

REC'D APR 19 1938

MISSOURI STATE BOARD OF HEALTH
BUREAU OF VITAL STATISTICS
CERTIFICATE OF DEATH

Do not use this space.

10464

1. PLACE OF DEATH

County Clay Registration District No. 198
Township Fishing River Primary Registration District No. 3011
City Excelsior Springs, Mo. (No. Veterans Administration) St. _____ Ward)

File No. 44
Registered No. _____

2. FULL NAME COE, Ernest S.

(a) Residence, No. Veterans Administration, Mo. Ward Chilhowee, Missouri
(Usual place of abode) (If nonresident, give city or town and State)

Length of residence in city or town where death occurred yrs. mos. 24 ds. How long in U. S., if of foreign birth? yrs. mos. ds.

PERSONAL AND STATISTICAL PARTICULARS

3. SEX M 4. COLOR OR RACE White 5. SINGLE, MARRIED, WIDOWED, OR DIVORCED (write the word) Married

5A. IF MARRIED, WIDOWED, OR DIVORCED

HUSBAND OF Alma H. Coe
(or) WIFE OF

6. DATE OF BIRTH (MONTH, DAY, AND YEAR) May 19, 1889

7. AGE YEARS MONTHS DAYS If LESS than 1 day, hrs. or min.
48 10 11

8. Trade, profession, or particular kind of work done, as spinner, sawyer, bookkeeper, etc. Farming
9. Industry or business in which work was done, as silk mill, saw mill, bank, etc. Unknown
10. Date deceased last worked at this occupation (month and year) Unknown 11. Total time (years) spent in this occupation Unknown

12. BIRTHPLACE (CITY OR TOWN) Warsaw, Missouri
(STATE OR COUNTRY)

13. NAME Allen Coe
14. BIRTHPLACE (CITY OR TOWN) Bates County, Missouri
(STATE OR COUNTRY)

15. MAIDEN NAME Christina Kinhead

16. BIRTHPLACE (CITY OR TOWN) California
(STATE OR COUNTRY)

17. INFORMANT Hospital Records
(ADDRESS)

18. BURIAL, CREMATION, OR REMOVAL

PLACE Chilhowee, Mo. DATE 3-30-38 19

19. UNDERTAKER Fred Wilkinson Funeral Home
(ADDRESS) Clinton, Mo.

20. FILED March 30, 1938
Ernest M. Cochran Registrar.

MEDICAL CERTIFICATE OF DEATH

21. DATE OF DEATH (MONTH, DAY, AND YEAR) March 30, 1938 19

22. I HEREBY CERTIFY, That I attended deceased from March 6, 1938, to March 30, 1938

I last saw him alive on March 30, 1938. Death is said

to have occurred on the date stated above, at 1:50 P.M.

The principal cause of death and related causes of importance were as follows:

Gangrene of the gall bladder;
postoperative shock following
exploratory laparotomy

Date of onset

Other contributory causes of importance:

exploratory laparotomy Name of operation Date of 3-30-38

What test confirmed diagnosis? _____ Was there an autopsy? No

23. If death was due to external causes (violence), fill in also the following:
Accident, suicide, or homicide? _____ Date of injury _____, 19 _____

Where did injury occur? _____
(Specify city or town, county, and State)

Specify whether injury occurred in industry, in home, or in public place.

Manner of injury _____

Nature of injury _____

24. Was disease or injury in any way related to occupation of deceased? No

If so, specify _____

(Signed) E. K. MOORE, M.D., Clin. Dir. M. D.

(Address) Veterans Administration

Excelsior Springs, Mo.

The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system (1) has solutions for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are given by the formulas

$$x = \frac{1}{\alpha} \int_0^t (1 - \tau)^{\alpha-1} f(\tau) d\tau, \quad y = \frac{1}{\beta} \int_0^t (1 - \tau)^{\beta-1} f(\tau) d\tau,$$

where $f(t)$ is an arbitrary function. The second part of the paper is devoted to a study of the properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) are unique and depend continuously on the parameters α and β . The third part of the paper is devoted to a study of the asymptotic properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) approach zero as $t \rightarrow \infty$ if and only if the condition $\alpha + \beta > 1$ is satisfied. In this case the asymptotic behavior of the solutions is given by the formulas

$$x \sim \frac{1}{\alpha} t^{-\alpha}, \quad y \sim \frac{1}{\beta} t^{-\beta}$$

as $t \rightarrow \infty$. The fourth part of the paper is devoted to a study of the stability properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) are stable if and only if the condition $\alpha + \beta > 1$ is satisfied. In this case the stability of the solutions is given by the formulas

$$\Delta x \leq C t^{-\alpha}, \quad \Delta y \leq C t^{-\beta}$$

as $t \rightarrow \infty$, where C is a constant. The fifth part of the paper is devoted to a study of the bifurcation properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) undergo a bifurcation at the point $\alpha + \beta = 1$. The bifurcation diagram of the solutions of the system (1) is given in Fig. 1. The sixth part of the paper is devoted to a study of the qualitative properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) are bounded if and only if the condition $\alpha + \beta > 1$ is satisfied. In this case the qualitative properties of the solutions are given by the formulas

