	Sudamina.	Exhaustion.	Involuntary dejections.	Hemorrhage,	Subsultus.	Coma.
97	119	74	14	46	56	49	67	82	51	26	44	45	9	17	74	58	57	74	58	32	48	97	64	50	81	71	109	14	50	12	8	11	6

I am by no means certain that in even a majority of the cases recorded in the clinical ward-books, all the important and characteristic symptoms of the disease have been noted. I do not claim, therefore, for these numerical statements, anything more than a comparative exhibition of the facts and phenomena that most prominently arrested the attention of the physician in his morning round at the hospital. This visit is oftentimes necessarily a hurried one, and the number of patients allotted to his charge is always too great to allow, in the limited time at his command, a careful and minute examination and recording of individual cases. Indeed, if thoroughly accurate numerical results are ever to be looked for in the analysis of our hospital records, the allowance of professional observers, as well as of clinical clerks, must be largely increased.

The Result. — Of the 152 cases recorded in these tables, 131 recovered, and 21 died. Of the fatal cases, 13 were males, 8 were females, the mortality being in the ratio of 1 to  $7_{100}^{23}$  cases. It is proper to add that four of these patients were insensible and in a well nigh hopeless condition when brought into the hospital.

TREATMENT.— This was mainly expectant, as will appear by the synopsis given in the tables. When an aperient was required, castor oil, alone or in emulsion with gum acacia, was commonly employed. Oftentimes a very small dose, from 3i. to 3ii., was found to be sufficient to produce the desired effect. In cases attended with restlessness and insomnia eight to ten grains of Dover's powders, or <sup>8</sup> of a grain of morphia (in the form of the officinal solution of the sulphate), for an adult, was administered at bedtime. A somewhat free use of the bromide of potas-

sium was also made for the purpose of quieting nervous irritability and inducing sleep,—and with reasonable success. Tepid or cool sponging was employed to reduce the temperature, and produce diaphoresis in patients having a dry and hot skin. A fever mixture, consisting of

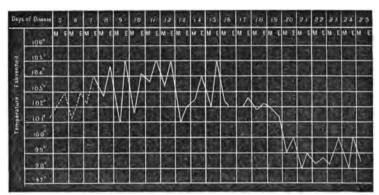
was added if the restlessness and fever was excessive. Camphor water or Hoffman's anodyne was given to allay wakefulness and nervous agitation. Occasionally the oil of turpentine was exhibited with marked benefit, in cases like those which have been described by Dr. George B. Wood, when, in the advanced stages of the disease, the tongue after cleaning partially becomes suddenly hard and dry, with increase of tympanites and aggravation of the other abdominal symptoms. In such condition eight to ten drops of the oil were administered, in emulsion with gum arabic and sugar, repeated at intervals of three or four hours, till the effect became manifest. Cold water, milk and water, and a weak infusion of flaxseed, were freely allowed as drinks. In the debility consequent upon the latter stages of the disease, or at whatever period of the fever depression and exhaustion of the vital power was manifest, recourse was had to tonics and stimulants, proportioned in amount and activity to the degree of prostration present. tea, wine-whey, brandy and whiskey, and the carbonate of ammonia were the stimulants used. The strictest

attention to the nature of the diet was enjoined throughout the whole course of the disease. None but mild and unirritating articles were allowed until convalescence was fully established; from this category the nutritious elements were by no means excluded. During convalescence quinine and the various combinations of iron and bark were used with gratifying success.

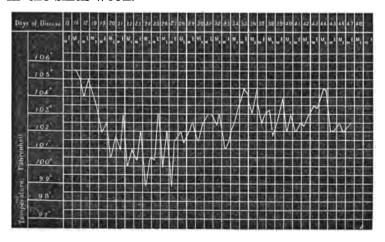
In the remarks appended to the abbreviated tabular history of the foregoing series of cases, the pulse rate and the temperature of the patient at the time of admission to the hospital is set down when such information is afforded by the records. The highest pulse rate and the highest temperature has also, in a considerable number of cases, been given. In 65 cases of recovery the average highest pulse rate was 108; in 14 fatal cases the average highest pulse rate 140. In 41 cases of recovery the average highest temperature was 104° 1′; in 6 fatal cases the average highest temperature was 105° 7′.

The daily variations of the temperature in two cases, one terminating in recovery, the other in death will appear in the following diagrams.

Case. I. (No. 74 of the foregoing series). A laboring man, æt. 21, — admitted Nov. 19, 1866, — had several days previously a general feeling of uneasiness and malaise, with headache, followed by dizziness, epistaxis, anorexia, vertigo, muscular pains; later, hot and dry skin, loaded and dry tongue, thirst, restlessness, tympanites, tenderness, gurgling, etc. Pulse varying from 76 to 96. Convalescence on the 25th day, — recovery.



Case II. (No. 104 of the Series.) A servant girl, æt. 21, — admitted Sept. 30, 1867, — after several days ill-defined sense of uneasiness, depression and malaise had, five days before entrance, chills followed by heat, general muscular pains, headache, abdominal distress, constipation; later, flushed face, anorexia, cough, vomiting, diarrhæa, rose spots, dry and brown tongue, sordes, tenderness, pain at epigastrium, delirium, involuntary dejections, excoriations of the sacrum, hemorrhage from the bowels, — death in the sixth week.



The complications noted were pneumonia, which occurred in 11 cases, bronchitis in 7, incipient phthisis in 5, cerebro-spinal meningitis in 3, gastric irritation in 3, hysteria in 3, rheumatism in 2, pleurisy in 2, functional disease of the heart in 2, tonsillitis in 1, erysipelas in 1, pericarditis in 1, and vesical irritation with dysuria, in one case. The sequelæ recorded were furunculi in 4 cases, glandular inflammation and suppuration in 2 cases, abscess in 2 cases, and phlebitis in 1 case. The state of the general health prior to the attack of fever was recorded in 131 cases, of which 77 were males, and 54 were females. Of the 77 males 63 were reported to have been in good, and 9 in impaired health; of the 54 females 41 had been in good health, and 13 in poor health. 'Of the 21 fatal cases 11 were noted as having been in previous good health, and 4 in impaired health. The average time at which the rose spots were first seen, as gathered from the history of 65 cases in which this fact was particularly noted, was between the 12th and 13th days. It is quite likely the spots might, in many cases, have been seen earlier, if close attention had been directed to Autopsies were obtained in five cases this point. only. Of these a moderate degree of rigor mortis was noted in two cases; fibrinous coagula in the cavities of the heart, in two cases; hypostatic congestion of the lungs, in two cases; enlarged or softened spleen, in four cases; prominence of the mesenteric glands, in one case; ulceration of the large intestines, in four cases; and thickening and

ulceration of Peyers' patches in all the cases. regard to the etiology of the fever not much light can be gathered from the records. Dr. Morland has, however, reported in extenso several cases of the disease (included in the preceding tables) which came under his care, in which he traces the origin of the fever to the presence of bad air, filth and insufficient drainage, to which all the patients in his group of cases had This interesting report of Dr. Morbeen exposed. land, may be found in the Boston Medical and Surgical journal, No. 13, Vol. LXXVII. In the great majority of the cases comprised in the preceding tabular series, however, the origin and cause of the fever is only a matter of conjecture.

We append to the succinct analysis of the tabular sketches above given, a detailed history of one or two cases included in the series, for the purpose more especially of consideration and comparison with the ordinary progress and phenomena of typhus fever, to which attention will be called in another part of this paper. The subjoined may be regarded as fair average examples of the fever seen in its moderately severe, and its fatal forms.

Case I.— (No. 87 of the preceding series.) M. T——, a woman, aged 34, living under favorable hygienic conditions, without known cause, after a few days of lassitude and general malaise, had pain in head, back and limbs, chills, anorexia, epistaxis, cough, loaded tongue, diarrhea, tenderness and gurgling in iliac fossæ, rose spots on the 11th day, ten-

dency to stupor, gradual amendment, convalescence on the 30th day, tonsillitis a few days later,—recovery.

Previous history and condition. — This patient was a native of Nova Scotia, and by occupation a cook in a family in this city. Her previous health had been good, habits regular, no known hereditary tendency to disease. So far as known, the hygienic surroundings in which she lived were good.

