

HONGKONG.

REPORT OF THE SANITARY SURVEYOR FOR 1892

*Laid before the Legislative Council by Command of His Excellency
the Governor, on the 8th March, 1893.*

SANITARY BOARD OFFICE,
HONGKONG, January 26th, 1893.

SIR,—I have the honour to forward you the following report for the year ending December 31st, 1892.

1. The tables given below shew :—

(a) The work carried out during the past year.

(b) The work carried out since the passing of the Public Health Ordinance.

Table A.

YEAR.	No. of Houses Re-drained.		No. of Houses Plans of which have been cancelled.		Total.	No. of Houses for which Plans have been received.	No. of Houses in hand.
1891, .....	...	80	...	74	154	198	44
1892,—1st Quarter,	63	...	...	...	...	...	...
" —2nd "	131	...	14	...	...	...	...
" —3rd "	158	...	...	...	...	...	...
" —4th "	145	497	18	32	529	693	164
Totals,.....	577		106		683	891	208

Table B.

YEAR.	No. of Houses for which Plans have been received.	No. of Houses re-drained.	No. of Houses Plans of which have been cancelled.	No. of Houses carried forward each year.	No. of New Houses certificated.
1889,	799	573	...	226	175
1890,	500	529	7	190	409
1891,	681	643	30	198	475
1892,	693	577	106	208	228
Totals,.....	2,673	2,322	143	...	1,287

2. Referring first to Table A. It will be seen that of the one hundred and ninety eight (198) houses incomplete at the close of 1891, eighty (80) have been finished and the plans for seventy-four (74) cancelled, leaving forty-four (44) to carry forward to 1893.

3. Of the six hundred and ninety-three (693) houses, plans for the re-drainage of which were received and duly passed in 1892, four hundred and ninety-seven (497) are finished, and the plans of thirty-two (32) have been cancelled leaving one hundred and sixty-four (164) to carry forward, which with the forty-four (44) of 1891 makes a total of two hundred and eight (208).

4. The drainage plans of a large number of houses have been cancelled during the past year; these have in almost every instance been those of new buildings and more than two-thirds ($\frac{2}{3}$) were deposited during or previous to the year 1891. They have been cancelled in consequence of fresh plans being deposited chiefly owing to alterations in the building plans.

5. Table *B* gives a summary of the work which has been carried out under the superintendence of the Sanitary Surveyor since the passing of the Public Health Ordinance. The year 1892 which has just passed, compares favourably with previous years, the record of drainage plans of houses received and the number of houses re-drained being much the same. The decrease during the year in the number of houses certified under Section 74 of the Public Health Ordinance, which appears in the last column, seems to point to a return to a normal state after the exceptional activity in building operations obtaining during the years 1890 and 1891.

6. The total number of houses in Hongkong and Kowloon (including the villages and Hill District) is approximately eleven thousand, six hundred and fifty (11,650). Two thousand three hundred and twenty-two (2,322) have been drained in accordance with the Bye-laws, and one thousand two hundred and eighty-seven (1,287) are certificated, the former being 20 % of the total number and the latter 11 %.

7. Special attention has been paid to the condition of the down-pipes and cook-house floors. In the old houses the former are almost invariably constructed with the common Chinese clay-pipes, without any sockets ; no jointing material has been used in fixing them and they are merely plastered over, the walls to which they are fixed being generally saturated in consequence of such defects ; added to this they are frequently broken off to a height of 2 or 3 feet from the ground. It is by no means an uncommon occurrence to find the pipes completely choked by the dirt, vegetable refuse, &c., which has been forced into them.

8. In all cases of re-drainage care has been taken that these down-pipes should be renewed, with heads fixed at all inlets, gratings being fixed inside the cook-houses to prevent the new pipes being choked by refuse which they are not intended to take.

9. The cook-house floors have also received my careful attention. Where they are paved the paving usually consists of red tiles or flags carelessly laid and imperfectly jointed, but many instances have come under my notice where nothing but the rough earth forms the floor.

10. The red tiles are in my opinion too soft for the purpose ; they wear in the centre of each tile, forming small basins which hold the water thrown on to the floor. Owing too to their soft nature the tiles become much broken by the chopping of wood which is usually performed in the cook-house. I believe that where these tiles are used the life of the floor might be considerably lengthened by providing a piece of stone in some corner of the cook-house where the tenant could chop his wood. Hard stone seems to me the only material which will effectually resist constant wear of this nature.

11. During the past year permission has been granted to connect the water-closets at the Mount Austin Hotel, Hongkong Hotel (New Wing) and French Sanitarium at Pokfulam to the house-drains ; these connections are now completed. In consequence of these applications and of the progress made in the main sewerage of the city, bye-laws were drawn up under Section 3 of Ordinance 12 of 1891 to regulate the construction materials and fittings of water-closets and these bye-laws were approved by the Legislative Council on November 30th. I would venture to hope that owners and occupiers of property will see the advantages and appreciate the improved state of domestic sanitation to be obtained by the more general introduction of the water-carriage system in place of the existing pail system, and that in the course of the next few years the latter will have entirely disappeared, at least in all European houses.

12. The records which were started in 1888 have been maintained and are complete to date.

I have the honour to be,

Sir,

Your most obedient Servant,

J. ROWLAND CROOK,
Sanitary Surveyor.

The Secretary

SANITARY BOARD.

HONGKONG.

SANITARY SUPERINTENDENT'S REPORT FOR THE YEAR 1892.

*Laid before the Legislative Council by Command of His Excellency
the Governor, on the 25th May, 1893.*

SANITARY BOARD ROOM,
HONGKONG, 25th March, 1893.

To the President and Members of the
SANITARY BOARD.

GENTLEMEN,—I have the honour to submit this the fourth annual report, year 1892, concerning the work done by the Sanitary Department.

DRAINAGE WORKS.

2. In addition to the work carried out by property owners of their own motion a considerable number of houses which were found on inspection to be in an insanitary condition have been re-drained at the request of the Board. I append a tabular statement (A) showing:—

- (a) The locality in which the houses so found to be insanitary are situated.
- (b) The number of houses so found at each such locality.
- (c) The houses so found for which plans for their re-drainage have been submitted.
- (d) The houses so found at which the work of re-drainage has been completed.

The statement also shows those houses the drains of which were found defective prior to 1892 and the owners of which have not yet re-drained them.

3. Although not to the same extent as in 1891 yet it has frequently happened during the year that comparatively new pipe drains have become choked and this has in most instances occurred through their misuse. The quiet but persistent manner in which Chinese servants will pass solid matters into the drains is the primary cause of the choking of the drains. The iron gratings covering the inlets to the drains are frequently broken by them so that solids may more readily be passed into the drains. Inasmuch as the object of these gratings is to keep solids of any size from entering the drains their breakage at any house simply means that either the tenant or the owner of such house will soon be put to considerable expense in clearing the drains, which expense is not unfrequently greater than it should be, and this arises mainly through the want of skill on the part of those undertaking to do work which they do not properly understand.

MARKETS AND SLAUGHTER HOUSES.

4. The new slaughter-house for the Kau-lung District was opened in July and adequately meets all the requirements of the District. When the depôt for the reception of animals imported into the Peninsula for slaughtering purposes has been provided the needs of the district,—so far as proper provision for the control of the meat supply therein is concerned,—will be fairly well met.

5. On the 28th March, the Colonial Veterinary Surgeon reported an outbreak of Rinderpest among some cattle on their importation into Kau-lung. The Board met the same day and gave directions for the diseased animals to be destroyed. The whole of the Peninsula was declared a place infected with Cattle Plague and the necessary steps were at once taken to give effect to this declaration. No further cases of Rinderpest occurring, Kau-lung was declared to be free from that disease on the 7th April. I think there can be no question but the prompt action taken was the means of preventing the spread of this virulent disease to other animals in the Colony and consequently was a great boon to the various cattle owners and a direct saving to the rate-payers.

6. Only a very few cases of disease other than those just referred to were reported during the year and none of them were of a character requiring special action to be taken.

7. Thirty sheds capable of housing 849 head of cattle, eight sheds capable of housing 267 head of goats and 299 pens capable of housing 1,714 head of swine were licensed during the year. With the exception of two temporary sheds at Wong-nai-chung all the cow-sheds in the Colony have been licensed. A few head of cattle are kept for agricultural purposes in some of the outlying villages where no licensed sheds exist but the animals do not appear to be housed although in very wet weather they may be placed temporarily in some of the houses in the villages. So far as is known all the goats in the Colony are now kept in licensed sheds or pens. A very great many swine-pens are still unlicensed but the law is being gradually enforced and by the end of 1893 it is hoped that most of the pens will be so constructed as to entitle them to be licensed.

8. The sheep and swine imported for slaughter are still kept in houses in the Sai-ying-poon district and this must continue pending the construction of the public depôts at Kennedy Town. These temporary places are not licensed.

MORTALITY STATISTICS.

9. The attached tabular statements (B) show :—

(a) The death-rate for 1892 for

1. The British and Foreign community.
2. The Chinese community on land in each Registration District.
3. The Chinese community afloat in each Registration District.
4. The Chinese community on land in the Colony.
5. The Chinese community afloat in the Colony.
6. The total Chinese community in the Colony.
7. The British, Foreign and Chinese community combined—Army and Navy excluded.

(b) The number of deaths occurring under each of the seven groups into which it has been deemed expedient—in view of the system of death registration in vogue—to classify in the summary the causes of death.

(c) The total number of deaths occurring among the British and Foreign community in each month of each year—1888 to 1892 both inclusive—under six disease groups. These groups are the same as in (b) only 6 and 7 groups are amalgamated.

(d) The same as (c) but for the Chinese community.

(e) The total number of deaths occurring in the Colony—those in the Army and Navy excluded—in each month for the past six years together with the death-rate for the estimated population.

10. The attached diagrams show :—

(a) The number of deaths which occurred each month under each of the groups referred to above.

(b) The mean temperature for each month.

(c) The rainfall for each month.

(d) The number of deaths registered during each month of the years 1888 to 1892 as also the mean temperature and rainfall.

11. It will be observed that the number of deaths registered during 1892 is very considerably less than in 1891 and that a decrease appears under all the group headings except "Other Causes" where there is an increase of 88. The principal decrease appears under the headings Fevers (182) and Bowel complaints (192).

12. The decrease in the number of deaths recorded as occurring from fevers is deserving of special attention chiefly because of the widely believed theory that soil disturbance, even when the soil is practically of a purely mineral character is the, or rather one of the, principal factors in the causation of malarial fevers. During the year under review there has been a very great deal of soil disturbance more especially in Kau-lung, yet the deaths recorded from fevers have been less than usual. It is no doubt true that the number of deaths caused by any particular disease is not a thoroughly reliable index to the number of cases of sickness that may have occurred but it is an index and the only one which we at present possess so far as the Chinese community is concerned. It is perfectly clear that some important factor in the causation of malignant malarial fevers has been during 1892 less powerful than usual and it is quite evident that that factor is not that a smaller quantity than usual of soil disturbance has taken place.

13. The death-rates for the year have been calculated from the figures obtained by the Census taken in May, 1891, plus an estimated increase to the population since then. This estimated increase to the population is based on the average annual increase which has been shown to have taken place between the years 1857 and 1891. It is somewhat doubtful if this rate of increase has been maintained during the past year, but in the absence of proof to the contrary it appears to me to be the only estimate of the population which can fairly be given.

14. In considering the death-rate the nature of the population should be remembered *i.e.* it is not a normal population, but a population in which the male sex in the prime of life largely predominates.

15. The number of deaths registered as occurring from infantile convulsive diseases and marasmus is again more than a fourth of the total deaths registered during the year. A large majority of the deaths registered as being caused by these diseases occurred during the first month of life and nearly all during the first year. As remarked last year this relatively large infantile mortality indicates insanitary conditions in the surroundings, nursing or treatment of the infants in some form.

