

HANDBOOK OF THE TANNING TRADE OF

SOUTH INDIA.

By

Major A. Guthrie.

## P R E F A C E

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THE importance of the tanning industry to the Madras Presidency may be gauged from the fact that there are believed to be from 400 to 500 tanneries giving wholetime employment in normal times to about 20,000 hands with an estimated wage roll of about Rs. 35 lakhs per annum. Tanned hides and skins have been one of the most important exports of Madras ever since figures of sea-borne trade were published, an export trade in tanned hides and skins valued at over six crores of rupees annually having been built up. As is well known, the bulk of the skins exported are tanned but not dressed, whilst hides are usually crust tanned for export and have to be subjected to further treatment after they reach foreign markets before they can be regarded as finished leather. Reptile skins, however, in which a lucrative trade has been developed during the last ten years, are generally exported in a finished condition and do not require any subsequent treatment.

Although a number of bulletins on various aspects of the tanning industry of the Madras Presidency have been published from time to time by the department, no comprehensive account of the organization and technique of the industry has hitherto been available and the lack of any such publication has been felt by the trade. When therefore the instructional side of the Leather Trades Institute was closed down in 1930 and Major Guthrie was placed on special duty to study in detail the problem of eradicating stains on tanned hides and skins it was arranged that, in addition to the prosecution of this research, he should also undertake the preparation of a Handbook of the Tanning Trade of South India. This task he completed shortly before he left India in April.

The Handbook which embodies Major Guthrie's 21 years' experience of the Madras tanning industry is divided into two parts, the first containing information and statistics of general interest to the trade which have been extracted and brought together from a number of different publications and official records and the second part dealing with

the technique of the industry and containing a good deal of unpublished information collected by Major Guthrie during his service at the Leather Trades Institute.

It is hoped that as a result of the publication of the Handbook the magnitude and importance of the tanning industry of this Presidency will become more widely known and that the tanners and others interested in the trade will derive benefit from the information in regard to the technique of the industry given in it.

V. RAMAKRISHNA,  
*Director of Industries.*

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## INTRODUCTION

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THIS book is the result of an order from the Government, instructing me to prepare a book on the "tanning trade" that will be of value to South Indian tanners.

After consulting a number of well-known tanners, I drew up a scheme, with a list of chapter headings, and circulated this to the trade asking for any suggestions that would improve the work. Several replies were received and wherever possible the proposals have been carried out.

In a few cases, where there is no exact English equivalent, it has been found necessary to use the Tamil expression, but wherever this is done the meaning has been explained, except in cases where it is obvious from the context.

Much of the information given has already been published elsewhere but as in many cases the publications, in which it appeared, are either out of print or not usually available, I have considered it wise to include it. The original matter is taken from notes made by me during my connexion with the trade since 1911.

The term "hides" when used refers to the outer covering of fully grown cattle and buffaloes and for customs purposes since 1919-1920, also includes those of cow and buffalo calf, whilst "skins" refers to those of goat and sheep and other small animals including reptiles. "Kip" was originally used to denote that of an animal too large to be considered a calf but not fully grown. When during the latter half of last century Indian hides began to arrive in England, they were found to correspond in size and weight to the "English kip" and hence became known as "kips" or "East Indian kips." As the number of these far out-distanced those of the local kips the term became more and more to indicate a hide of Indian origin and it is now usual to speak of an "English kip" when referring to one of English origin, whilst "kip" used alone is usually understood to refer to that from India.

I wish to thank various members of the department for help given to me in various ways and especially my assistant Mr. Subramania Sastry. I also wish to thank the Collector of Customs for kindly permitting me to examine certain records in the Custom House in order to get some of the information required for Chapter II.