Present attack. — Ten days before admission to hospital the patient had headache, with pain in back and limbs, accompanied with loss of appetite, and a sense of weakness and general malaise. She had subsequently chills followed by heat, and sometimes diaphoresis. Has had nausea, but no vomiting. Her bowels have inclined to be costive. This condition of things has continued without essential variation till now (March 4th, 1867), at which time she first came under observation at the hospital. Her general appearance indicates a moderately severe attack of fever. Patient complains of debility and great weakness, and pains throughout the whole body. bitus on the side. She has dizziness on rising. There is great tenderness in the right iliac region. The abdomen is soft and natural to the feel. tongue is dry and thickly coated at base. tite; great thirst. Patient is restless and wakeful at Her urine is of dark color, and is passed with some difficulty. One dejection. Pulse 100; respiration 32; temperature 101°5′, at evening.

spts. mindereri zi. every 3 hours. Pulv. ipecac et opii. grs. x. at night.

March 5th. — Some dulness of expression, extreme tenderness over right iliac region. One or two rose spots are seen. Pulse 88; temperature 99°5', morning, 103°, evening. To have milk and water, flaxseed tea, mild farinaceous diet. Spts. mindereri p.r.n. Dover's powder repeated at night.

6th.—Increased headache, eyes somewhat suffused and sensitive to light, tinnitus aurium. Has had epistaxis and vomiting. Tongue more loaded, and somewhat swollen. There is pain throughout the back, a sense of soreness in the bowels, great tenderness over the right iliac region, tenderness and soreness also at epigastrium. Pulse 120, of moderate strength and volume. To have lime water and milk, sinapism to epigastrium.

R. Liq. ammon. acetat. acetat. once every three hours.

7th.—Some apathy of expression, intelligence good, great sense of exhaustion. The headache has diminished, pain in back and limbs continues, tongue moist, with thin milky white coat evenly diffused, less tenderness at epigastrium and right iliac region. Pulse 120, of moderate fulness, compressible; fever mixture to be continued, with milk and water in equal parts for drink. To have castor oil 3iij in emulsion with mucilage of acacia.

8th.—Cephalalgia still continues. A little tendency

to stupor, but intelligence complete on being aroused; tongue as yesterday, cheeks flushed, tenderness and pain in right iliac, with some tympanites. Ten or twelve more rose spots have appeared. Pain at epigastrium still severe. Pulse 116, regular, soft, compressible. Five dejections from the oil of yesterday.

9th.—Less hebetude, intelligence good, tongue dry and brown in centre, skin dry, pulse 100, regular, soft, compressible. There is some pain on taking a full inspiration, less tenderness over right iliac region, gurgling. Wine whey vi., in divided doses during the day.

10th.—General expression of exhaustion, conjunctive somewhat injected, no headache, slight flush on cheeks, tongue red and dryish in centre, coated at the sides. Tympanites, and gurgling in right iliac continues. There has been some cough during the night with expectoration of glairy mucus. Auscultation and percussion give no abnormal signs. To continue the wine whey.

11th.—Patient makes no complaint of pain, tongue covered with a yellowish white fur at base, redder than natural at tip and edges, abdomen less tender, no tympanites, pulse 116, regular, of moderate volume and strength.

12th.—General expression better, skin cool, moist, abdomen only slightly tympanitic, appetite beginning to improve, pulse 108, full and regular. May have chicken broth to-day at dinner.

13th.—No pain, tongue cleaning, moist, some cough, abdomen less tender on pressure, no tympan-

ites, one dejection since yesterday, pulse 92, regular, of moderate strength and volume. Patient slept well last night.

R. Fl. ext. cubeb. 3i. Syrup. tolu 3i cap. 3i p. r. n. To have beef tea.

14th.—Patient had yesterday afternoon a period of chilliness, followed by heat; slept but little during the night. Countenance this morning apathetic, and expressive of exhaustion. The cough has subsided. Tongue red, shiny, thickly coated in centre, inclining to dry; bowels more tender, some tympanites. There has been diarrhæa with numerous watery discharges attended with flatus, pulse 118, soft and compressible.

Rt. Pulv. ip. et opii. gr. i. every hour till diarrhœa is checked.

R. vin. oporto 3 ss. every four hours. Omit the wine whey.

I find no notes of this case on the 15th.

16th.—Patient has had five dejections during the night, none this morning; no headache, skin cool and natural, tongue less dry and red, covered with a milky white coat in centre; only slight tympanites and tenderness of abdomen, pulse 96.

17th. — One dejection only since yesterday, tongue much the same as at previous visit, general condition of the patient improved; no pain, pulse 92. Asks for and may have soft boiled egg at dinner.

18th.—Condition still improving, tongue nearly normal in appearance; no pain, no tenderness on pressure over abdomen, but little tympanites, appetite improving. May have eggs, with cocoa or shells in the morning.

20th.—A little blood appeared in the dejection last night. No tenderness excepting over epigastrium, no tympanites; tongue nearly clean, pulse 92, regular. Turpentine stupe to abdomen.

R. Pulv. ip. et opii. gr. i. every hour till eight grains have been taken.

21st. — Two dejections since last visit, the first tinged with blood, the second natural. No pain, no tenderness, no tympanites; tongue clean and moist.

22d.—Tongue nearly clean and natural; no dejections since yesterday, no pain, no tenderness; pulse 68, soft, compressible. Port wine to be omitted. Patient began to convalence from this time. On the 24th the pulse had fallen to 60, all symptoms favorable. days subsequently, during convalescence, the patient was attacked with soreness of the throat, accompanied by dysphagia, and stiffness of the muscles on the right side of the neck. On examination, the right tonsil was found to be swollen and covered with a whitish exudation. The pulse had risen to 120. liniment of soap and opium was applied to right side of neck, and an application of a solution of permanganate of potash (grs. ii., in aquæ 3 i.,) was made to the tonsil. The next day the pulse had receded to 96, the skin was again moist and natural, the tongue There was great tenderness over the furred at base. parotid region on the right side, and to a less extent, on the left, with excessive dysphagia. In a few days these symptoms disappeared, and the convalescence proceeded rapidly and without further hindrance, and on the 6th of April she was discharged, well

Case II.—(No. 81 of the tabular series.)—A man, aged 23, born in England, a salesman by occupation, previous history not ascertained, cause and previous duration of fever unknown, delirious at entrance, severe epistaxis, hebetude, brown dry and caked tongue, rose spots at entrance, diarrhæa, weak and compressible pulse, involuntary dejections, jactitation, subsultus, carphologia; death on the 12th day after admission,—autopsy.

This patient was brought to the hospital May 10th, 1867. No reliable particulars of his previous condition could be obtained. At the time of admission he had profuse epistaxis, which could only be checked by plugging the posterior nares. The first notes of this case, taken May 11th, the day after admission to hospital, are as follows: Aspect of patient extremely pale, expression dull, apathetic, breath very offensive, tongue hard, dry, caked; abdomen flat, pulse 130; eight or ten doubtful looking rose spots are seen. On the 12th, his condition was as follows: Pulse 124, very weak, tongue dry, brown, almost black; gurgling in the iliac fossæ, delirium constant. To have brandy zviii. during the day, also carbonate of ammonia grs. v. four times a day. 13th. Delirium constant and increasing, subsultus tendinum, picking at the bed-clothes, pulse 130, very weak. Brandy and beef tea to be administered per rectum. 15th. Pulse 120, very weak; patient restless, inclining to coma. Picking at bed-clothes continues. On the 17th, his condition seems somewhat improved. which improvement was still more noticeable on the

18th. From that time onward he gradually sank, and died at 3 P. M., on the 22d.

Autopsy, -19 hours after death, showed moderate emaciation, and some lividity of depending portions of the body. About a drachm of serum was found in each lateral ventricle of the brain, subarachnoid fluid inconsiderable, no turgidity of the cerebral veins; a rather slender, firm, fibrinous coagulum found in each side of the heart, the right side flaccid and containing but little fluid blood; two ounces of serum in the pericardium, some slight pleural adhesions. Intermingled with the healthier portions of the lungs was a pretty general deposit of miliary tubercle, mostly collected in small groups; there was some hypostatic congestion in the lower lobes, of which portions were friable, but crepitant. There was marked vascular injection of the internal surface of the cardiac pouch of the stomach. Pevers' patches large and distinct; superficial ulcerations of their mucous surface very marked in the vicinity of ileocœcal valve, but noticeable to the extent of nine feet above that point. A rather numerous group of whitish spots, quite small and ill-defined, looking like a circumscribed thinning and softening of the mucous membrane, in part showing traces of ulceration, were noticed in the upper part of the large The liver was rather pale, otherwise norintestine. mal; gall bladder distended with a pale-vellow fluid; spleen rather soft, a little above the normal size, kidneys normal; the mesenteric glands reddened, but slightly, if at all enlarged.