16. The remarks made in my report for 1890 with reference to the registration of the actual causes of death are still applicable inasmuch as no improvement, so far as the Chinese community is concerned, has taken place in this branch of death registration. This is, in my opinion, to be regretted for it may, nay probably will, lead to the expenditure of a considerable sum of money in organizing hurriedly a temporary medical service to meet as far as possible the requirements of the Colony should it be visited by cholera or other virulent communicable disease and should such disease assume the proportions of an epidemic throughout the Colony. This is viewing the question from a financial stand-point. The more important points of obtaining fairly reliable information regarding the diseases which actually cause the deaths which occur and the affording the people we govern facilities for the rational treatment of the diseases from which they suffer are referred to in previous reports.

HEALTH DISTRICTS.

17. *Cemeteries.*—The bye-laws for regulating the Cemeteries came into force on the 1st January, 1892. It was anticipated that the public Cemeteries for Chinese would have been laid out by then in the manner indicated by the bye-laws, but unfortunately this was not done and some inconvenience and expense has been the result. However, no hitch of importance has arisen and steps are now being taken to lay out these Cemeteries.

18. The following are the number of burials which have taken place up to the 31st December, 1892, in each of the public Cemeteries for Chinese since they were placed under the charge of the Sanitary Department in February, 1892, viz. :—

Mount Davis Cemetery,	547	burials
Mount Caroline Cemetery,	278	„
Kau-lung Cemetery,	321	„
Shau Ki Wan Cemetery,	155	„
Aberdeen Cemetery,	148	„
✓ Stanley Cemetery,	31	„
Shek-O Cemetery,	3	„

Total, 1,483 burials

19. During the same period the fees collected amounted to \$924.50 and the total expenditure in connection with the Cemeteries amounted to \$1,896.70. Through the Cemeteries not being laid out the great majority of the burials have been made in the free section. It is too early to express a decided opinion as to the success of this new departure in the management of the Cemeteries, but that it is a move in the right direction appears to me to be beyond question and one which I feel sure commends itself to the Chinese Community.

20. *Laundries.*—The Board was informed in March that the first set of public laundries were nearly ready for occupation and steps were taken with a view to letting them. Six public washermen entered into occupation of six of the laundries on the 1st of June. One of the six gave up his tenancy at once and two others at the end of the first month's occupation. The other three are still in occupation of a laundry each. Seven of the laundries are vacant and I am inclined to think they will remain vacant so long as public streams can be used free of charge for the business purposes of public washermen and while the ironing and dressing of clothing so washed is permitted in the bed-rooms of the washermen.

21. *Bakeries.*—A special report on the sanitary condition of the bake-houses in Victoria was made in March. This report led to the making of bye-laws for regulating bake-houses. These bye-laws did not come into force during 1892.

22. *Common Lodging Houses.*—The bye-laws for licensing and regulating these are in abeyance pending the fixing of a day by the Board on which they will come into force.

23. *Infectious Disease.*—Seventy-one cases of small-pox were reported during the year, viz.:—9 cases from ships in the Harbour, 2 from the Eastern, 15 from the Central, 41 from the Western health districts of Victoria, 3 in Kaulung and 1 in the Hill district. In every case on shore the disinfection of the premises in which it occurred as well as of the bedding, clothing, etc. was carried out as far as practicable under present conditions.

24. Three cases of hydrophobia were reported all of which ended fatally. One of these cases was not seen by any qualified medical practitioner and although the death is recorded as having resulted from hydrophobia, I doubt very much if the person ever suffered from this disease.

25. One case of Choleraic Diarrhœa was reported and it ended fatally.

26. Two cases of Diphtheria were reported and both ended fatally. In one instance the disease appears to have been contracted in the Colony, in the other it is clear that it was contracted elsewhere as the person was found to be suffering from the disease on arrival here.

27. A native of Stanley was found to be suffering from leprosy and arrangements were made by which the leper was transferred to a so-called lepers home in the neighbourhood of Canton. The hut in which the leper lived was demolished and everything combustible was burned.

28. *Contracts*.—The following contracts expired or were about to expire in 1892, viz. :—

1. The City Conservancy Contract.
2. The City Scavenging Contract.
3. The City Animal Manure Contract.
4. The Kau-lung Scavenging Contract.
5. The Shau Ki Wan Scavenging Contract.
6. The Aberdeen Scavenging Contract.
7. The Stanley Scavenging Contract.

29. In each instance before tenders for these new Contracts were called for the specifications were carefully considered and amended as the experience gained during the past three years showed to be desirable.

30. The tenders accepted for the new Contracts are very much more advantageous than those accepted in 1889 and 1890. The sums to be received annually amount to \$23,280 as against \$19,740 received under the old Contracts *i.e.* an increase of \$3,540 a year. The sums to be paid annually amount to \$25,680 as against \$29,820 under the old Contracts *i.e.* a decrease of \$4,140 a year. In addition to these Contracts there are also the Slaughter-house and Cattle-depôt Contracts both of which were let for 1893 for \$40,236 and \$2,460 respectively as against \$37,464 and \$2,400 respectively for 1892, *i.e.* an increase to be received of \$2,832. It will be observed that in letting these contracts, amounting in the aggregate to a money value of \$91,656, there is a money gain of \$10,512 a year compared with the sums received and paid under the old contracts. If the work to be done under these new contracts is performed in the same satisfactory manner that the work under the old contracts was done then the letting of these can only be viewed as being highly satisfactory.

STAFF.

31. The following changes, etc., took place during the year :—

32. *Surveyor*.—Mr. J. R. CROOK, Civil Engineer, was appointed in February Sanitary Surveyor, *vice* Mr. F. A. COOPER who had been appointed Director of Public Works.

33. *Senior Inspector of Nuisances*.—Mr. J. R. GERMAIN, owing to ill-health, was granted four months vacation leave of absence and subsequently three and a half months leave of absence on half pay. During the absence of Mr. GERMAIN, the duties of Senior Inspector were performed by Mr. J. J. CLERHEW.

34. *Assistant Inspector of Markets*.—Owing to the long and serious illness of Mr. GEO. RAE, the duties of this post were performed during the whole of the year by Mr. WM. FISHER who was appointed, permanently, Assistant Inspector of Markets when Mr. RAE was invalided as unfit for further service in October. Very soon after being invalided Mr. RAE died. He was an intelligent steady and trustworthy official who had been in the service of the Colony for a little over twenty years.

35. *Inspectors of Nuisances*.—Police Constable HENRY SMITH acted for Mr. WM. FISHER in the eastern health district from January till October when he left the service having secured a more lucrative appointment in Hankow. Mr. GALBRAITH MOFFAT was appointed to the post rendered vacant by the transference of Mr. WM. FISHER to the markets. Police Constable R. PATTERSON acted for Mr. CLERHEW in the western health district of Victoria for two and a half months.

36. *Market Watchmen*.—J. NORONHA absconded, MAHOMET ALLI and SEETHA RAM were dismissed. A. B. SOUZA and CHUNAM SHAH were appointed.

37. *Market Scavengers*.—One died, two resigned and one was dismissed. Four other men were appointed to the vacancies thus created.

I am,

Gentlemen,

Your obedient Servant,

HUGH MCCALLUM,
Sanitary Superintendent.

Table A.

Return showing the houses the drains of which have been opened and inspected under the provisions of the Health Ordinance during the year 1892, and the owners thereof requested to re-drain them.

Street.	Lot. No.	No. of Houses.	If plans submitted.	If work completed.	Remarks.
Mosque Street,	Inland 347, 345A., 344 & 717.	12	Yes.	Yes.	
Queen's Road Central,	Inland 25.	8	"	"	
Fuk San Lane,	Inland 747.	8	"	No.	Kitchen floors not yet repaired.
Bonham Strand,	Marine 6.	8	"	Yes.	
Jervois Street,	Do.	7	"	"	
Tung On Lane,	Inland 100A.	10	"	"	
Hollywood Road,	Inland 60.	4	"	"	
Lower Lascar Row,	Inland 70A. & 166.	10	"	"	
East Street,	Inland 26.	4	"	"	
U-Yam Lane,	Do.	6	"	"	
Jervois Street,	Inland 202.	4	"	"	
Queen's Road Central,	Do.	4	"	"	
Pok-fu-lam Road,	Inland 747.	7	"	"	
Pottinger Street,	Marine 14.	16	"	"	
Chinese Street,	Do.	16	"	"	
Queen's Road Central,	Do.	4	"	"	
Praya Central,	Do.	6	"	"	
Graham Street,	Inland 112 & 113.	5	"	"	
Market Street,	Inland 406 & 407.	12	"	No.	
Tank Lane,	Inland 277.	3	"	"	
Square Street,	Do.	3	"	"	
Market Street,	Inland 701.	6	"	"	
Pound Lane,	Do.	11	"	"	
Fuk On Lane,	Do.	7	"	"	
Ping On Hong,	Inland 701A.	8	"	"	
Possession Street,	Inland 212 A., B., & c., & 568.	15	"	"	
Hollywood Road,	Inland 568.	1	"	"	
Queen's Road Central,	Inland 619.	10	Yes, for eastern half.	Yes, eastern half.	Inspected prior to 1892.

HUGH McCALLUM,
Sanitary Superintendent.

Tables B.

MORTALITY STATISTICS,

For the Year 1892.

BRITISH AND FOREIGN COMMUNITY.

The whole Colony, Death Rate, Civil Population,..... 20.7—per 1,000 per annum.

CHINESE COMMUNITY.

Victoria Registration District, Death Rate,—Land Population,	23.9	} per 1,000 per annum.
" " " " Boat " 	7.2	
Kaulung " " " " Land " 	14.0	} " "
" " " " Boat " 	25.0	
Shaukiwán " " " " Land " 	15.7	} " "
" " " " Boat " 	24.5	
Aberdeen, " " " " Land " 	20.3	} " "
" " " " Boat " 	28.4	
Stanley ✓ " " " " Land " 	32.6	} " "
" " " " Boat " 	12.3	
The whole Colony, " " " " Land " 	22.4	} " "
" " " " Boat " 	15.3	
" " " " Land and Boat Population,	21.4	" "
" " " " { British, Foreign & Chinese Community, excluding Army and Navy,..... }	21.3	" "

HUGH McCALLUM,
Secretary.

SANITARY BOARD ROOM,
HONGKONG, 31st January, 1893.

A SUMMARY OF DEATHS AND THEIR CAUSES REGISTERED

DISEASE.	EUROPEAN AND FOREIGN COMMUNITY.			CHINESE COMMUNITY.								
	Civil. — Esti- mated Popula- tion. 7,000	Army. — Esti- mated Strength. ...	Navy. — Esti- mated Strength. ...	VICTORIA DISTRICT.—								
				Sokonpo.	Bowington.	Wantsai.	Hawan.	Sheungwan.	Chungwan.	Táip'ingshan.		
				Estimated Population,								
Infantile Convulsive Diseases, {	Convulsions,	5	...	...	5	...	7	48	6	108	157
	{ Trismus Nascentium, ..	1	...	...	...	...	1	479	...	204	21
Throat Affections, {	Acute,	3	...	...	...	...	...	...	...	...	1
	{ Chronic, .....	...	...	...	...	...	...	...	...	...	...
Chest Affections, {	Acute,	16	2	...	6	...	9	3	2	23	120	
	{ Chronic,	19	...	...	16	1	41	46	9	109	354
Bowel Complaints, {	Cholera, .....	...	...	...	...	...	...	...	...	...	...
	Cholera Nostras, ....	...	...	...	...	...	...	...	...	...	...
	Cholera Infantum, ...	...	...	...	...	...	...	...	...	...	...
	Diarrhœa,	3	3	...	2	...	2	71	...	3	58	
	„ Choleraic, .....	...	...	...	...	...	...	...	...	...	...
	Dysentery,	2	6	...	...	...	...	...	...	1	46
	Colic, .....	...	...	...	...	...	...	...	...	...	...
Fevers, {	Malarial, {	Remittent,	3	9	...	5	...	6	...	1	10	7
		{ Intermittent,	9	...	5	7	3	13	96
	Simple Continued, .....	...	...	1	...	1	2	163	1	13	69
	Puerperal, .....	...	...	...	...	...	...	...	1	...	...
Exanthematous, {	Typhoid, .....	...	...	...	...	...	...	...	...	...	...
	Measles, .....	...	...	...	...	...	...	...	...	1	1
	Small-pox, ...	1	...	...	1	...	...	...	...	1	35
Marasmus,	1	...	...	...	...	...	...	...	169	...	
Other Causes,	91	10	8	12	3	15	29	7	152	475		
TOTAL,	145	30	9	56	5	88	846	29	808	1,440		

SANITARY BOARD ROOM,
HONGKONG, 31st January, 1893.