A. GUTHRIE.

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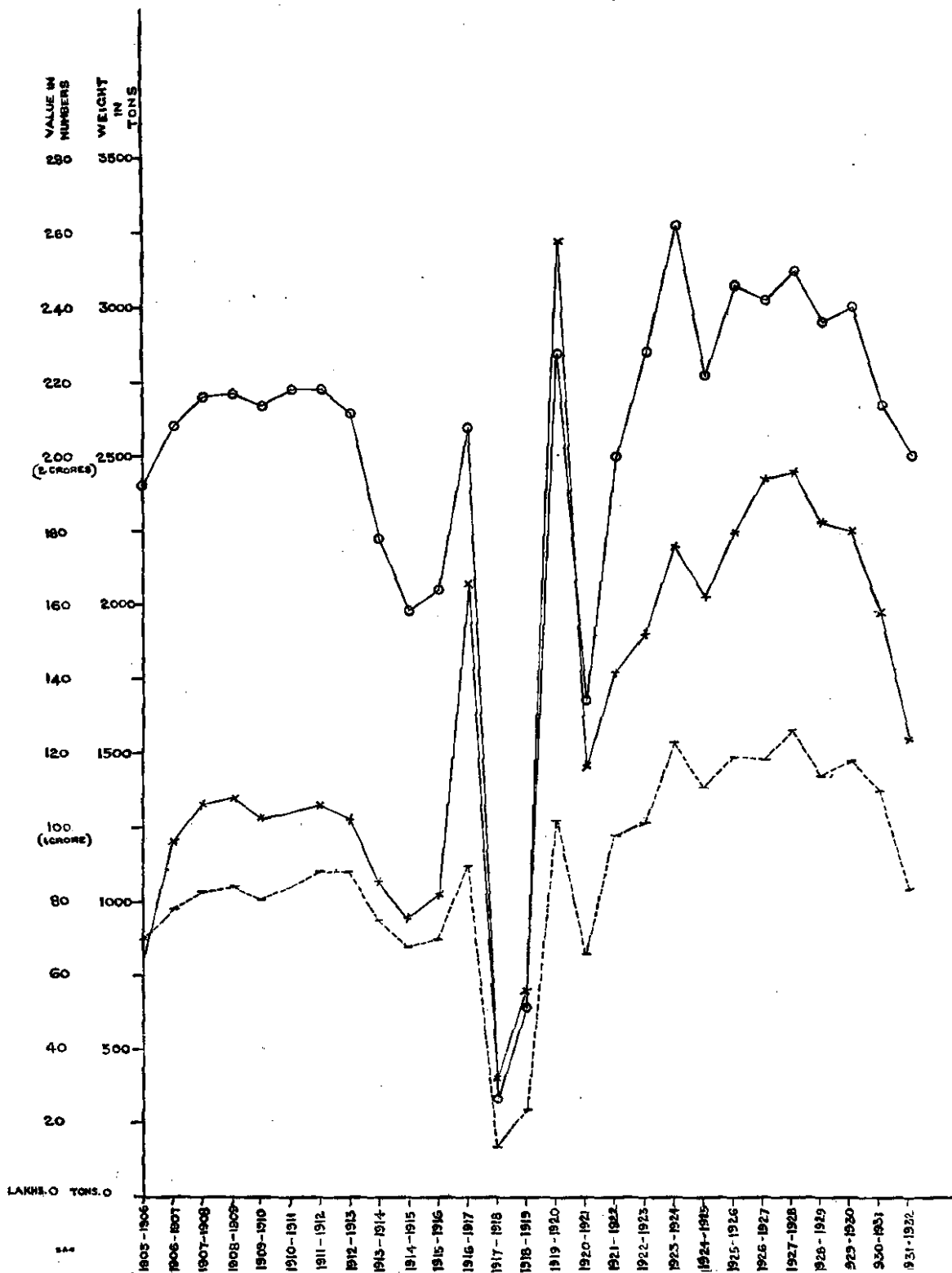
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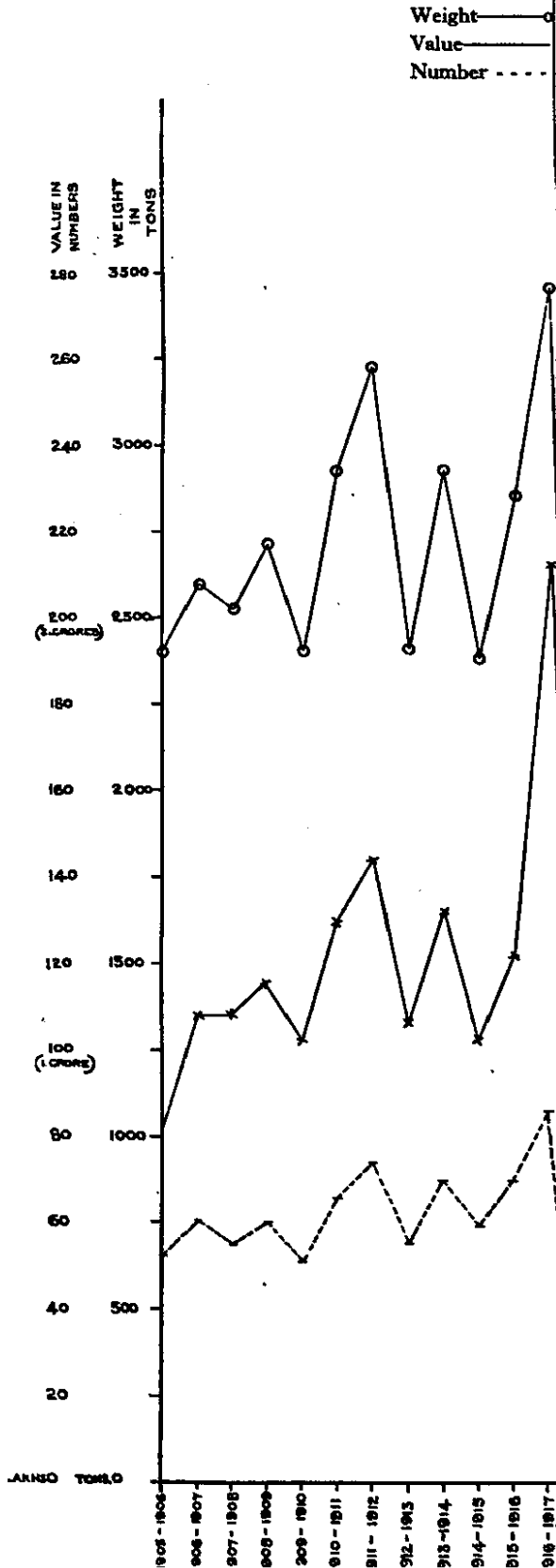
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No. 4.—Exports from Madras Presidency—Tanned Sheep Skins.