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#### TABULAR HISTORY OF 38 CASES OF TYPHUS

No. of Case.	Name and Oc- cupation. Vol.	γge.	When admitted.	Days ill be- fore entrance.	Duration till convales- cence or death.	Result.	SYMPTOMS.
Ž	and page of record.	•	₽₽	Day o e o	D B B B	<u> </u>	· Early.
1	M. A. T., American ser- vant girl. Vol. 4, page 285.	13	1865. Sept.14.	14	82 days.	Well.	Sudden seizure with head- ache, severe pains in back and limbs, also pain in epi- gastrium, anorexia, insom- nia.
2	A.M., American school girl. Vol. 6, page 66.	9	Oct. 22.	6	16 days.	Well.	Sudden attack, anorexia, thirst, great heat of body, delirium, headache, general pains, &c.
8	G. G., Prussian machinist. Vol. 6, page 92.	21	Oct. 28.	4	19 days.	Well.	Headache, anorexia, consti- pation, vomiting, pains throughout body.
4	T. D., American newsboy. Vol. 5, page	17	1866. Feb. 10.	Not defi- nitely known.	In hosp. 8 days.	Dead.	Not stated.
<b>5</b>	J. Y., American hostler. Vol. 7, page	86	Apr. 10.	7	15 days.	Well.	Attack sudden; chills, followed by heat, headache, pain throughout body, soreness of muscles.
6	D. M., Irish laborer. Vol. 7, page 124.	21	Apr. 8.	. 8	13 days.	Well.	Chills, nausea, vomiting, general malaise, dry cough, sibilant râles under clavicies, thick, yeilowish coat on tongue, restlessness.

#### FEVER, TREATED IN THE BOSTON CITY HOSPITAL.

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SYMPTOMS.  Advanced.	Treatment.	Name of Physician	Remarks-
Sense of great exhaustion, pain in bones and in epigastric region, anor-xia, insomnia, natural and cool skin, pasty coat on tongue, some talkative delirium. On or about 6th day, according to patient's account, an eruption appeared covering the entire trunk and extremities, of bright red color, not elevated above the surface, which after a few days vanished. Constipation.	Fever mixture, simple enema, — milk and beef tea.	Reynolds.	Previous health good. Had been taking care of children "sick with fever," for two weeks before commencement of disease. Pulse 96 at entrance.
Flushed face, injected eyes, drowsiness, great heat of surface, dry and parched tongue, sordes, abdomen flat, tendency to constipation. On 26th was noted "slight petechies on many parts of body."	Fever mixture, enema, wine whey, whiskey, milk, beef tea.	Reynolds.	Previous health good. Pa- tient lived in a dry local- ity, but there were six per- sons (old and young) "sick with fever" in the same house, four sick in the same room which the child occu- pied. Pulse 124 at entrance; highest pulse rate 132.
Flushed face, dry and hot skin, restlessness, moist, heavily loaded tongue, abdomen natural, profuse perspiration on 4th and 5th days, much nervous agitation, subsultus, delirium at night, constipation. On the 8th Nov. was noted "body covered with eruption of minute papules, of a dull red color becoming vesicular." Noted as "fading," on the 11th.	Fever mixture, morphia, p. r. n., enemata, whiskey, milk, and beef tea.	Reynolds.	Previous health good. Pulse 108 at entrance, — at no time higher.
Delirium, sordes on teeth and lips, pain in head, skin hot and dry, pulse weak and compressible, pungent heat of surface, contracted pupils, brown and dry tongue, abdomen shrunken, pain and gurgling in right lilac fossae, constipation, subsultus.	Dover's powder, fever mixture, enema- ta, flaxseed tea, ice, sponge bath daily, brandy, quinine, milk and beef tea ad lib- itum.	Upham.	Previous health generally good; hygienic conditions of life bad. Purpuric eruption manifested itself two days before death. Delirious throughout case. Pulse 112; temperature 105° 4′ the day after entrance; temperature had become nearly normal for two days before death. Highest pulse rate 124.
Hot and dry skin, tongue coated in centre, pulse occasionally intermittent, some tympanites and tenderness of abdomen, subsultus, abundant eruption on chest, arms, and abdomen, some fading on pressure and others not; first noted by patient on the 7th day of the disease, constipation.	Dover's powder, flax- seed tea, sweet spirits of nitre, sherry wine, ice, infus. cinchon. comp.	Morland.	Previous health good. Attacked after severe exposure. Pulse ranged from 68 to 108.
Light florid eruption over chest and arms at entrance, griping pains in abdomen, constipation.	Dover's powder, flax- seed tea, sweet spirits of nitre, sponge baths, castor oil, sherry wine, quinine.	Morland.	Previous health good. Pa- tient left Steamer Etna one week before entering hos- pital; no fever on board ship. Pulse 88 at entrance, with but little variation. Abundant sweating on 14th day, with moist skin, dimin- tished coat on tongue; erup- tion disappeared on the 8th, and convalescence began.

No. of Case.	Name and Oc- cupation. Vol.		When admitted.	Days ill be- fore entrance.	Duration 1 convales- cence or death.	4	SYMPTOMS.
No. 0	and page of record.	Age.	M M	Days fore en	Duration till convaler cence or death.	Result.	Early.
7	W. S., Irish laborer. Vol. 7, page 126.	22	1866. April 4	9	22 days.	Well.	Epistaxis, delirium, cough, constipation.
8	E. S., Prince Edw'd Island servant maid. Vof. 8, page 82.	22	June 12	8	27 days.	Well.	Headache, muscular pains, slight diarrhea, vomiting, hot and dry skin, insomnia.
9	C. B., Irish seamstress. Vol. 9, page 86.	37	June 25	14	21 days.	Well.	General malaise, "burning heats," constipation.
10	J. M., Irish boy. Vol. 9, page 78.	8	June 21	6	16 days.	Well.	Malaise, anorexia, headache, increased heat, abdominal pain, constipation.
11	P. M., Irish laborer. Vol. 9, page 82.	45	June 23	7	13 days.	Well.	Sudden attack, chill, head- ache, anorexia, thirst, sense of exhaustion.
12	M. D., Irish maid-servant. Vol. 9, page 94.	25	June 30	7	14 days.	Well.	Chills followed by heat, general malaise, anorexia, constipation.
13	A. M., Irish maid-servant. Vol. 9, page 102.	22	July 7	11 .	14 days.	Well.	Chill, pain at epigastrium, vomiting, insomnia, constipation.
14	E. B., American school girl. Vol. 9, page 113.	14	July 10	14	20 days.	Well.	Loss of appetite, pains in neck, knees and back, "flushes of heat." headache, "cramps in the stomach," constipation.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Dark purple eruption on chest and abdomen, noted at entrance, not fading on pressure, brown, dry tongue, constipation.	Dover's powder, castor oil, flaxseed tea, broth, sherry wine, cod liver oil, quinine.	Morland.	Previous health good. Came from the same steamer as No. 7. Pulse full at en- trance, ranged between 56 and 80. Spots disappeared on 18th day.
Apathetic face, dusky hue, suffused eyes, measles-like eruption scattered over abdomen, back and sides, at entrance, later on arms, legs, dry and cracked tongue, delirium, stupor.	mixture, wine, qui-	Upham.	Previous health good. Patient lived in a very unhealthy locality; children in family were sick with "some kind of fever." Whole appearance of patient was characteristic of one suffering from typhus. Tedious convalescence from complication with ecthyma and rheumatic pains. Pulse 112 at ent'nce; highest pulse 128.
Tongue dry and red, consti- pation, eruption on abdo- men at entrance, not fading on pressure, mild delirium.	baths, enemata, sherry	Morland.	Previous health good. This patient lived in an unfavorable locality, and worked hard upon poor food. She had three children "sick with fever." The pulse was 108, feeble, undulating, at time of entrance; highest pulse rate 116. She had a protracted convalescence.
Headache, somnolence, hot and dry skin, dry and loaded tongue, constipation, absence of other abdominal symp- toms.	Fever mixture, castor oil, sponge baths,	Morland.	Previous health good. Pulse 108 at entrance, at no time higher. Child of cases Nos. 11 and 23, and brother of case No. 22.
Headache, hebetude, moist, slightly coated tongue, cough with expectoration, hot and dry skin, weak compressible pulse, slight diarrhea, no tenderness, tympanites or gurgling.	sponge baths, brandy.	Morland.	Previous health good. Highest pulse rate 84. This patient was father of cases Nos. 10 and 22, and husband of case No. 23.
Flushed face, dry and coated tongue, moist, hot skin, dusky eruption on chest and abdomen at entrance, mus- cular tremors, constipation.	Castor oil, fever mix- ture, flaxseed tea, wine, quinine.	Morland.	Previous health good. Pattent came from Ireland eight weeks before her present illness. There was no sickness on board ship. Pulse 76 at entrance; highest pulse rate 84.
Loss of appetite, sense of exhaustion, dusky hue of face, pungent skin, foul emanations from the surface, epigastric and abdominal pains, "a few spots on chest and abdomen not fading on pressure" noted at entrance, constipation.	Mild mercurial ca- thartic, milk, beef tea, wine, quinine.	Morland.	Previous health good. Pulse 80 at entrance. This patient had recently arrived from Glasgow. Convalescence was prolonged by gastric irritation, which existed as a complication.
Headache, whitish coat on tongue, afterwards red and dry, hot skin, restlessness, wandering delirium, pain at umbilicus, pains in feet and legs, an indistinct dusky eruption scattr'd over chest, arms and abdomen noted at entrance, constipation.	Fever mixture, flax- seed tea, Dover's powder, sponge baths, enemata, sherry wine, quinine.	Morland.	Previous health delicate. Pulse 92 at entrance; high- est pulse rate 100.