DURING THE YEAR ENDED 31ST DECEMBER, 1892.

CHINESE COMMUNITY.													TOTAL.	GRAND TOTAL.
DIVISION.				Kaulung District.		Sháukiwán District.		Aberdeen District.		Stanley District.				
Saiyingpun.	Shektongtsui.	Kennedytown.	Harbour. Estimated Population.	Estimated Population.		Estimated Population.		Estimated Population.		Estimated Population.				
				Land.	Boat.	Land.	Boat.	Land.	Boat.	Land.	Boat.			
154,500			18,350	21,800	6,450	7,700	3,830	2,900	3,980	950	570			
67	1	1	12	31	5	10	3	8	15	2	...	491	} 1,212	
7	...	...	...	2	1	1	...	...	...	4	...	721	
...	...	...	...	...	1	...	...	...	...	...	...	5	} 7
...	...	...	...	...	2	...	...	...	...	...	...	2	
26	1	...	13	...	...	...	...	12	41	1	...	275	} 1,204
97	8	3	59	72	30	18	13	12	11	9	2	929		
...	...	...	...	...	...	...	...	...	...	...	...	...	} 308
...		
3	...	...	...	25	14	23	20	2	6	2	...	237	} 308
1	...	...	...	...	...	...	...	...	...	...	...	1	
6	...	...	4	...	...	2	...	...	...	2	...	69	} 129
...	...	...	...	...	...	...	...	...	1	...	...	1	
10	...	1	4	...	...	39	34	...	...	...	...	129	} 215
17	4	...	9	6	2	10	12	8	10	3	1	215		
12	2	...	1	91	44	6	5	12	20	4	...	447	} 838	
...	...	...	...	...	...	...	...	...	...	...	...	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	} 44
...	...	...	...	...	...	...	...	...	...	...	...	2	
5	...	...	...	1	...	...	...	...	...	...	...	44	} 170
...	...	...	...	...	...	...	...	...	...	...	...	170	
143	5	5	31	78	62	12	7	5	9	4	4	1,167	1,167	
394	21	10	133	306	161	121	94	59	113	31	7	4,906	4,906	

HUGH McCALLUM,
Secretary.

COMPARATIVE STATEMENT FOR THE LAST FIVE YEARS.—(EUROPEAN COMMUNITY, CIVIL.)

MONTH.	Infantile Convulsive Diseases.					Throat Affections.					Chest Affections.					Bowel Complaints.					Fevers.					Other Causes.					Total Deaths.					Death-rate per 1,000 per Annum.				
	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.	1891.	1892.					
January,	1	...	1	2	3	2	6	3	1	5	2	1	...	24	2	12	3	8	11	9	40	13	12	19	12	74.8	23.9	21.7	33.3	20.7					
February, .....	...	...	1	...	1	3	2	3	7	5	2	...	1	...	4	...	...	1	...	6	6	12	3	5	11	15	7	15	16	28.0	27.6	12.7	26.2	27.6		
March,	1	1	...	...	1	6	1	8	1	1	2	1	...	...	1	...	...	1	...	5	5	8	5	6	6	15	12	15	8	28.0	22.0	27.1	13.9	13.8
April,	2	...	...	...	...	...	3	2	2	4	...	2	1	...	4	...	2	1	...	5	4	5	4	13	11	9	8	17	20.5	16.5	14.1	14.0	29.2		
May, .....	...	3	1	...	2	2	1	4	2	4	6	1	...	...	1	...	...	2	2	4	4	9	6	8	6	13	14	14	12	24.2	25.6	25.2	21.0	22.3	
June, .....	...	...	...	1	2	...	...	3	4	4	16	2	1	1	...	4	2	6	2	1	9	5	8	6	7	29	9	18	14	53.9	16.5	32.4	22.6	24.0	
July, .....	...	...	1	...	1	3	1	2	1	1	6	1	3	4	...	5	10	6	3	1	9	7	4	13	7	23	19	16	21	42.7	35.3	28.8	36.6	18.9				
August,	3	1	2	1	...	2	2	3	...	3	2	1	2	1	2	2	4	2	1	1	7	9	11	10	7	16	17	20	14	29.7	31.0	35.9	24.3	20.6						
September,	2	...	1	...	...	3	1	7	...	4	2	1	...	3	2	2	1	2	...	7	6	8	8	7	16	10	17	10	29.6	18.2	30.5	17.4	23.9					
October,	1	1	2	1	...	...	3	5	2	3	4	3	2	1	1	1	2	1	...	8	5	12	7	8	14	14	22	12	25.9	25.5	39.4	20.8	20.5					
November,	1	1	1	...	1	1	1	5	3	3	2	...	1	2	1	...	...	3	...	3	2	6	5	4	8	4	13	13	14.8	7.3	23.3	22.5	13.7					
December, .....	...	...	1	2	...	3	3	...	5	...	2	2	...	...	...	...	...	2	3	1	5	11	5	8	7	10	17	8	18.4	30.8	14.3	31.1	13.6	
Total,	11	7	10	7	6	3	1	1	3	25	21	44	33	35	45	49	22	23	20	4	80	81	81	91	92	210	153	171	164	145	32.3	23.0	25.5	23.8	20.7					

HUGH McCALLUM,
Secretary.

Sanitary Board Room, Hongkong, 31st January, 1893.

COMPARATIVE STATEMENT FOR THE LAST FIVE YEARS.—(CHINESE COMMUNITY.)

MONTH.	Infantile Convulsive Diseases.					Throat Affections.					Chest Affections.					Bowel Complaints.					Fevers.					Other Causes.					Total Deaths.					Death-Rate per 1,000 per Annum.					
	1888	1889	1890	1891	1892	1888	1889	1890	1891	1892	1888	1889	1890	1891	1892	1888	1889	1890	1891	1892	1888	1889	1890	1891	1892	1888	1889	1890	1891	1892	1888	1889	1890	1891	1892						
January,	138	67	94	81	72	1	...	1	1	...	86	81	76	132	125	28	25	28	24	22	406	61	51	85	62	86	62	67	95	91	91	745	296	217	418	372	50.3	19.5	20.5	24.1	20.7
February,	89	76	59	81	117	2	...	1	1	...	77	70	75	152	129	17	18	15	34	17	180	46	52	109	56	92	59	60	108	118	437	30.7	17.7	16.9	27.7	24.2					
March,	73	87	67	76	73	2	...	2	...	...	82	78	96	121	118	28	19	16	24	13	61	54	82	75	70	52	53	56	90	106	380	20.8	19.2	20.4	22.2	21.0			
April,	55	97	76	68	84	1	3	1	1	1	82	68	112	110	100	34	17	15	19	23	58	62	62	55	67	70	300	319	335	324	307	20.1	20.9	21.4	18.5	20.3					
May,	95	133	90	114	112	...	1	1	1	2	103	71	87	80	95	77	22	29	15	20	78	88	61	68	83	93	446	407	341	370	417	29.9	26.7	21.8	21.1	23.0					
June,	118	126	115	119	128	1	...	1	...	...	180	85	69	80	79	31	40	51	39	31	122	105	92	73	121	88	803	444	434	414	403	53.9	29.0	27.7	23.5	22.2			
July,	56	120	90	152	109	1	1	...	1	1	91	83	83	98	54	145	42	38	82	27	88	108	106	106	66	57	573	454	401	566	364	38.4	30.3	25.6	32.1	19.9					
August,	144	121	85	129	104	...	...	...	1	...	75	58	74	101	90	54	49	32	94	30	95	93	115	123	74	115	75	79	102	86	483	32.2	25.8	24.5	30.9	21.0		
September,	139	119	103	126	144	2	...	...	...	...	86	73	80	93	80	55	33	37	50	25	89	121	93	69	101	54	472	368	424	447	431	31.4	23.9	27.0	25.1	23.5	
October,	125	130	119	126	94	1	1	...	1	...	99	77	80	90	89	44	34	38	39	29	108	78	125	82	72	112	489	413	444	421	378	32.4	26.8	28.2	24.0	20.6					
November,	93	107	56	107	82	...	2	1	...	...	94	90	94	90	85	38	42	30	34	21	69	109	91	74	61	89	383	437	346	404	338	25.4	28.3	21.9	22.6	18.3			
December,	87	84	76	84	87	1	2	...	...	...	82	90	112	98	123	25	27	24	25	36	72	54	74	86	73	69	336	310	359	398	453	22.2	20.0	22.7	22.2	24.5		
Total,	1,212	1,267	1,030	1,263	1,306	12	8	8	8	4	1,037	924	1,038	1,245	1,167	856	368	353	479	294	1,426	947	1,040	1,048	826	1,057	891	887	1,140	1,227	5,785	4,405	4,365	5,183	4,724	32.7	24.5	23.3	24.5	21.4	

HUGH McCALLUM,
Secretary.

Sanitary Board Room, Hongkong, 31st January, 1893.

Table showing the Total Deaths for each Month in the Years 1887 to 1892 inclusive and the Death-rate for estimated Population, (Army and Navy excluded).

Estimated Population,	DEATH-RATE PER 1,000 PER ANNUM.						REMARKS.
	182,500	187,000	192,000	197,000	218,800	225,500	
Year,	1887.	1888.	1889.	1890.	1891.	1892.	
January,	302	785	309	329	437	384	Deaths from causes other than Small-pox and Choleraic complaints,
February,	289	472	284	269	500	453	
March,	351	313	304	332	396	388	5,020
April,	326	311	328	344	332	384	
May,	397	459	421	355	382	430	Deaths from Small-pox and Choleraic complaints,
June,	518	832	453	452	427	417	
July,	494	596	473	417	587	375	
August,	534	499	413	405	563	396	
September,	459	488	379	441	457	445	
October,	437	503	427	466	433	390	
November,	520	391	441	359	417	346	
December,	658	346	327	367	416	461	
Total,	5,285	5,995	4,559	4,536	5,347	4,869	Total,
							1887.
							1888.
							1889.
							1890.
							1891.
							1892.
							4,824
							27
							1
							11
							762
							265
							45
							4,535
							5,320
							4,536
							4,559
							5,285
							5,347
							4,869

Sanitary Board Room, Hongkong, 31st January, 1893.

HUGH MCCALLUM,
Secretary.

Table C.

Contract.	Name of Contractor.	Butchers.	Foremen and Watchmen.	Boatmen.	Cartmen.	Basketmen.	Sweepers.	Men for washing Side Channels & Cleaning Sewer Traps.	Other Workmen.	Nightmen.	Attendants at Latrines and Urinals.	Total.
Victoria, Scavenging,	Hü A-tso, .....	...	18	85	155	133	82	36	24	...	...	533
Victoria, Conservancy,	Chan Pui, .....	...	16	48	...	...	...	...	...	45	10	119
Kaulung, Scavenging and Conservancy, ..	Pan In, .....	...	2	8	6	6	10	...	...	...	4	36
Shaukiwan, Scavenging and Conservancy,	Kwok Chau, ...	...	1	...	...	...	8	...	...	...	...	9
Aberdeen, Scavenging and Conservancy,	Chan Yu Cheung, ...	...	1	...	...	...	4	...	...	...	1	6
Stanley, Scavenging and Conservancy, ..	Do., ...	...	1	...	...	...	2	...	...	...	1	4
Slaughter-house,	Hü A-tso,	18	5	...	...	...	...	...	22	..	...	45
Cattle Depôt,	Tsang Keng, ...	...	1	...	...	...	...	...	15	...	...	16
Animal Manure,	Chun I, .....	...	1	...	...	...	...	...	14	...	...	15
Total,		18	46	141	161	139	106	36	75	45	16	783

Note.—1. Estimated number of Nightmen employed by Householders in Victoria, 500.