Weight —○— 250 Tons.  
 Value —×— 1 Unit—20,00,000 Rs.  
 Number - - - - - 1 Unit—2,000,000 Skins.



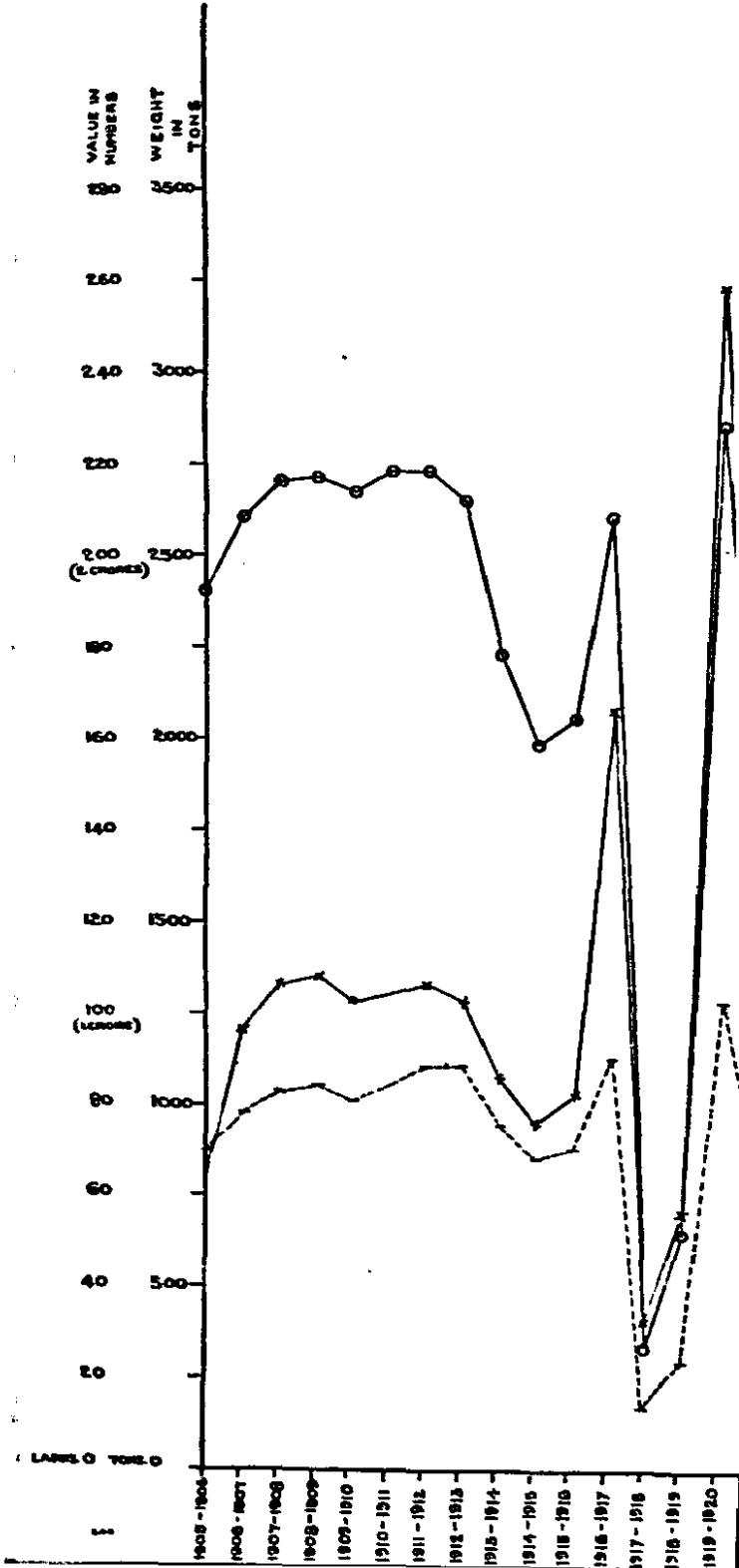
No. 3.—Exports from Madras