=	Name and Oc-		7 %	= 1 .	1		SYMPTOMS.
No. of Case.	cupation. Vol. and page of record.	Age.	When admitted.	Days ill before en- trance.	Duration till convaler cence or death.	Result.	Early.
15	M. A. B., English maid servant. Vol. 9, page 125.	39	1866. July 20.	14	24 days.	Well.	Headache, pain in back and limbs, nausea, vomiting "soreness at epigastrium."
16	J. F., Irish coffin-maker. Vol. 9, page 128,	49	July 20.	5	9 days.	Dead.	Chill, pain throughout the body, anorexia, nausea vomiting.
17	J. C., Irish laborer. Vol. 10, page 13.	24	Mar. 23.	7	13 days.	Well.	Headache, general malaise, confused intellect, dusky hue of face, hot and dry skin.
18	E. C., Irish maid servant. Vol. 10, page 22.	20	Mar. 30.	7	22 days.	Well.	Cough, disturbed sleep, vague pains, difficult respiration, increased pulses, general malaise, slight diarrhœa.
19	E. H., American girl. Vol. 10, page 20.	14	Mar. 28.	14	22 days.	Well.	Headache, nausea, pain in chest, hot and dry skin.
20	W. McC., American er- rand boy. Vol. 10, page 100.	15	Apr. 26.	14	21 days.	Well.	Lassitude, hot and dry skin, soreness of muscles, chills, pain in back and limbs, pain at epigastrium, vomiting.
21	C. C., Irish maid servant. Vol. 10, page 248.	27	June 19.	7	22 days.		Headache, pain in back and legs, hot and dry skin, rest- lessness, anorexia, excessive thirst, prostration.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Deafness, brown and loaded tongue, maculated eruption over abdomen at entrance, regular bowels.	sponge baths, sherry	and	Previous health good. Patient had attended a child "sick with fever." The mother of said child has since had fever. Highest pulse-rate 118. Lingering convalescence.
Pain in occipital region, dry tongue, weak and undulat- ing pulse, oppressed breath- ing, general prostration, a dark eruption over abdo- men, persistent under press- ure, noted at entrance.	Castor oil, fever mix- ture, flaxseed tea, sponge baths, brandy, sherry, carbonate of	Morland.	Previous health good. Pulse 96, and very feeble at entrance. The wife of this patient died of fever after an illness of two weeks. The wife's sister was admitted to hospital with typhus and recovered; see case 21.
Epistaxis, sub-livid counte- nance, dry and cracked tongue, sordes on teeth, hurried respiration, irregu- lar and moderately full pulse, maculae over abdo- men, chest, arms and legs, smail in size, some disap- pearing under pressure, others not, foul emanations from body, coma.	Castor oil, Dover's powder, fever mix- ture, sherry wine.		Patient came off emigrant vessel the day before com- plaining of disease. Had some slight sickness while aboard ship. Pulse 120, ir- regular at entrance, at no time higher. Patient par- tially comatose. Typhus spots first noted day after entrance.
Hot and dry skin, flushed face, deafness, stupor, abdomen full, tympanitic, gurgling in right liac fossa, small distinct reddish eruption, persistent on pressure, profusely scattered over abdomen, thorax, and to some extent on extremities, noted April 1st.	mixture, anodynes, wine whey, port wine, afterwards sherry, beef tea.	Blake.	Previous health good. Pulse 108, regular at entrance, 120 April 1st. Spots seen April 1st. April 7th sound sleep and profuse perspiration occurred, followed by apparent convalescence on the 8th. Subsequent relapse and convalescence established on the 14th. Tedious recovery. Highest pulse rate 128.
Suffused eyes, dusky face, hot skin, dry and brown tongue, delirium, subsultus, foul emanations from body, sordes on teeth and lips.	Flaxseed tea, demulcents, wine, broth, milk.	Upham and Blake.	Previous health good. The condition of this patient on admission was that of stupor and great prostration. Highest pulse rate 104.
Flushed face, dull look, thick, yellowish coat on tongue, dry and cracked lips, sordes on teeth, urgent thirst, slight tympanites, dark persistent eruption over body and extremities at entrance, contracted pupils, constipation.	Mild cathartics, fever mixture, milk, beef	Blake.	Previous health good. Pulse 100, respiration 32; tempera ture 101°, at entrance. High- est pulse-rate 100; highest temperature 103°
Suffused eyes, distressed countenance, loaded and dry tongue, pungent sensation of skin, great thirst, insom nia, dark purplish eruption on arms, abdomen and thorax, noted at entrance, later on legs; delirium, diarrhea alternating with constipation, stupor	Sweet spirits of nitre, Hoffman's anodyne, beef tea, wine whey, sherry, brandy, quin- ine, phosphate of iron.	Blake and Reynolds.	Pulse 120 at entrance, at no time higher; respiration 40 at entrance. This patient came from the ship one week before commencement of her illness; a well marked crisis with profuse perspiration occurred July 4th, the date of commencing convalescence. Patient was retained in the hospital six weeks after the fever, for vague rheumatic pains,—sister to wife of case 16.