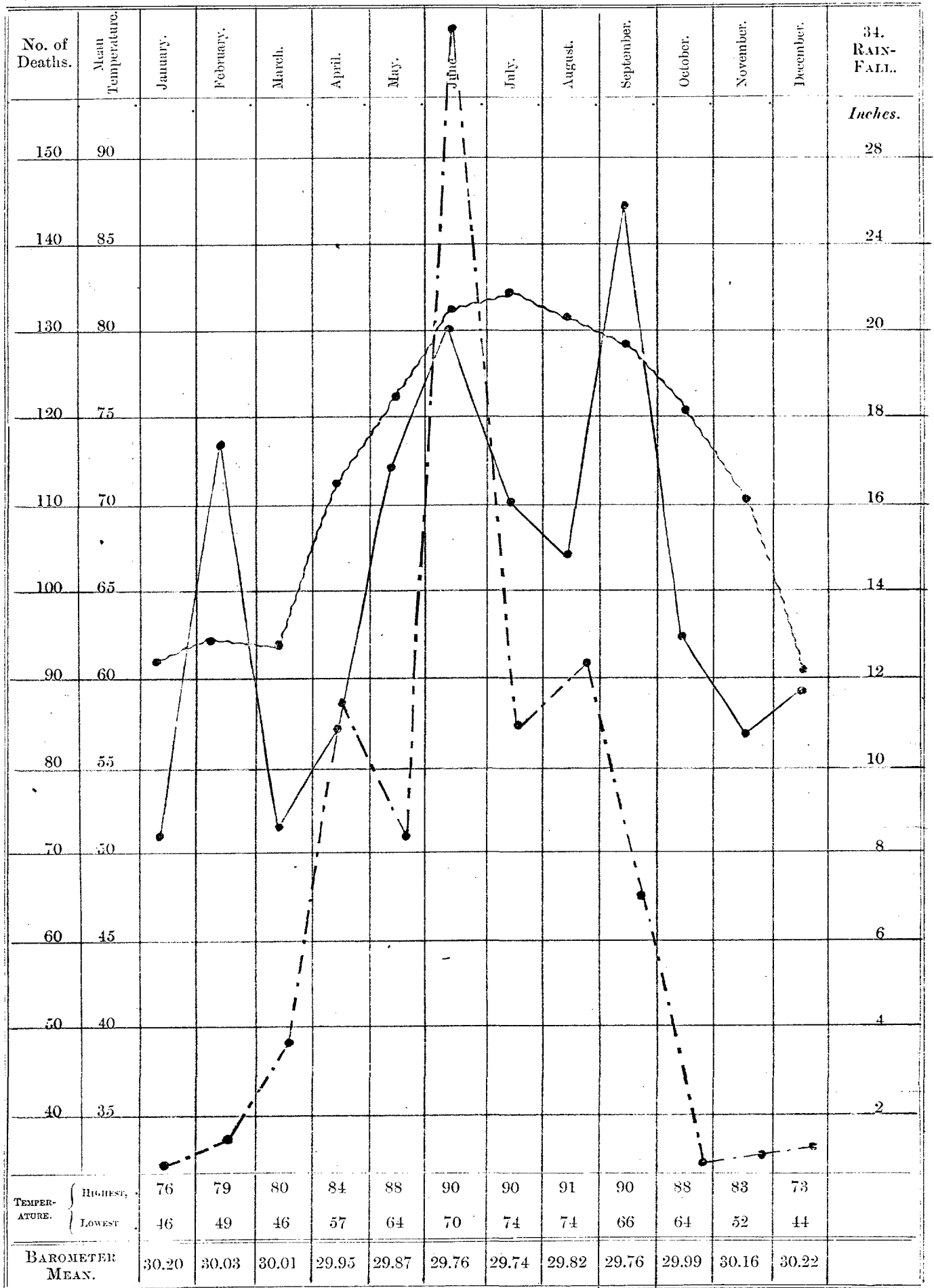
2. Estimated quantity of house and trade refuse, street sweepings, &c., removed by Scavenging Contractors from Victoria, Hill and Kaulung Districts during 1892, 30,000 tons.

3. Estimated quantity of Nightsoil removed by Conservancy Contractor from Victoria, Hill and Kaulung Districts during 1892, 11,500 tons.

HUGH McCALLUM,
Sanitary Superintendent.

DEATHS FROM CONVULSIVE DISEASES.

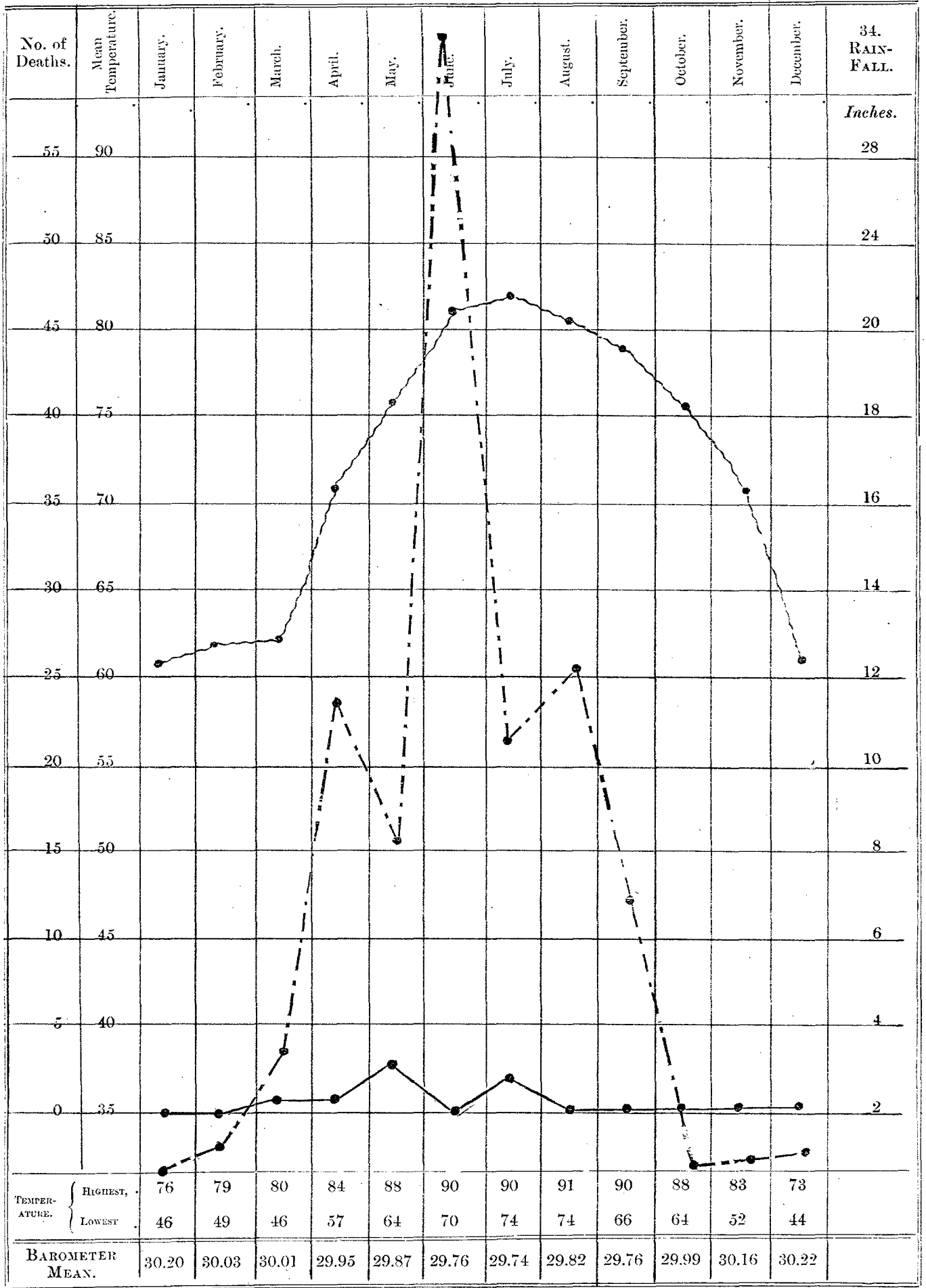
1892.



NOTE.—Plain line indicates the number of deaths, the Curved line mean temperature, and the Dotted line rain-fall in inches.

DEATHS FROM THROAT AFFECTIONS.

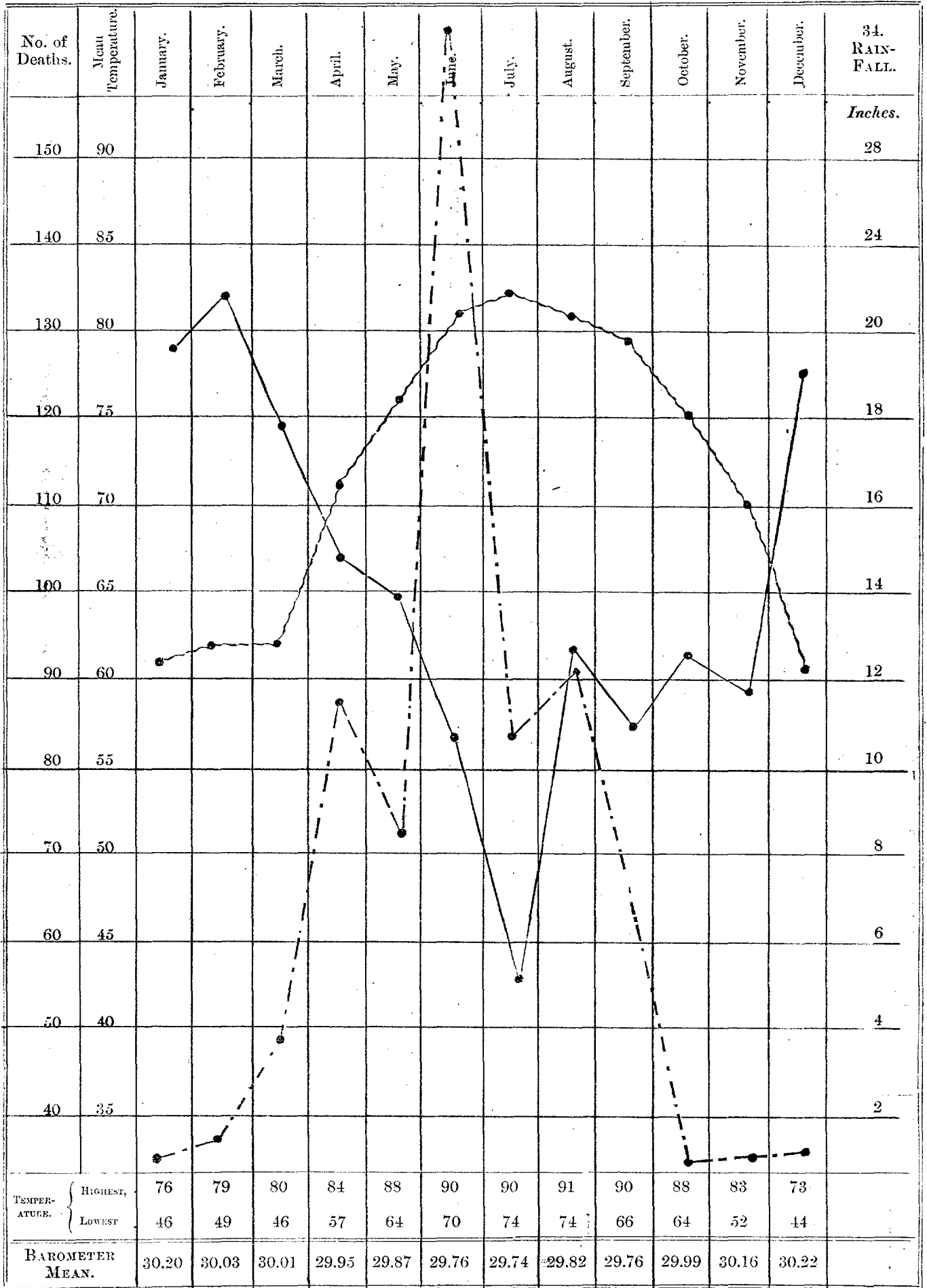
1892.