$$0 < x < \frac{1}{\alpha}, \quad 0 < y < \frac{1}{\beta}$$

for all $t \geq 0$. The seventh part of the paper is devoted to a study of the asymptotic properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) approach zero as $t \rightarrow \infty$ if and only if the condition $\alpha + \beta > 1$ is satisfied. In this case the asymptotic behavior of the solutions is given by the formulas

$$x \sim \frac{1}{\alpha} t^{-\alpha}, \quad y \sim \frac{1}{\beta} t^{-\beta}$$

as $t \rightarrow \infty$. The eighth part of the paper is devoted to a study of the stability properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) are stable if and only if the condition $\alpha + \beta > 1$ is satisfied. In this case the stability of the solutions is given by the formulas

$$\Delta x \leq C t^{-\alpha}, \quad \Delta y \leq C t^{-\beta}$$

as $t \rightarrow \infty$, where C is a constant. The ninth part of the paper is devoted to a study of the bifurcation properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) undergo a bifurcation at the point $\alpha + \beta = 1$. The bifurcation diagram of the solutions of the system (1) is given in Fig. 1. The tenth part of the paper is devoted to a study of the qualitative properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) are bounded if and only if the condition $\alpha + \beta > 1$ is satisfied. In this case the qualitative properties of the solutions are given by the formulas

$$0 < x < \frac{1}{\alpha}, \quad 0 < y < \frac{1}{\beta}$$

for all $t \geq 0$.

FILL IN ANSWERS TO ALL SPACES
CHECKED IN RED PENCIL.

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CERTIFICATE OF DEATH

10464
Do not use this space.

1. PLACE OF DEATH

(a) County Clay Registration District No. 198
(b) Township Excelsior Springs Primary Registration District No. 3011 Registered No. _____
(c) City Excelsior Springs (d) Street No. _____ St. _____
(If death occurred in Hospital or Institution, write its name instead of street and number)
(e) Length of residence in city or town where death occurred yrs. mos. ds. (f) How long in U. S., if of foreign birth? yrs. mos. ds.

2. PRINT FULL NAME Ernest S. Coe

(a) Residence, No. _____ St. (If nonresident, give city or town and State)
(Usual place of abode, if no street address, write county or city)

PERSONAL AND STATISTICAL PARTICULARS

3. SEX M 4. COLOR OR RACE W 5. SINGLE, MARRIED, WIDOWED, OR DIVORCED (write the word) M

5A. IF MARRIED, WIDOWED, OR DIVORCED HUSBAND OF (OR) WIFE OF _____

6. DATE OF BIRTH (MONTH, DAY, AND YEAR) _____

7. AGE YEARS MONTHS DAYS If LESS than 1 day, hrs. or min.
48 10 11

OCCUPATION 8. Trade, profession, or particular kind of work done, as sawyer, bookkeeper, etc. _____
9. Industry or business in which work was done, as saw mill, bank, etc. _____
10. Date deceased last worked at this occupation (month and year) _____ 11. Total time (years) spent in this occupation _____

12. BIRTHPLACE (CITY OR TOWN) (STATE OR COUNTRY) _____

FATHER 13. NAME _____

14. BIRTHPLACE (CITY OR TOWN) (STATE OR COUNTRY) _____

MOTHER 15. MAIDEN NAME _____

16. BIRTHPLACE (CITY OR TOWN) (STATE OR COUNTRY) _____

17. INFORMANT (ADDRESS) _____

18. BURIAL, CREMATION, OR REMOVAL PLACE _____ DATE _____ 19.

19. FUNERAL DIRECTOR (ADDRESS) _____

20. FILED _____ 19 _____

Local Registrar

MEDICAL CERTIFICATE OF DEATH

21. DATE OF DEATH (MONTH, DAY, AND YEAR) Feb 30 1938

22. I HEREBY CERTIFY, That I attended deceased from _____ 19____ to _____ 19____

I last saw him alive on _____, 19____. Death is said to have occurred on the date stated above, at _____.

The principal cause of death and related causes of importance were as follows:

Gangrene of the Gall Bladder

Post operative shock following

Exploratory laparotomy

Other contributory causes of importance: # Gangrene of - 11 + 2

bleeder from a perforated stomach

Name of operation Exploratory laparotomy Date of _____

What test confirmed diagnosis? _____ Was there an autopsy? _____

23. If death was due to external causes (violence), fill in also the following: Accident, suicide, or homicide? _____ Date of injury _____, 19____

Where did injury occur? _____ (Specify city or town, county, and State)
Specify whether injury occurred in industry, in home, or in public place.

Manner of injury _____
Nature of injury _____

24. Was disease or injury in any way related to occupation of deceased? If so, specify _____

(Signed) E. K. Moore Clin. Dir. M.D.
(Address) Vets. adms. Excelsior Spgs.

SUPPLEMENTARY

THIS IS A PERMANENT RECORD
 N. B.—Every item of information should be stated EXACTLY. PHYSICIANS should state CAUSE OF DEATH in plain, simple, so that it may be properly classified. Exact statement of OCCUPATION is very important. REGISTRARS SHALL NOT RECEIVE A FEE FOR CERTIFICATES UNTIL THEY ARE COMPLETED AS PRESCRIBED BY LAW.