cupation. Vol.	6	Wheh admitted.	Days ill before en- trance.	Duration till convales- cence or death.	Result	SYMPTOMS.  Early.
D. M., Irish boy. Vol. 10, page 258.	Not stated.	June 21	6	20 days.	Well.	Sense of weakness in lower extremities, pain in back, vertigo, malaise, urgent thirst, pyrexia.
A. M., Irish housewife. Vol. 10, page 262.	38	June 22	6	10 days.	Dead.	Headache, pain in back, vertigo, general malaise, "weakness" in lower ex- tremities, anorexia, consti- pation.
A. McB., Amer. girl. Vol. 10, page 270.	10	June 25	7	17 days.	Well.	Headache, pain in back, hot skin, anorexia, thirst.
M. B., American nurse. Vol. 12, page 23.	46	1866. July 9.	2	9 days.	Dead.	Headache, general malaise, feverishness, anorexia, thirst, constipation.
R. G., Irish laborer. Vol. 14, page 174.	22	Dec. 19	4	14 days.	Well.	Chill, headache, pain in bones, vertigo, cough, nau- sea, vomiting, anorexia.
E. C., American black- smith. Vol. 13, page 34.	24	1867. Jan. 11	15	27 days.	Well.	Chills, headache, pain in back and limbs, vertigo, muscular pains, epistaxis, vomiting, slight diarrhœa.
	cupation. Vol. and page of record.  D. M., Irish boy. Vol. 10, page 258.  A. M., Irish housewife. Vol. 10, page 262.  A. McB., Amer. girl. Vol. 10, page 270.  M. B., American nurse. Vol. 12, page 28.  R. G., Irish laborer. Vol. 14, page 174.	D. M., Irish boy. Vol. 10, page 258.  A. M., Irish housewife. Vol. 10, page 262.  A. McB., Amer. girl. Vol. 10, page 270.  M. B., American nurse. Vol. 12, page 28.  R. G., Irish laborer. Vol. 14, page 174.  E. C., American blacksmith. Vol. 13, page 24.	Cupation. Vol. and page of record.	D. M., Irish boy. Vol. 10, page 258.  A. M., Irish housewife. Vol. 10, page 262.  A. McB., Amer. girl. Vol. 10, page 270.  M. B., American nurse. Vol. 12, page 28.  R. G., Irish laborer. Vol. 14, page 174.  E. C., American blacks smith. Vol. 13, page 24 Jan. 11 15	D. M., Irish boy. 258.  A. M., Irish housewife. Vol. 10, page 262.  A. McB., American nurse. Vol. 12, page 28.  R. G., Irish laborer. Vol. 14, page 174.  E. C., American blackwol. 19, page 174.  E. C., American blackwol. 19, page 1867.  E. C., American blackwol. 19, page 1867.  E. C., American blackwol. 13, page 24 Jan. 11 15 27, days.	D. M., Irish boy. Vol. 10, page 258.  A. M., Irish housewife. Vol. 10, page 262.  A. McB., American nurse. Vol. 12, page 28.  R. G., Irish laborer. Vol. 14, page 174.  E. C., American black with Vol. 13, page 174.  E. C., American black vol. 13, page 24 Jan. 11 15 days. Well.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Dull apathetic look, confusion of intellect, deafness, hot and dry skin, thirst, slightly coated tongue, sordes, an "eruption of numerous doubtful-looking spots on thorax and abdomen," noted June 22d, sudamina, some tenderness, constipation, delirium.	Hoffman's anodyne, fever mixture, beef tea, wine whey.	Blake.	Pulse 110 at entrance, at no time higher. Father, mother and brother in hos- pital sick with fever.
Hot and dry skin, clouded intellect, dry and loaded tongue, sordes on teeth, urgent thirst, tenderness, tympanites, gurgling, diarrhea, doubtful looking spots on abdomen and thorax noted June 23d.	Hoffman's anodyne, fever mixture, beef	Blake.	Pulse 120; respiration 40 at entrance; highest pulse rate 134. This patient was the mother of cases 10 and 22, and wife of case 11. Post mortem not obtained.
Suffused eyes, flushed face, hebetude, hot and dry skin, great thirst, hurried respiration, pains throughout body, dusky eruption over thorax, abdomen and extremities noted June 27th, constipation, delirium, comavigil.		Blake.	Pulse 116; respiration 44 at entrance; highest pulse rate 136; highest temperature 104*. Three members of this family were sick with fever.
Excited and accelerated pulse, hot and dry skin, loaded tongue, cough, labored respiration, restlessness, occasional diarrhœa, great exhaustion, involuntary dejections, subsultus, July 12th a measles-like eruption appeared, scattered over thorax and abdomen.	Citrate of magnesia, Hoffman's anodyne, wine whey, brandy, milk punch, carbonate	Reynolds.	Pulse 132 two days after entrance, 144 the morning before death. This patient had charge of the fever patients in the hospital, and had overworked herself in the discharge of her duties.
Dull and apathetic look, obscured intellect, hot and dry skin, dry and loaded tongue, suffused eyes, sensitiveness to light, dusky hue of face, dark measles-like eruption over chest, shoulders, arms and legs, noted Dec. 20th, profuse diaphoresis, sordes, subsultus.	mixture, milk, beef	Upham.	Previous health good. Pulse 108; temperature 104° 5' at entrance; highest pulse rate 112; highest temperature 104° 5'.
Headache, apathetic look, dusky hue of surface, hot and dry skin, brown, dry, fissured tongue, deafness, cough, labored breathing, pain in left chest, viscid expectoration, sudamina; dusky, ill-defined eruption not raised, fading but not disappearing under pressure, seen on abdomen, chest and shoulders at entrance.	Dover's powder, milk and lime water, sponge baths, wine whey, milk punch, quinine.	Borland.	Previous health good. Respiration 82, pulse 96, temperature 103° at entrance. Highest pulse rate 116; highest temperature 104°. Pattent was attacked after exposure to a severe storm. Pneumonia involving the lower portion of both backs was present at time of entrance, and materially delayed convalescence.

No. of Case.	Name and Oc- cupation. Vol.	Age.	When admitted.	Days III before en- trance.	Duration till conva- lescence or death.	Result.	SYMPTOMS.
No. o	and page of record.	٧	₩ El	Defo	Dur till c lesce	24	Early.
28	J. H., Irish blacksmith. Vol. 14, page 274.	19	Jan. 14.	5	15 days.	Dead.	Chill, followed by rigors and well-marked pyrexis, headache, pain in bones, back, and limbs, slight cough, general malaise, muscular debility, consti- pation.
29	L. M., American dentist. Vol. 13, page	24	Feb. 1.	7•	22 days.	Well.	Headache, pain in back, vertigo, constipation, pyrexia.
80	J. B., Irish maid-servant. Vol. 16, page 200.	27	Mar. 16.	5	13 days.	Well.	Headache, chills followed by heat, cough with expec- toration, pain in eyes, weak- ness, debility, general malaise.
81	H. H., Irish maid-servant. Vol. 15, page 40.	25	Apr. 13.	7	15 days.	Well.	Chills, headache, slight epistaxis, anorexia, thirst, muscular pains.
82	J. M., Irish Male. (Occu- pation not stated.) Vol. 19, page 112.	Not stated.	Dec. 4.	7	18 days.	Dead.	Not stated.
<b>83</b>	M. M., Irish laborer. Vol. 24, page 36.	27	Dec. 24.	8	23 days.	Well.	Chills, followed by heat, dyspnæa, cough, anorexia, urgent thirst, constipation.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Suffused eyes, injected conjunctivæ, dry and caked tongue, sordes on teeth and lips, foul emanation from body, dusky hue of face, some gurgling, diarrhea, delirium, sudamina, dark eruption over chest and abdomen, noted Jan. 15, comavigil.	Dover's powder, fever mixture, flaxseed tea, sponge baths, milk, brandy, carbonate of ammonia, morphia in small doses.		Previous health good. Pulse 108 at entrance; highest pulse rate 180; highest tem- perature 104° 2'. Pneumonia involving lower half of right lung occurred as a compli- cation. Post mortem not obtained.
Epistaxis, suffused eyes, deafness, wandering delirium, dusky red punctated eruption over body and extremities, fading, but not disappearing under pressure, noted at entrance.	of potassium, demul-	Borland.	Previous health generally good. Respiration, 40; temperature, 104° 5′. Pulse 122 at entrance; highest temperature 105°. This patient came by ship to Boston in the early part of January; knows of no fever on shipboard.
Suffused eyes, dusky appearance of face, deafness, tongue coated in centre, inclining to dry, sordes on teeth, hot skin foul emanations from surface, mulberry colored eruption over abdomen, chest, arms, and back, at entrance.	cyamus and camphor,	Upham.	Previous health good. Respiration 24; pulse 112 at entrance; highest pulse rate 120; highest temperature 104. The fever supervened after exposure to cold and other depressing influences.
Flushed face, dusky hue, dull expression, dry and dirty brown tongue, sordes, parched lips, hot and dry skin, pungent to the feel, slight cough, hurried respiration, tenderness at epigastrium. tremulousness.	Fever mixture, sponge baths, milk, beef tea, sherry, carbonate of ammonia, quinine.	Morland.	Previous health good. Pulse 120 at entrance, at no time higher. The attack was sudden and severe.
Hot and dry skin, dry and hard tongue, insomnia, ex- pression of terror, wild delirium, coma-vigil, sunken abdomen,dark colored erup- tion over thorax, at entrance constipation.	Castor oil, milk, beef tea, brandy, carbonate of ammonia.	Borland.	Pulse 60, and intermittent at entrance; 116 two days before death. Patient re- fused all nourishment the first three days. Came from New York.*
Flushed face, headache, vertigo, cough with expectoration, moist, loaded tongue, pungent emanation from surface, "the whole body covered with a dark-colored eruption, imbedded in substance of the skin, and partially disappearing on pressure," noted on the 25th.	Castor oil, fever mix- ture, demulcents, Dover's powder, mor- phia.	Upham.	Previous health delicate. Case complicated with Phthisis. Pulse 112 at en- trance; highest rate 116.

<sup>&</sup>quot;The Autopsy showed well marked rigor mortis, a few old adhesions at posterior portion of left lung slightly increased amount of serum in left pleural eavity; heart of full size, normal in texture, gall bladder distended, liver and spleen normal, lower portion of lleum congested. No other attentions noticed.

No. of Case.	Name and Oc- cupation. Vol. and page of		When admitted.	Days ill before en- trance.	Duration till convales- cence or death.	# .	вумртомв.
ģ,	record.	Δge.	P 49	T E	Q # 8 4	Result	Early.
84	H. B., Prussian male (occupation not stated). Vol. 24, page 226.	Not stated.	1868. Feb. 13.	Not stated.	In hosp'l 8 days.	Dead.	Not definitely ascertained .
85	M. B., Nova Scotian sail-maker. Vol. 33, page 30.	37	Dec. 4.	6	11 days.	Dead.	Not stated.
86	M. P., Irish tailor. Vol. 36, page 280.	88	1869. Feb. 11.	7	14 days.	Dead.	Headache, epistaxis,marked pyrexia, cough, vomiting, slight diarrhœa, epigastric distress.
87	E. A. K., American nursery maid. Vol. 37, page	16	Mar. 20.	7	14 days.	Well.	Headache, pyrexia, general muscular pains.
<b>3</b> 8	J. F., Irish housewife. Vol. 12, page 51.	45	1866. July 20.	14	14 days.	Dead.	Sudden attack, chills fol- lowed by heat, pain in back and legs, anorexia, &c.