NOTE.—Plain line indicates the number of deaths, the Curved line mean temperature, and the Dotted line rain-fall in inches.

DEATHS FROM CHEST AFFECTIONS.

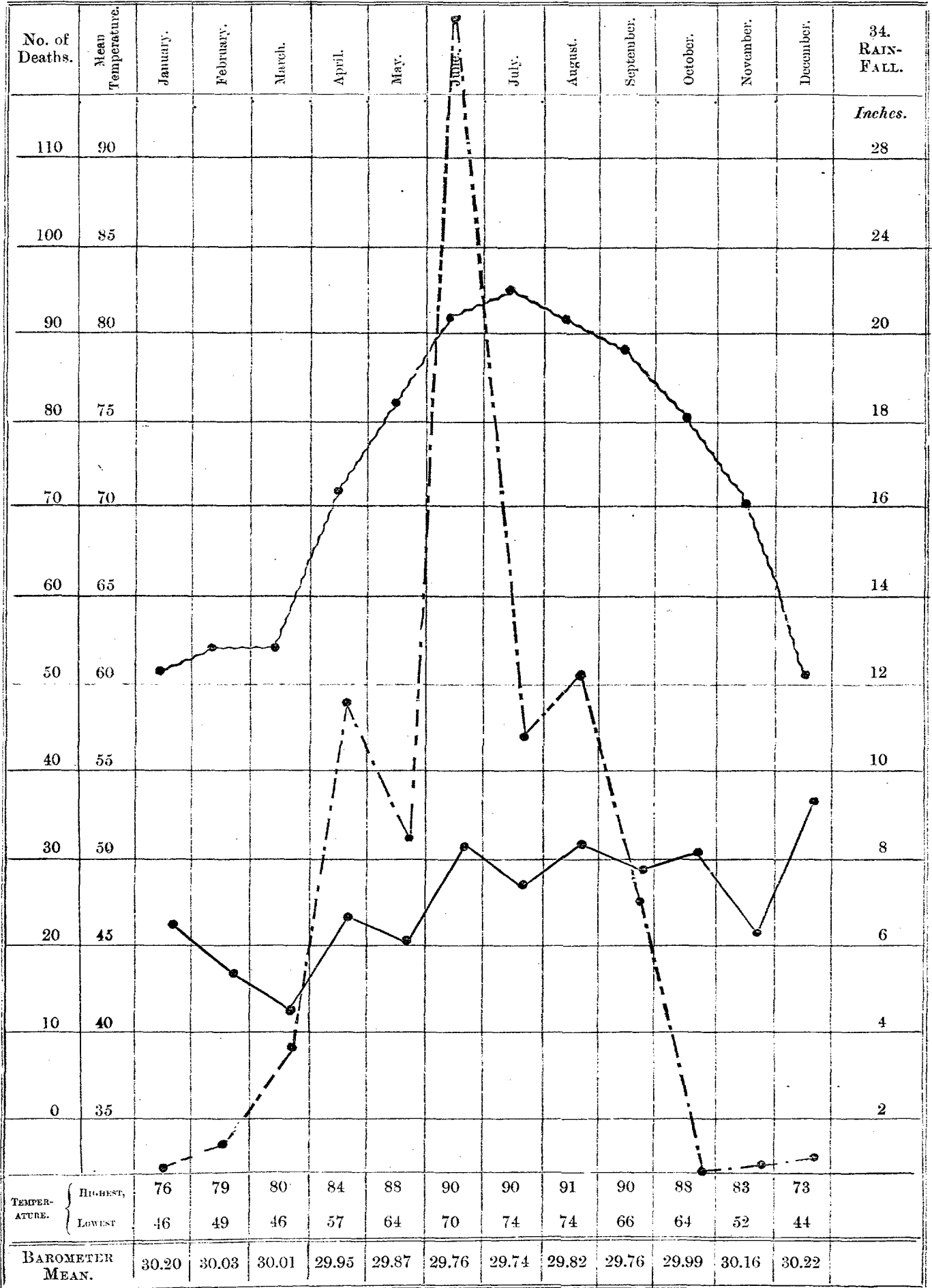
1892.



NOTE.—Plain line indicates the number of deaths, the Curved line mean temperature, and the Dotted line rain-fall in inches.

DEATHS FROM BOWEL COMPLAINTS.

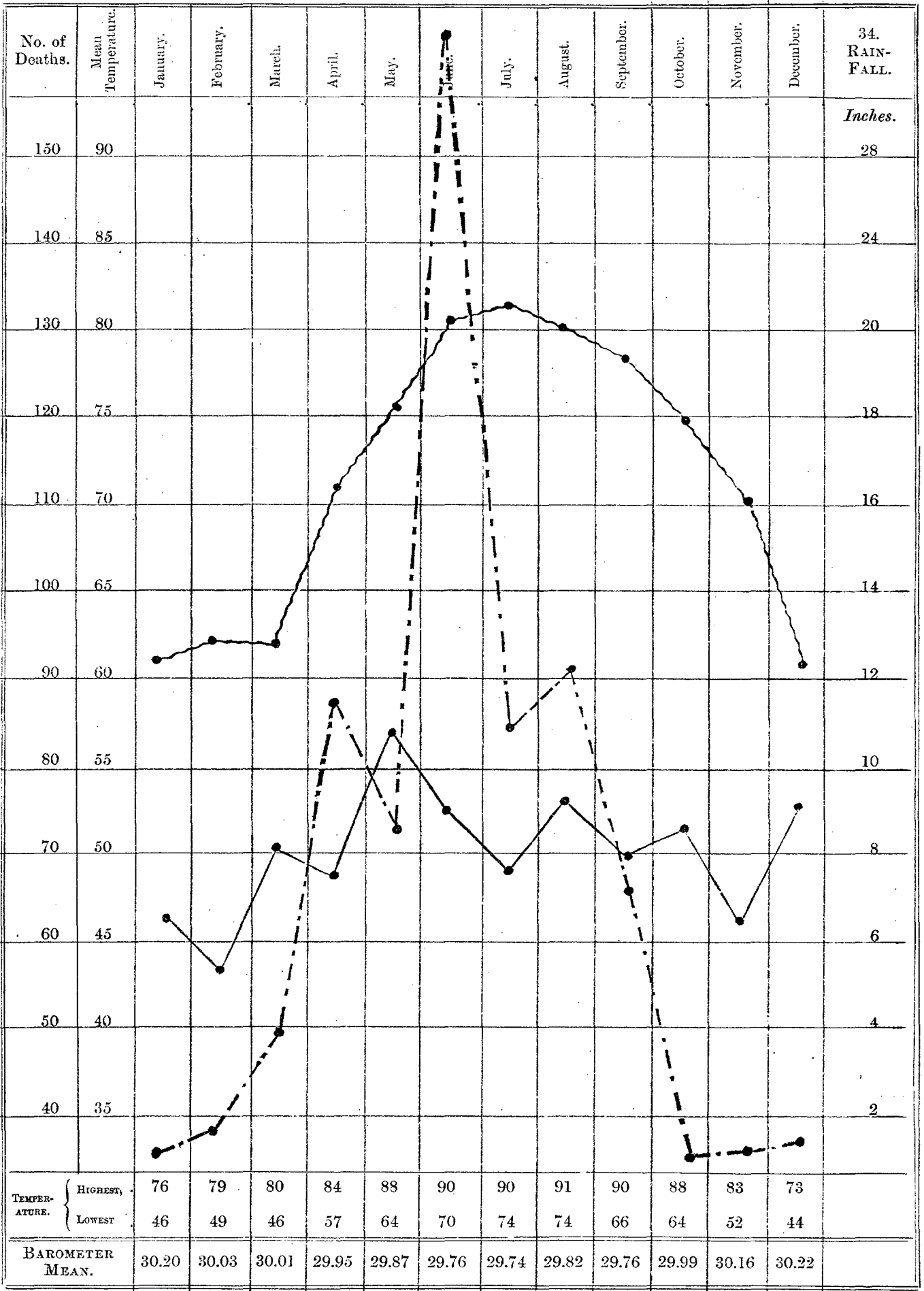
1892.



NOTE.—Plain line indicates the number of deaths, the Curved line mean temperature, and the Dotted line rain-fall in inches.

DEATHS FROM FEVERS.

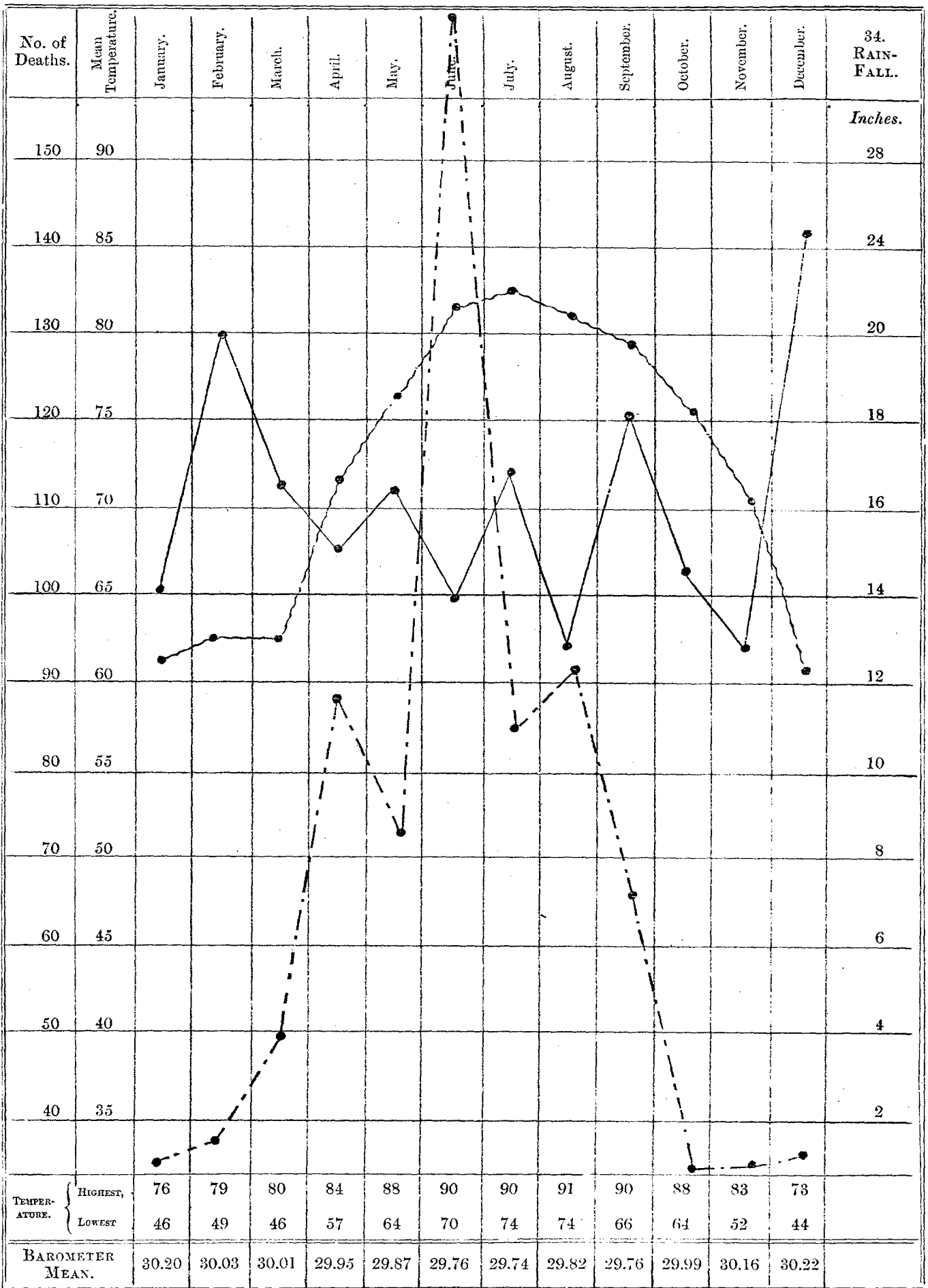
1892.