SYMPTOMS.  Advanced.	Treatment.	Name of Physician.	Remarks.
Suffused eyes, dusky hue of face and of the general surface, swollen, dry, brown tongue, sordes on lips, foul emanation from the body, dark, purplish eruption over the trunk and extremities, petechial at entrance, constipation, delirium, coma.vigil.	Castor oil, fever mix- ture, milk, egg-nog,	Upham.	This patient was nearly in a comatose state at en trance, no definite particulars of his history or the early state of the disease, could be gathered. Post mortem not obtained. Pulse 96 at entrance; highest pulse rate 120; temperature 102° 5°.
Lividity of face, extremities, sunken abdomen, constipation, dark-colored maculated eruption over abdomen, chest, and neck, noted Dec. 6th, the whole surface covered with small, thin scales.	baths, beef tea, brandy, carbonate of ammo- nia.	Borland.	Pulse 132 at entrance, 152 day before death; highest temperature 103°5'; Patient was brought from a low, damp cellar, was semi-con- scious on admission, but unable to give any account of himself.*
Headache, congested conjunctive, great prostration, delirium, dusky hue of surface generally, gurgling in iliac fossae, dark-red maculated eruption over abdomen and upper portions of chest, persistent on pressure, noted at entrance, urine and fœces passed involuntarily.	Stimulating enemata, fever mixture, dilute hydrochloric acid, milk, beef tea, sherry wine.	Sinclair.	Previous health generally good. Pulse ranged between 92 and 120. Highest temperature 105°. This patient's wife had just recovered from typhus fever contracted on board an emigrant ship. Post-mortem not obtained.
Injected eyes, dry and parched tongue, deafness, diarrhæs, extremely fetid emanations from body, livid hue, dark maculated eruption scattered over the limbs and extremities, not disappearing on pressure, at entrance.	Sponge baths, dilute hydrochloric acid, bromide of potassium, astringents, milk, beef tea, brandy, quinine.	Borland.	Pulse 112; temperature 104.5 at entrance; highest pulserate 116; highest temperature 104° 5′. Patient in a semi-comatose state on admission. Was attacked with muscular pains and febrile symptoms the day after arrival from Liverpool. Says there were many sick o board, whether or not with fever cannot say.
Flushed face, anxious look dilated pupils, coldness and lividity of surface, inability to protrude tongue, labored and irregular respiration, weak, compressible pulse, stupor, complete prostration.	Carbonate of ammo- nia, brandy, stimulat- ing injections.		This patient was comatose, indeed moribund, when brought in, and died six hours afterwards. Pulse 120 at entrance, exceedingly feeble; respiration 30. Wife of case No. 16, and sister of case No. 8.

<sup>\*</sup>Autorest.—Showed rigor mortis, slight opacity of sub-arachnoid fluid, hypostatic congestion of lungs, heart filled with fluid blood, spleen enlarged, lower two feet of ileum congested. Peyers' patches congested, not ulcerated or thickened, large intestines healthy.

The number of cases of typhus fever, of which a tabular history is here given, is 38. Of these, 20 are males, 18 females.

Nationality. — Of the above 38 cases, 21 were born in Ireland, 12 in America, 2 in Germany, 1 in England, 1 in Nova Scotia, and 1 in Prince Edward Island. Seven were recently arrived emigrants.

The Occupation — is recorded in 35 cases, of which 17 were males, 18 were females. There were among the males, 6 common laborers, 2 blacksmiths, 2 errand boys, 1 coffin-maker, 1 hostler, 1 machinist, 1 dentist, 1 sail-maker, 1 tailor, 1 newsboy. Of the females, 10 were maid servants, 4 were school-girls, 1 was a seamstress, 2 housewifes, and one a nurse.

The Age. — This was stated in 35 cases, of which 17 were males and 18 females. The youngest was a boy of 8 years, the oldest a man of 49 years.

There were of the age of 10 years or under. 3 cases. Between the ages of 10 and 20 years . . . 8 cases. Between the ages of 20 and 30 years . . . 14 cases. Between the ages of 30 and 40 years . . . 6 cases. Between the ages of 40 and 50 years . . . 4 cases.

The average age of the males was  $26\frac{41}{100}$  years; of the females,  $24\frac{94}{100}$  of both,  $25\frac{66}{100}$  years. Of the fatal cases, — 10 in all, — the age was stated in 8 cases, of which the average was  $36\frac{12}{100}$  years.

Season when admitted:— Ten cases were admitted in the spring, 15 in the summer, 3 in the autumn and 10 in the winter. Of the fatal cases, 6 occurred in winter, 4 in summer.

Stage of the disease when admitted.—It appears that 22 patients were admitted during the first week, and 13 during the second week of the fever. In 3 cases the time is not given.

Duration of the disease. — In arriving at the duration of the fever, we have adopted the plan stated in the preceding history of typhoid, viz.: To measure. from the first access of the premonitory symptoms manifested by languor, loss of appetite, headache, malaise, general muscular pains, debility, &c., as nearly as this could be ascertained, to the time at which convalescence was established, or The onset of the disease was mostly sudoccurred. den and severe; the approach of convalescence was well marked, and heralded by a decided relief and subsidence of the symptoms. It was sometimes accompanied with profuse diaphoresis. The average duration of the cases which recovered was, for the males,  $18_{\overline{100}}^{80}$  days, for the females  $19_{\overline{100}}^{53}$  days; for both,  $18_{\frac{96}{100}}$  days. The duration was recorded in 8 of the 10 fatal cases, of which five were males, and three females, — it being  $12_{\frac{40}{100}}$  days for the former, 11 days for the latter, and for both,  $11\frac{88}{100}$  days.

Symptoms. — Among the early symptoms were loss of appetite, lassitude, chilliness, debility, headache, pain in back and limbs, soreness of the muscles, confusion of intellect, vertigo, nausea, vomiting, epigastric distress, increased heat of surface, thirst, insomnia, accelerated, moderately full, soft and compressible pulse, furred and loaded tongue, constipation, &c.; later, there was flushed face, hot

skin, suffused eyes, dusky hue of surface, general sensitiveness to the touch, a peculiar nauseous emanation from the body, a measles-like, florid or mulberry-colored eruption seen on the arms, chest, abdomen and legs, not infrequently on the sides and back, sometimes fading, sometimes persistent on pressure; dry, brown, fissured tongue, sordes, hurried and interrupted breathing, rapid and feeble pulse, violent delirium, exhaustion, subsultus and coma.

The relative frequency of the more marked of these symptoms, as noted in our series, in the earlier and later stages of the disease, will appear in the following tables:—

TABLE SHOWING THE RELATIVE FREQUENCY OF THE SYMPTOMS MORE COMMONLY NOTED IN THE EARLY STAGES OF 28 CASES OF TYPHUS FEVER WHICH TERMINATED IN RECOVERY.

EARLY STMPTOMS.	Chills.	Headache.	Pain in back and limbs.	soreness of muscles.	Lassitude and malaise.	Debility.	Vertigo.	Epistaxis.	Cough.	Anorexia.	Thirst.	Nauses.	Vomiting.	Epigastric distress.	Increased heat of surface.	Insomula.	Confusion of intellect.	Diarrhea.	Constipation.
Noted in how many cases.	11	19	13	8	9	4	4	3	6	12	7	4	8	6	10	6	3	4	9

TABLE SHOWING THE RELATIVE FREQUENCY OF THE MORE MARKED AMONG THE EARLY SYMPTOMS, IN 6 OF THE 10 FATAL CASES OF THE SERIES.

EARLY SYMPTOMS.	Chills.	Headache.	Pain in back and limbs.	Soreness of muscles.	Lassitude and malaise.	Debility.	Vertigo.	Epistaxis.	Cough.	Anorexia.	Thirst.	Nausea,	Vomiting.	Epigastric distress.	Increased heat of surface.	Insomnia.	Confusion of intellect.	Diarrhœa.	Constipation.
Noted in how many cases.	3	4	4		3	2	2		2	4	1	1	2		1				3

In four of the fatal cases the early symptoms were not ascertained.

TABLE SHOWING THE RELATIVE FREQUENCY OF THE MORE PROMINENT SYMPTOMS OCCURRING IN THE ADVANCED STAGES OF 28 CASES OF TYPHUS FEVER WHICH TERMINATED IN RECOVERY.