NOTE.—Plain line indicates the number of deaths, the Curved line mean temperature, and the Dotted line rain-fall in inches.

DEATHS FROM CAUSES OTHER THAN CONVULSIVE DISEASES, THROAT AFFECTIONS, CHEST AFFECTIONS, BOWEL COMPLAINTS AND FEVERS.

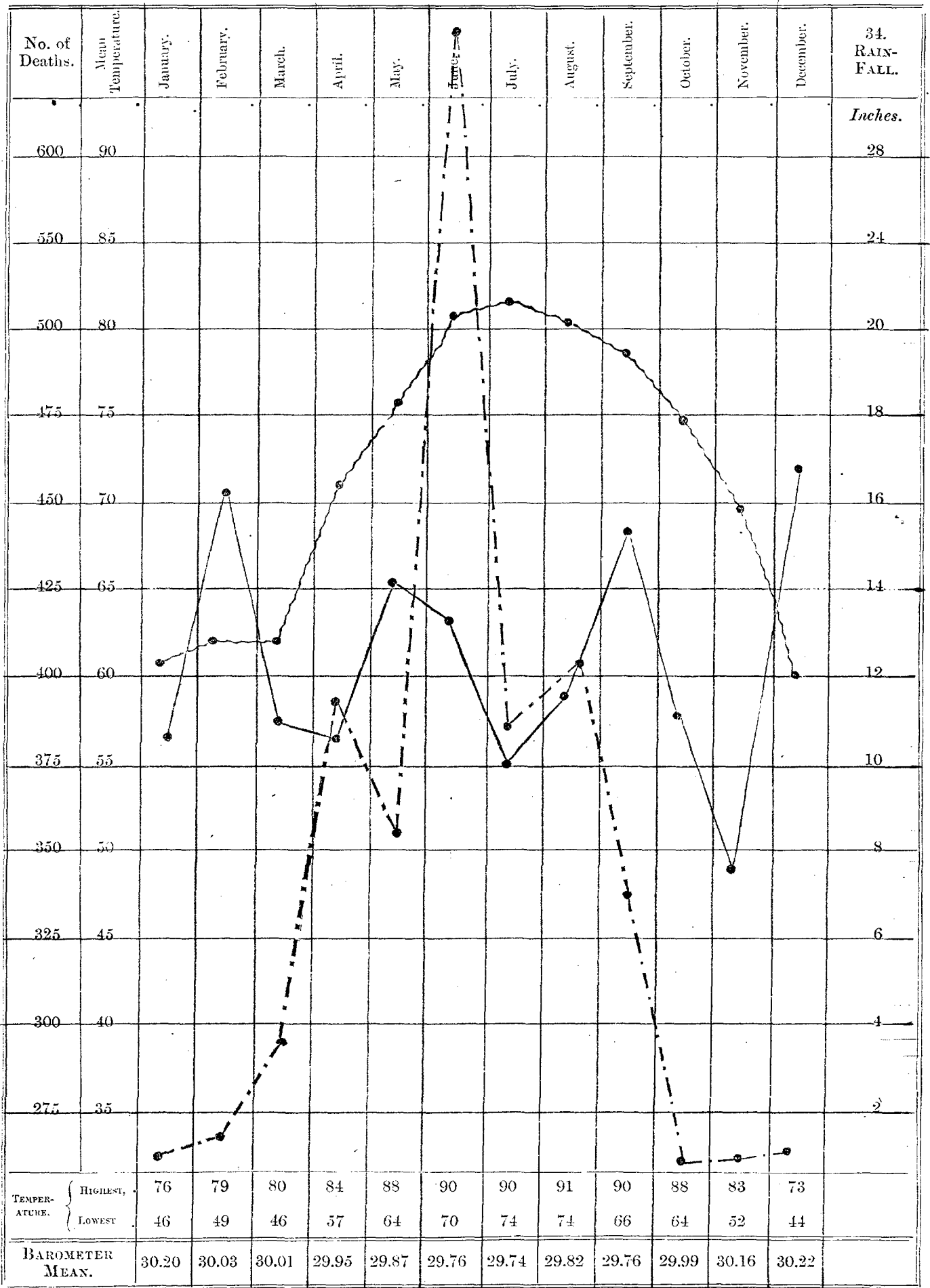
1892.



NOTE.—Plain line indicates the number of deaths, the Curved line mean temperature, and the Dotted line rain-fall in inches.

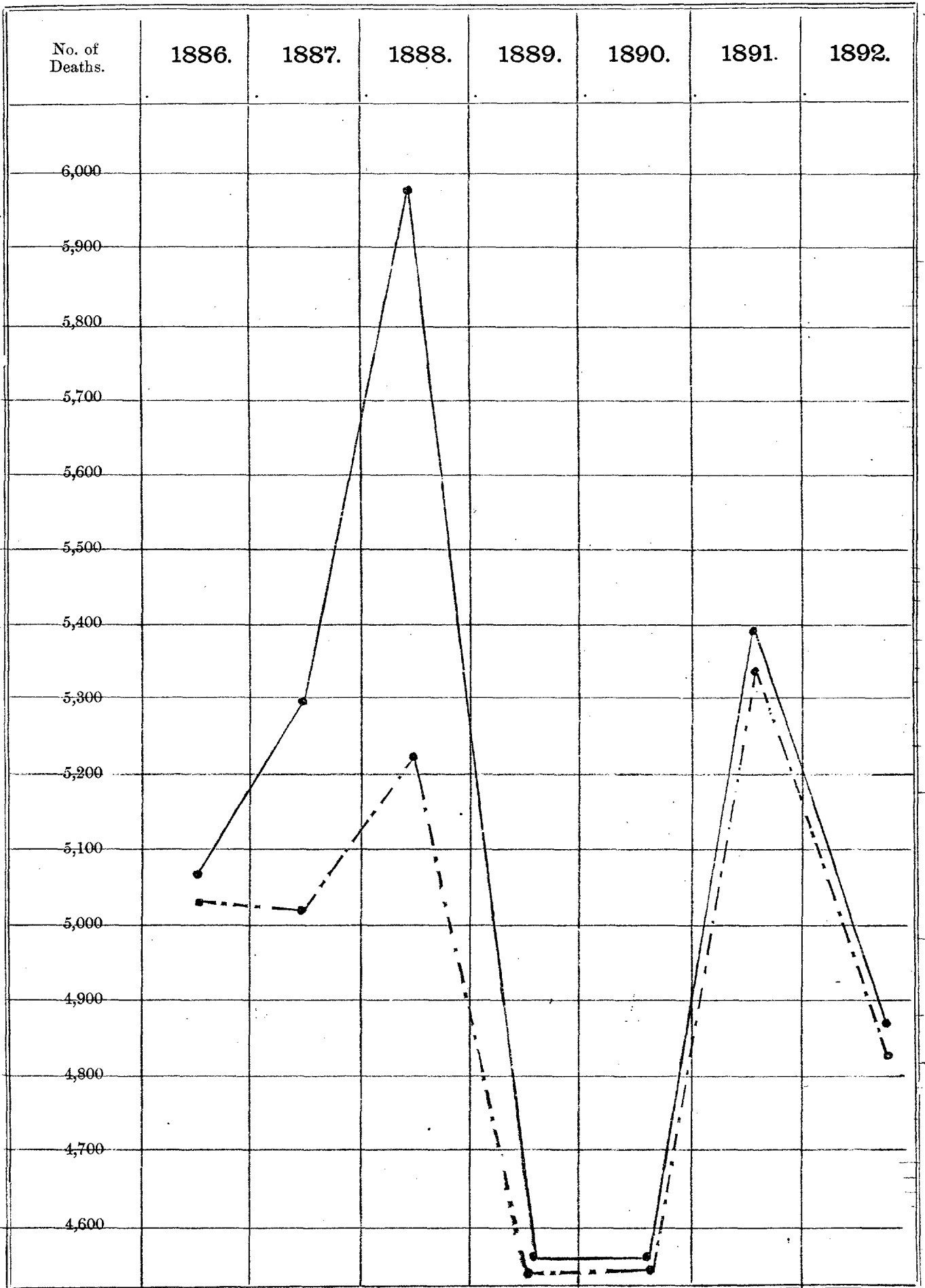
DEATHS FROM ALL CAUSES.

1892.



NOTE.—Plain line indicates the number of deaths, the Curved line mean temperature, and the Dotted line rain-fall in inches.

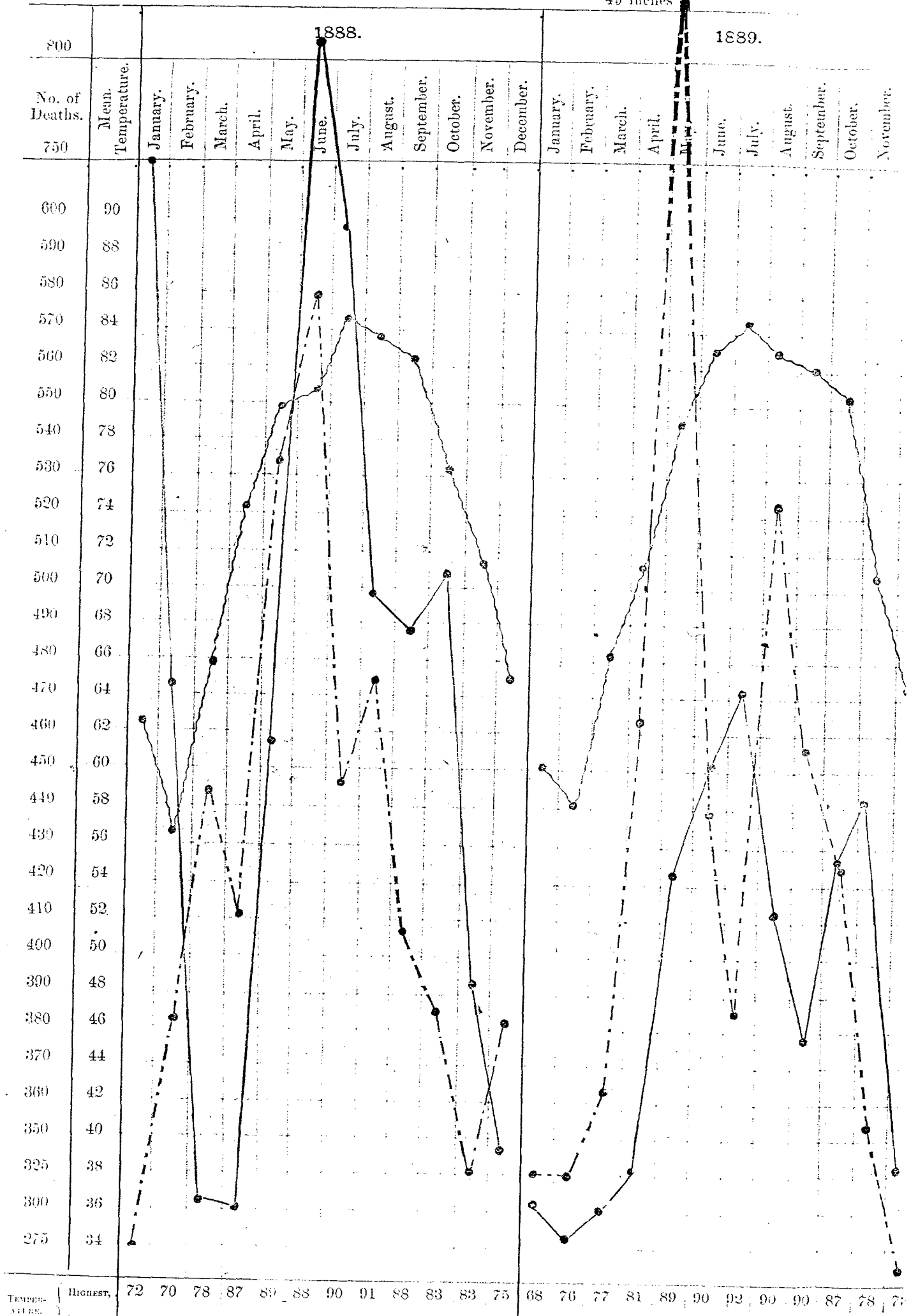
DEATHS DURING THE YEARS 1886, 1887, 1888, 1889,
1890, 1891, AND 1892.



NOTE.—Plain line shows death from all causes and Dotted line shows death from all causes exclusive of small-pox and choleraic diseases.

DEATHS FROM ALL CAUSES

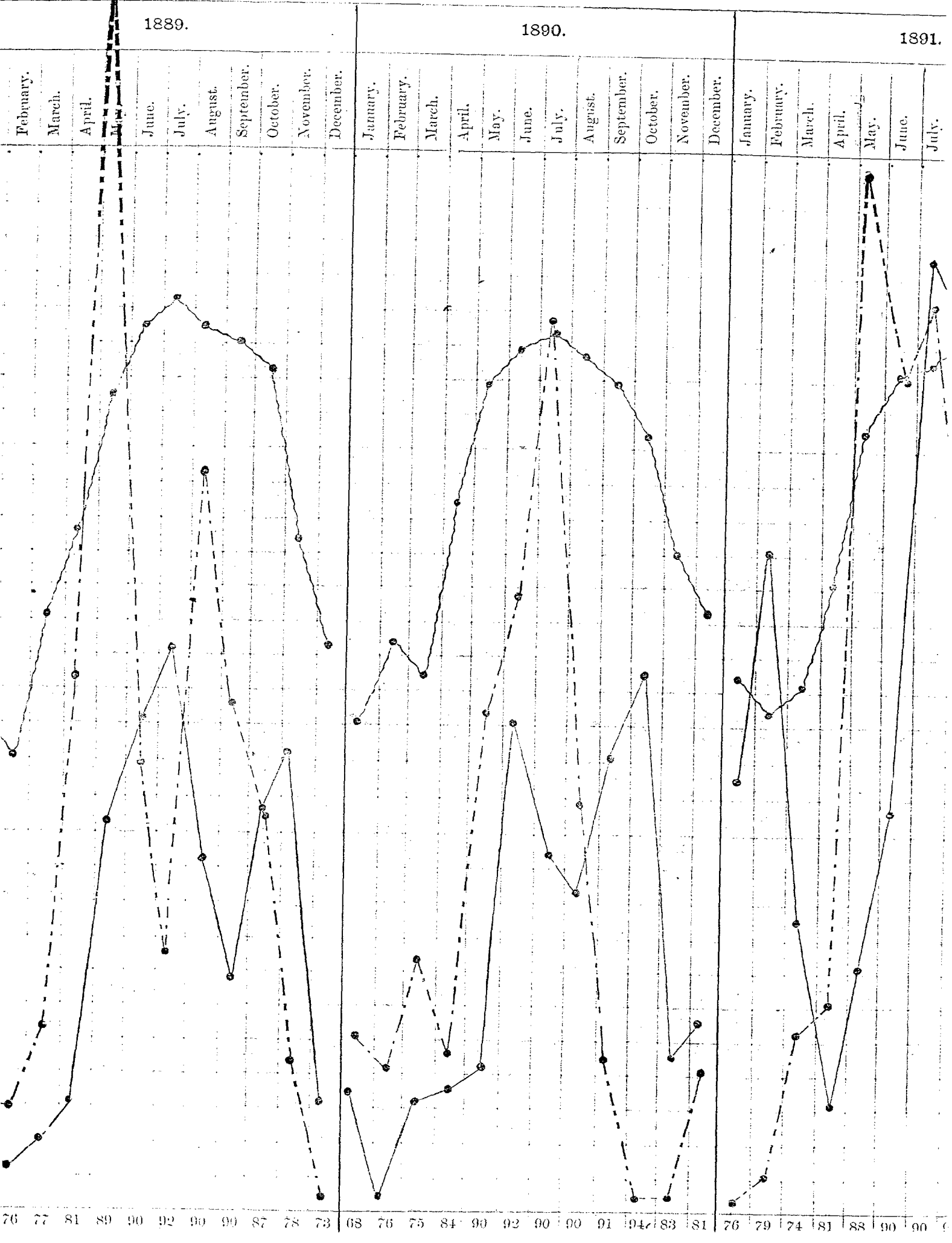
49 inches



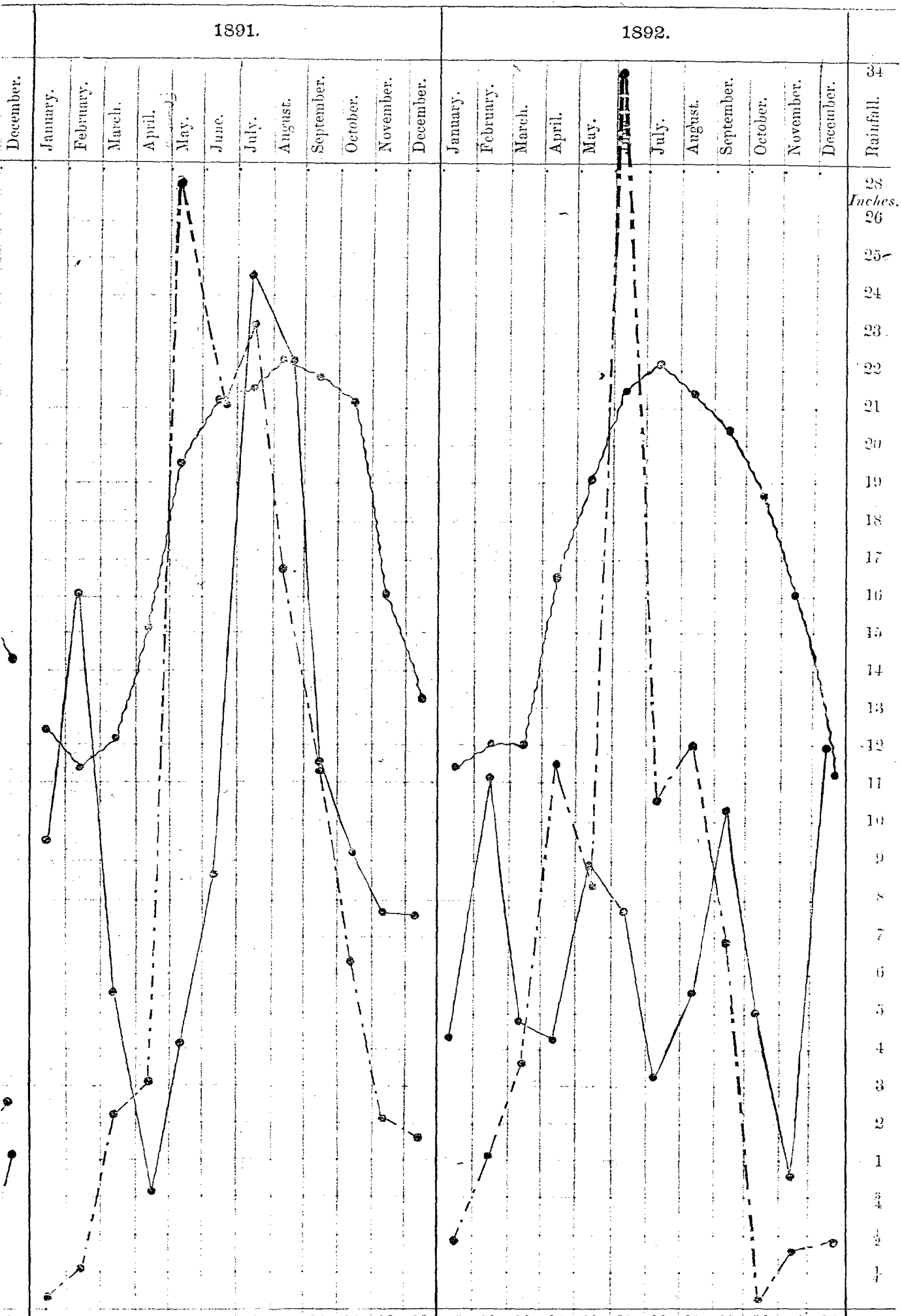
TEMPERATURE. HIGHEST, 72 70 78 87 89 88 90 91 88 83 83 83 75 68 76 77 81 89 90 92 90 90 87 78 75

IS FROM ALL CAUSES FOR THE FIVE YEARS ENDED 31st DECE

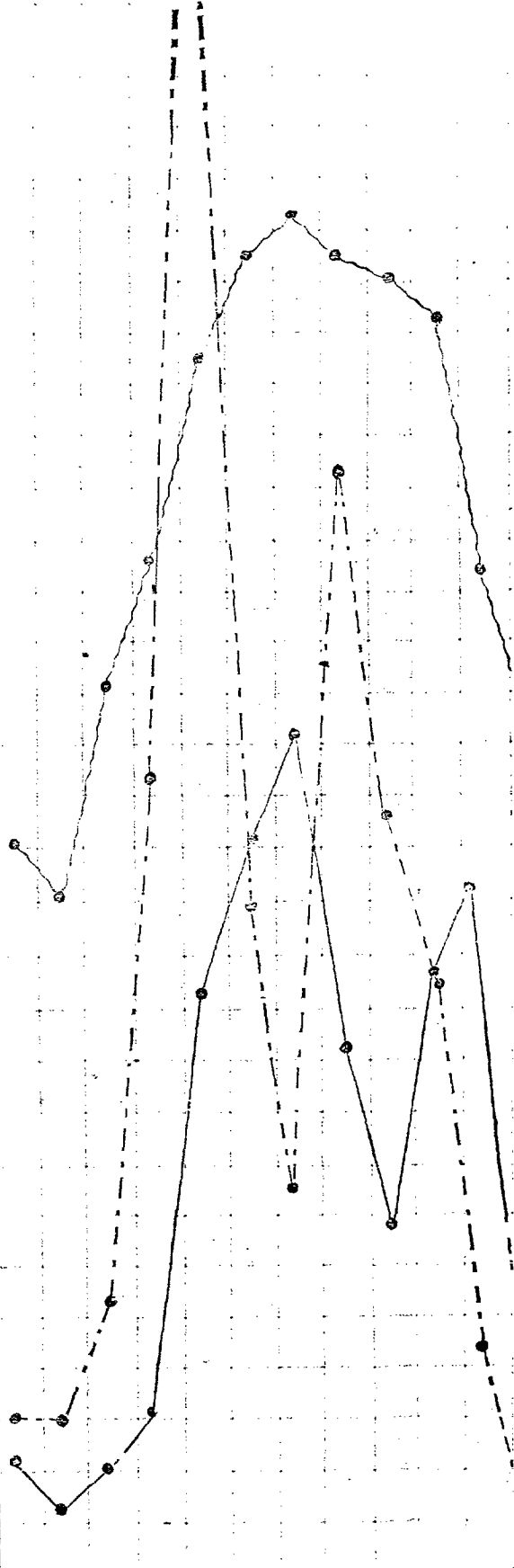
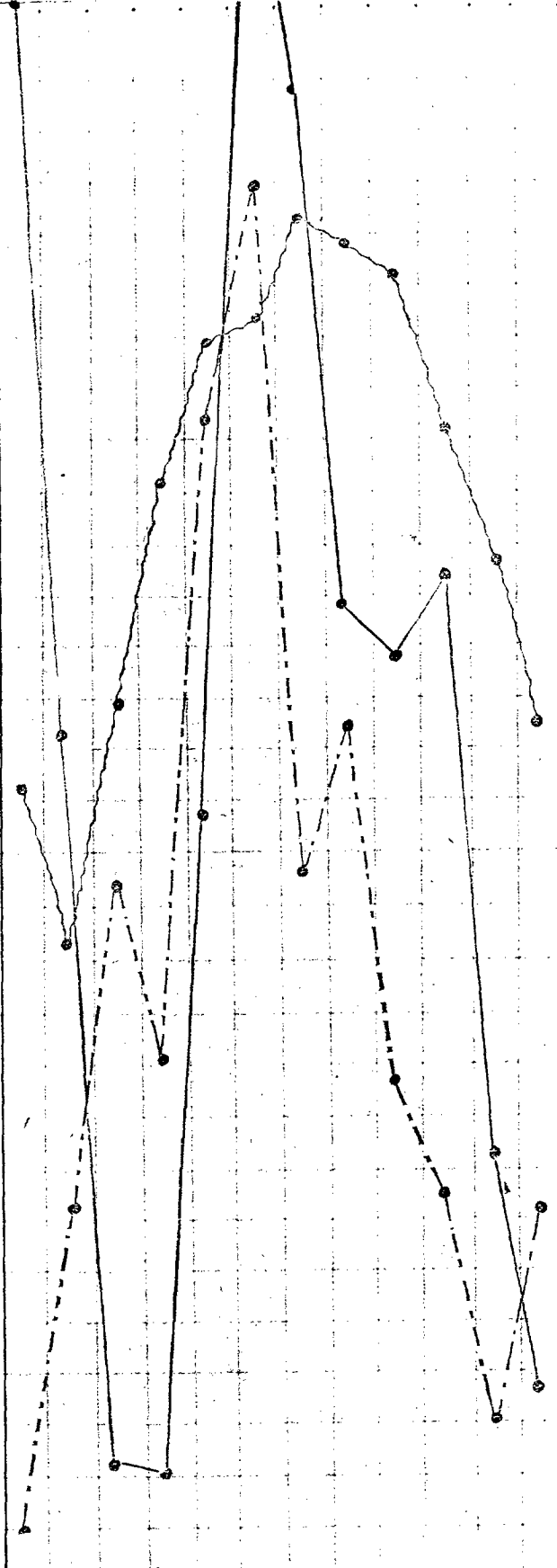
49 inches