Noted in how ADVANCED SYMPTOMS.	ு Headache.	N   Pain in bones.	c Somnolence and Apathy.	Flushed face.	61 Hot skin.	co   Buffused eyes.	U Dusky hue.	Foul odor of surface.	N Anorexia.	Thirst.	⇔   Cough.	B   Mulberry colo'd eruption	∞   Sudamina.	Diaphoresis.	Brown and dry tongue.	∞   Sordes.	c   Abdominal pains.	ω Tenderness.	Gurgling.	c   Tympanites.	Insomnia.	13 Delirium.	4 Stupor.	N Prostration.	e Diarrhœa.	91 Constipation.	o   Involuntary dejections.	o   Subsultus.	Coms vigil.
Noted																													

TABLE SHOWING THE RELATIVE FREQUENCY OF THE MORE PROMINENT SYMPTOMS OCCURRING IN THE ADVANCED STAGES OF THE 10 FATAL CASES OF TYPHUS FEVER.

Headache.	Pain in bones.	Somnolence and apathy.	Flushed face,	Hot skin.	Suffused eyes.	Dusky hue.	Foul odor of surface.	Anorexia.	Thirst.	Cough.	Mulberry colo'd eruption	Sudamina.	Diaphoresis.	Brown and dry tongue.	Sordes.	Abdominal pains.	Tenderness.	Gurgling.	Tympanites.	Insomnia,	Delirium.	Stupor.	Prostration,	Diarrhea,	Constipation.	Involuntary dejections.	Subsultus.	Coma viril.
-	-	-	-	=	-	-	-	7	=	-	-	-	I	11	- :	-	1.1	9	1.1	I	1	-	_	-	-	=	-	
3			1	4	3	5	2		1		9			3	2	1	2	3	2	2	6	7	9	1	3	2	1	82

From these tables it appears that chills, headache, pain in back and limbs, soreness of the muscles, lassitude, anorexia, vomiting, increased heat of surface and constipation, were the most common of the early symptoms observed, being noted respectively in 14, 23, 17, 8, 12, 16, 10, 11 and 12 of the 34 cases of recovery and death above given; and that, in the advanced stages, the symptoms more frequently noted were hot skin, suffused eyes, dusky hue, foul odor of the body, dark measles-like eruption, brown and dry tongue, sordes, delirium, stupor, exhaustion and constipation, being recorded in 23, 12, 15, 9, 33, 21, 10, 19, 11, 11 and 19 cases respectively.

I must here repeat what has already been said in substance in reference to the symptoms of typhoid fever, viz.: that, in the early stages especially, such symptoms only as were sufficiently marked to attract the attention of the patients or their friends were recorded, while others of equal importance, perhaps, were likely to be omitted. And it must be borne in mind that the terms "early" and "advanced" are somewhat conventionally used. I doubt not that some of the phenomena found only in our category of advanced symptoms in typhus might have been sooner observed if attention had been directed that way; especially the appearance of the eruption, the suffused and injected eyes, flushed face, dusky hue of the surface, &c.

TABLE SHOWING THE COMPARATIVE FREQUENCY OF THE PROMINENT SYMPTOMS NOTED AT SOME PERIOD OF THE FEVER IN ALL THE TYPHUS CASES OF THE SERIES.

As stated in a preceding page, these tables must be considered as only approximating to the exact results; I cannot suppose that all the prominent and characteristic symptoms in each case are to be found upon the records. They may be useful, however, in their partial accuracy, and will serve as a basis for future and more rigid observations. And the value of such future observations will, of course, be increased precisely in proportion to the number and completeness of the recorded cases.

The Results. — Of the 38 cases here recorded, 28 recovered, and 10 died, showing the very large ratio of one death in  $3_{100}^{80}$  cases. One of these fatal cases was moribund when brought in, and died six hours afterwards. Three were delirious and unconscious at the time of admission, from which condition they did not rally. Another was a hospital nurse, 46 years old, excited and overworked, who contracted the disease while in attendance upon patients ill with the fever.

Treatment. — Pure air, cleanliness, and nursing were deemed of the first importance. diet was nourishing. Beef-tea, broths, tapioca, sago, soft-boiled rice, toast water, milk and water and infusion of flaxseed, constituted the principal food and drinks during the active stage of the fever. Mild cathartics and diaphoretics were employed as occasion required. Sponge baths were freely used in cases accompanied with the pungent burning heat of surface. Camphor was found useful in allaying nervous agi-Morphia and Dover's powder were given in small doses, to procure sleep. Stimulants, in the shape of brandy, sherry, whiskey, beef essence and carbonate of ammonia, were all employed in their turn when required, and were sometimes called for, in judicious measure, when signs of adynamia or general exhaustion were present, throughout the whole course of the The routine stimulant treatment was, however, not in vogue. A tonic and stimulant combined was thought to be sometimes beneficial; thus,

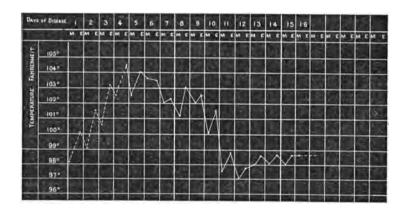
a mixture composed of sherry wine and the officinal solution of sulphate of quinine, in equal parts, was made of which 3ss. was administered once in two hours in cases of much prostration. In the severe cases, when ymptoms of prostration combined with nervous excitement were present, the "strong fever mixture" used in the London hospitals was exhibited, of which the following is the formula:—

R. Ammoniæ sesquicarb. gr. v. M. cap. zi. quâque 4tâ horâ. Camphoræ Mist.zi.ss.

In desperate cases, when the powers seemed to be sinking, stimulating injections, hot pediluvia, frictions to the spine, and sinapisms to the inside of the thigh and legs were ordered. During convalescence, ale and porter were recommended. Quinine, the compound infusion of cinchona, and some of the preparations of iron, were also employed in the recovering stage.

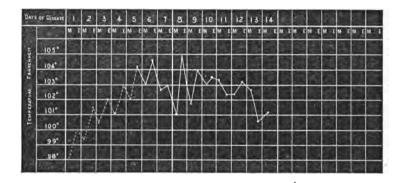
The state of the general health previous to the onset of the fever was noted in 27 cases, of which 15 were males, 12 were females. Of the 15 males, 14 were in good, 1 in impaired health; of the 12 females 11 were in good, 1 in impaired health. In 26 cases of recovery the average highest pulse rate was 111. In 9 fatal cases the average highest pulse rate was 132. The temperature was noted in twelve cases In 7 cases of recovery the average highest temperature was 104° 1'; in five fatal cases also it was 104° 1′. The following diagrams will show the daily thermometrical record in an average favorable and in a fatal case of the disease.

Case. I. (No. 26 of our series.) A laboring man æt. 22, admitted Dec. 19, 1866. Four days previously, chills, headache, pain in bones, vertigo, anorexia, nausea, vomiting, &c.; later, dull, apathetic look, obscured intellect, hot skin, pungent, peculiar odor of surface, dusky hue, sensitiveness, mulberry-colored eruption, dry and loaded tongue, sordes, soft and compressible pulse, subsultus, diaphoresis; convalescence on the 16th day,—recovery. The temperature was 104° 5′ at four P. M. on the day of entrance.



Case II.— (No. 28 of the series.) A blacksmith, æt. 19, admitted Jan. 14, 1867,—five days previously, had chills followed by heat, headache, pain in back and limbs, sense of weakness, constipation, &c.; later, suffused and injected eyes, dusky hue of face, dry and brown tongue, sordes, dark-colored eruption over chest and abdomen, foul emanations from the surface, prostration, delirium, coma vigil, death on the 14th day.

The temperature was 104° 2' at entrance.



The time of the first appearance of the rash does not appear to have been noted with sufficient accuracy to warrant any fair deductions on this point. The pathological appearances in the two cases examined, were characterized rather by the absence of any marked changes. The considerable rigor mortis, the lividity of the surface and hypostatic congestion in the depending parts of the body, and the fluid and disorganized state of the blood, were the main features in the morbid anatomy of these cases. etiology of the disease in the cases under consideration, can be traced, by inference, at any rate, to contagion in several instances. Thirteen are recorded as having been previously more or less in communication with patients ill with fever, prior to their attack. In one instance, a group of three, and in another, a group of four cases, came from the same family. Seven had recently arrived in this country from Europe. The hygienic surroundings of four others are stated to have been notably bad. The complications and sequelæ were pneumonia in two cases, phthisis in one case, rheumatism in one case, ecthyma in one case, and gastric irritation in one case.

We present below the history of two cases, showing in detail the course and progress of the fever in its favorable and fatal aspects.

Case I.— (No. 30 of the series.) J. B.— a woman, æt. 27— without known cause, had for a day or two, a general feeling of uneasiness and malaise, then chills followed by heat, headache, pain in bones, sense of weakness and debility, anorexia, cough, suffused eyes, dusky hue of face, hot skin, dry and loaded tongue, sordes, measles-like, persistent eruption on the fifth day; subsultus, diaphoresis, slight bronchitis as a complication; convalescence on the 16th day,—recovery.

Previous history and condition.— The patient was of Irish birth, a domestic in the city and in favorable hygienic circumstances so far as could be learned, of good habits, with no known hereditary tendency to disease. Her previous health had been good.

Present attack.—Four days before admission to the hospital, after exposure to cold, the patient, having experienced for two or three days an indefinable sense of depression, uneasiness and malaise, was seized with chills succeeded by heat, severe headache, pain in calves of the legs, and a feeling of general exhaustion. She had slight cough, with expectoration of a tenacious whitish mucous. There has been no epistaxis, or abdominal pain or tenderness.

March 16th, 1867. — Patient is now in bed: decubitus dorsal. Skin is hot, but moist; conjunctivæ injected, tongue covered with a slight coat in the centre, inclined to dryness; severe headache, anorexia, thirst; respiration 24, pulse 112. She has slept at intervals only, during the night. A light, measly-looking eruption is scattered over the trunk and upper extremities, noticed to-day for the first time: —

R. Ext. Hyoscyamus } āā griis. F. pil. cap. h. s.

17th. — Patient has, this morning, severe frontal headache, injected eyes, a dusky hue of face, skin somewhat dry and hot, tongue uniformly covered with a milky-white fur; some cough, with expectoration of a glairy mucous; on auscultation an occasional râle only is heard; the sounds are otherwise normal; spots, of a florid, measly hue, are thickly scattered over the abdomen, chest, arms and back; none on face or legs; pulse, 116.

R. Aq. camph.
Liq. ammon, acetate

āā 3ii. Cap. every 4 hrs.

Cloths, dipped in camphor water, to be applied to head:

R. pulv. ipecac. et opii. gr. x.—h. s.

18th.—Patient slept tolerably well last night,—awoke in perspiration; intelligence good, eyes suffused, skin hot and dry, pungent to the feel, a noticeable mousey emanation from the surface; tongue cov-

ered with a uniform, pasty, creamy white coat; some nervous agitation; slight cough, with tenacious white sputa; bowels constipated, a little tympanitic; no tenderness; the spots still manifest, about the size of a pin's head, fading; pulse, 120, soft, weak, compressible.

R. Ol. ricini 3ss. in emulsion with gum acacia: Sherry wine 3iv. during the day: toast water: Dover's powder at night.

20th. — Intelligence good, eyes clearer; somewhat dusky hue of face; skin hot and dry; marked pungent and disagreeable emanation from the surface; cough, with bronchial râles; tongue covered with thick yellowish fur, inclining to be moist; sordes on teeth; abdomen flat, without pain or tenderness; spots fading, not wholly disappearing under pressure; pulse, 104, regular, soft, compressible; temperature, last evening, 103°; this morning at 8.30, A. M., 104°.

Increase the Sherry wine to 3vi. daily.

On the 21st, — The temperature was 104° in the morning, 103° in the evening.

22d. — Eyes clear, less nervous agitation, tongue covered with thick, creamy, pasty coat at centre and base, red at edges and tip; pulse, 100, regular, of moderate strength and volume; temperature at evening, 100°; no dejection for three days.

To have Ol ricini 3iii. statim ---

23d. — General expression of the patient improved;

intelligence clear; there is still headache, some deafness; the cough, with bronchial râles, continues; tongue somewhat swollen, with yellowish, pasty fur over centre and base, moist at edges and tip; the odor from the surface subsiding; pulse 88, regular, of moderate strength and volume; temperature this morning, 98°5′; last evening, 101.5′.

24th.—No headache; face expresses exhaustion; cough continues; skin moist, natural; tongue moist, covered with a uniform pasty coat; pulse 96, of moderate volume, regular, compressible; temperature, 98°5′.

25th.—Less exhaustion; skin cool to the feel; tongue moist, clean at edges and tip; temperature 98°.

27th. — Expression better; skin moist and cool; tongue cleaning from edges and tip; pulse 88, regular, compressible, of moderate volume.

R. quinine sulph. gr. ii. To be taken during the day. Sherry Wine. — 3ii.

28th. — Expression good, eyes clear, tongue nearly natural; pulse 72, regular, soft, compressible, of moderate strength; appetite returning; the patient is manifestly convalescent.

From this time the recovery was rapid, and without drawback or hindrance. On the 5th of April the patient was up and about the ward, and on the 10th was discharged, well.

CASE II. — The following case was brought into the Hospital, in a semi-comatose state, on the 4th of

December, 1868. It was that of a man 37 years old, a Nova Scotian by birth, and by occupation a sail-He had been living in a low, damp cellar, was reported to have been ill six days. No further history of his case could be obtained. He lay in a The pupils were natural; his speechless condition. tongue was protruded with difficulty, and was hard and dry; skin natural, respiration 32; pulse 132, The next day (Dec. 5th), the small and weak. patient was conscious, but unable to speak; abdomen flat; pulse 124, respiration 32, temperature 103°5'; he had had convulsions of a chlonic character, confined principally to the upper extremities. given beef tea, ad libitum: -

#### Brandy 83i. every two hours.

On the 6th. — The pulse was 124, respiration 28, temperature 99°5′. A maculated eruption was scattered over the abdomen, chest and shoulders.

On the 7th. — The tongue became moist; the bowels were moved by enema; the patient took food regularly and seemed to be much improved; his pulse was 120; temperature, 102°.

On the 8th. — This condition of things continued. On the 9th, the pulse had risen to 152; the patient was completely in sensible; his respiration was labored and thoracic. He soon became comatose, and at 12 o'clock, M., died.

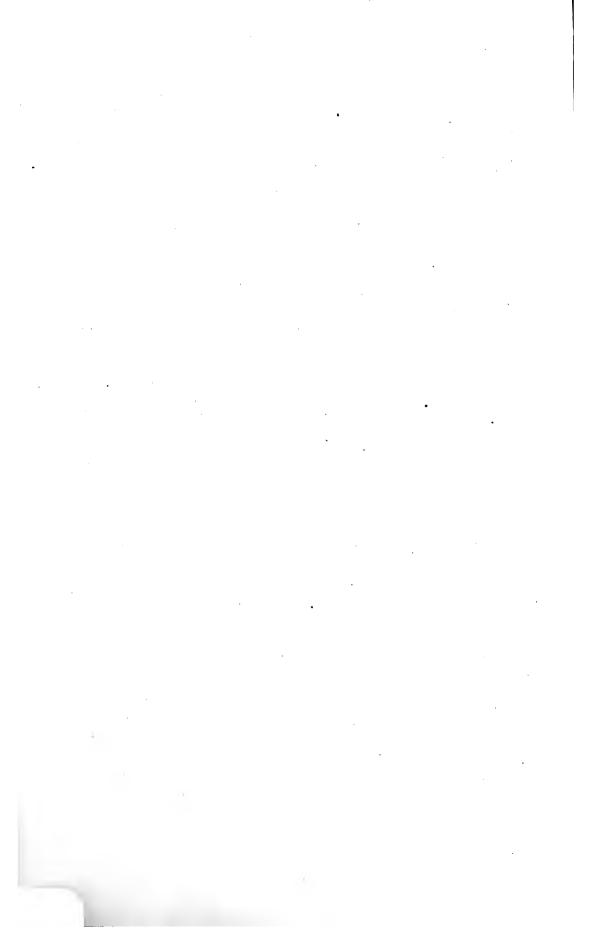
On post mortem examination (24 hours after death), the rigor-mortis was marked; there was much hypostatic congestion of the body and of the depending

The brain showed nothing portion of the lungs. abnormal, with the exception of a slight opacity of the sub-arachnoid fluid, as seen through the membranes, and an unusual amount, perhaps, of the cerebro-spinal fluid; the lungs were healthy throughout, with the exception of a generally congested and friable condition of the posterior portion of the lower The heart was pale, otherwise normal in appearance; small, pale clots were found in the left cavities; the blood was copious in amount, very fluid, not dark; liver normal; spleen enlarged to about double its natural size, apparently normal in consistency; the lower two feet of the small intestines were congested; Pyer's patches in the lower six feet of ileum were somewhat congested, but not ulcerated or thickened; large intestines healthy.

Such, in brief, is the history, and such the results which the records of the Hospital have furnished on the subject of fever in the first five years of its existence. If the materials are in themselves too meagre, and their treatment inadequate, to establish any positive conclusions, it is hoped they may serve, at least, to stimulate a nicer and minuter record of facts and observations of fever at the bedside, and a more satisfactory generalization of such facts in the future volumes of these Reports.

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