ENDED 31ST DECEMBER, 1892.

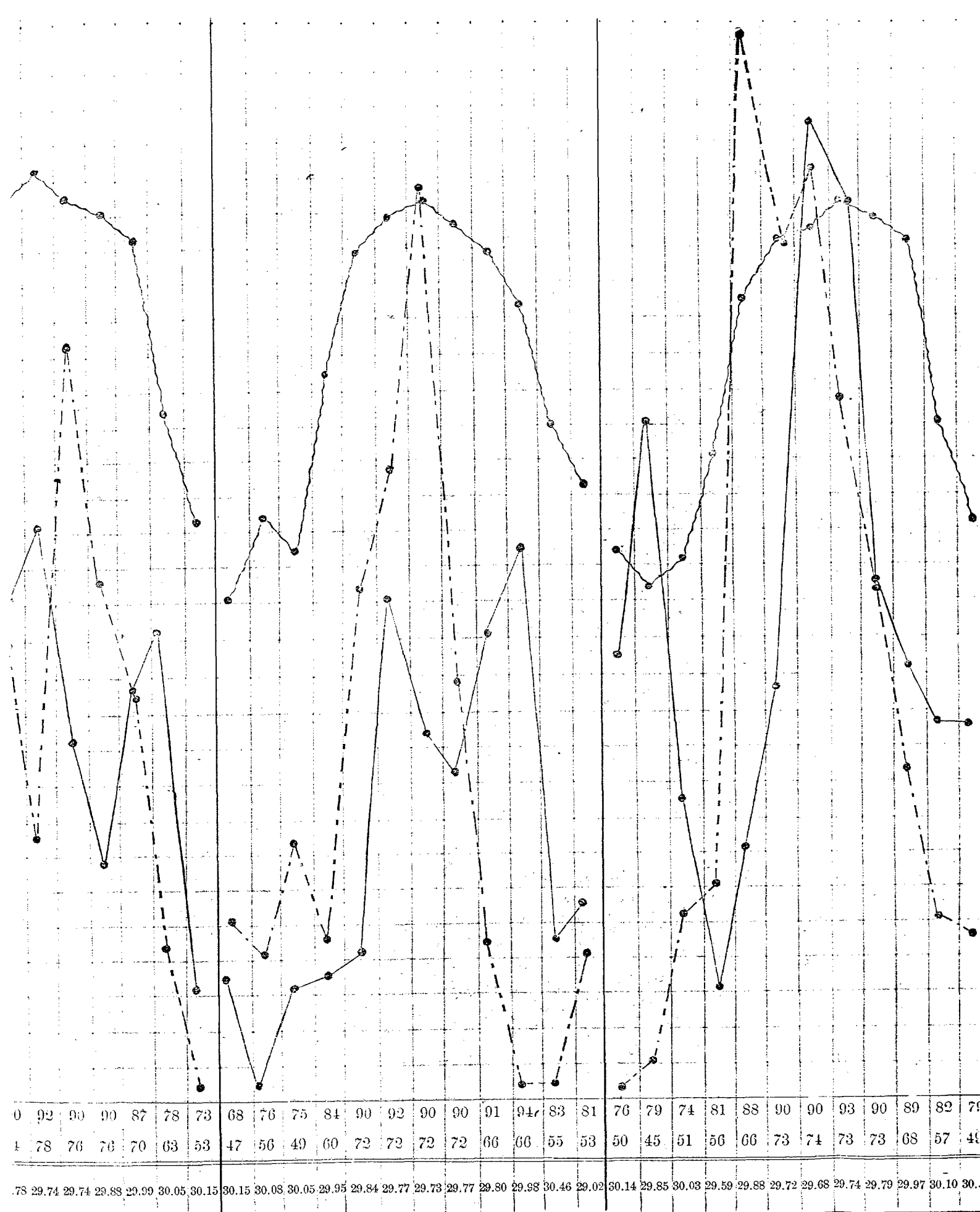


600 90
 590 88
 580 86
 570 84
 560 82
 550 80
 540 78
 530 76
 520 74
 510 72
 500 70
 490 68
 480 66
 470 64
 460 62
 450 60
 440 58
 430 56
 420 54
 410 52
 400 50
 390 48
 380 46
 370 44
 360 42
 350 40
 325 38
 300 36
 275 34



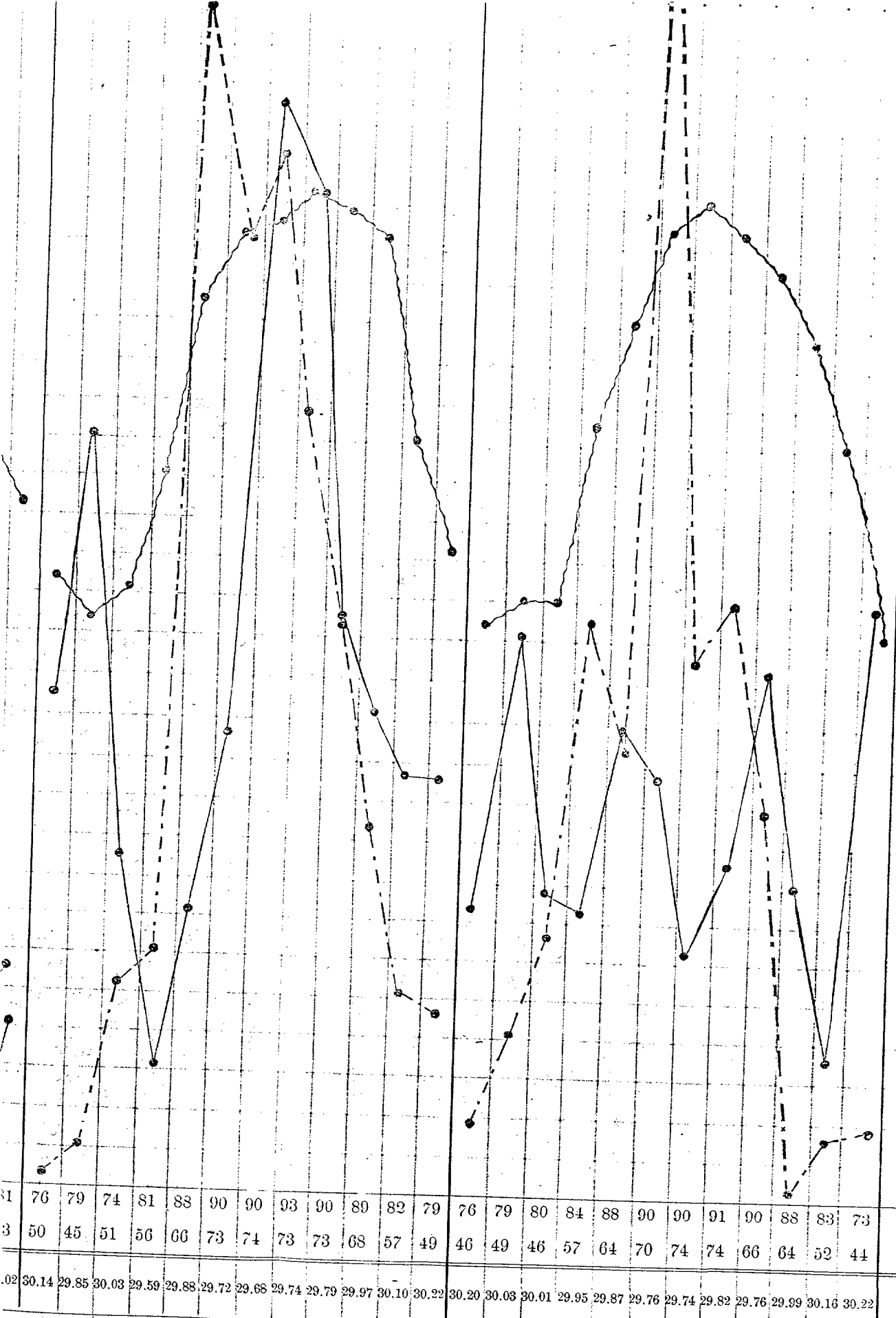
TEMPERATURE.	Highest,	72	70	78	87	89	88	90	91	88	83	83	75	68	76	77	81	89	90	92	90	90	87	78
	Lowest,	45	42	54	60	69	70	79	76	73	68	61	53	52	43	54	61	72	74	78	76	76	70	63
BAROMETER MEAN.		30.17	30.14	30.05	29.92	29.85	29.68	29.69	29.71	29.89	30.04	30.10	30.14	30.19	30.15	30.08	29.93	29.86	29.78	29.74	29.74	29.83	29.99	30.05

NOTE.—Plain line indicates the n



-Plain line indicates the number of deaths, the Curved line mean temperature, and the Dotted line rain-fall in inches.

28
Inches.
26
25
24
23
22
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17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
3/4
1/2
1/4



76	79	74	81	83	90	90	93	90	89	82	79	76	79	80	84	88	90	90	91	90	88	83	73	
50	45	51	56	66	73	74	73	73	68	57	49	46	49	46	57	64	70	74	74	66	64	52	44	
.02	30.14	29.85	30.03	29.59	29.88	29.72	29.68	29.74	29.79	29.97	30.10	30.22	30.20	30.03	30.01	29.95	29.87	29.76	29.74	29.82	29.76	29.99	30.16	30.22

Dotted line rain-fall in inches.