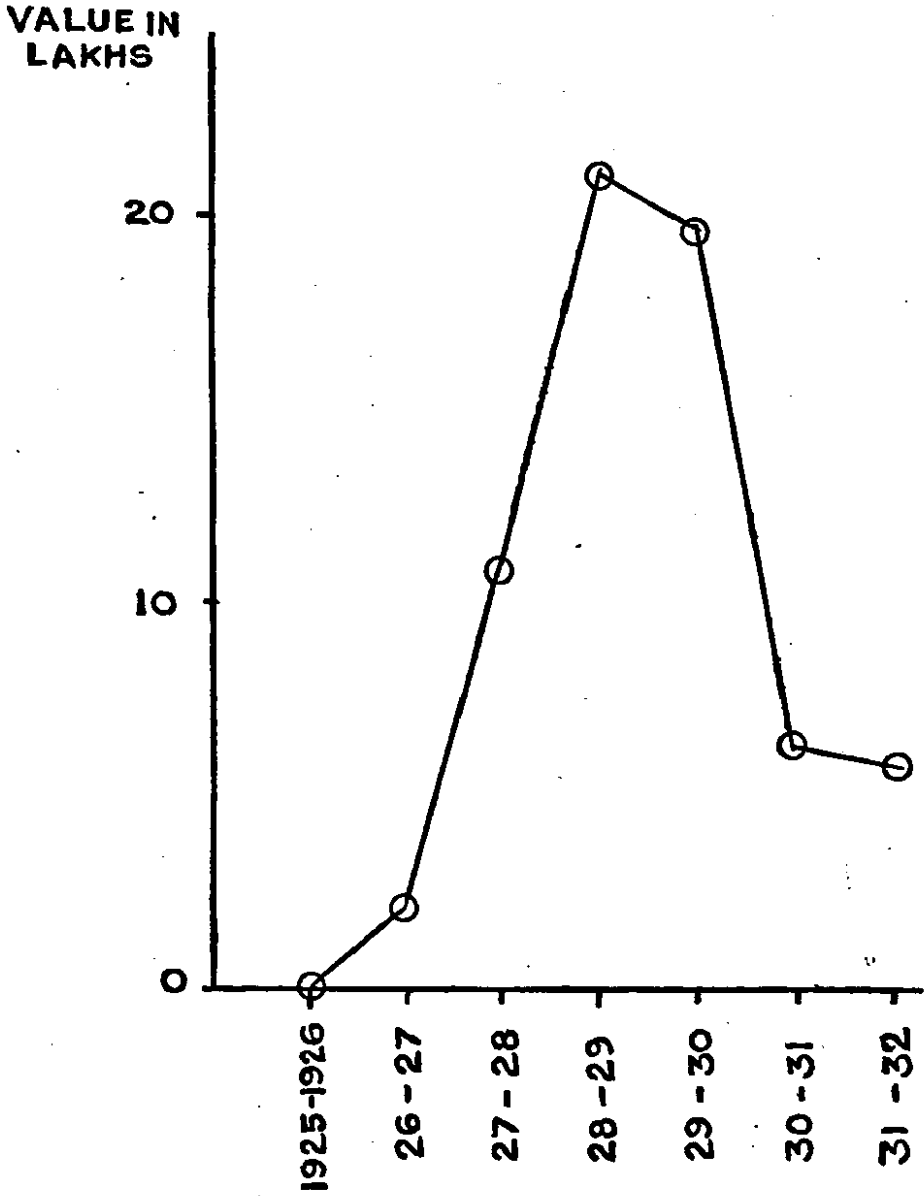


No. 4.—Exports from Madras Presidency—

Weight ———○——— 1 Unit  
 Value ———x——— 1 Unit  
 Number - - - - - 1 Unit



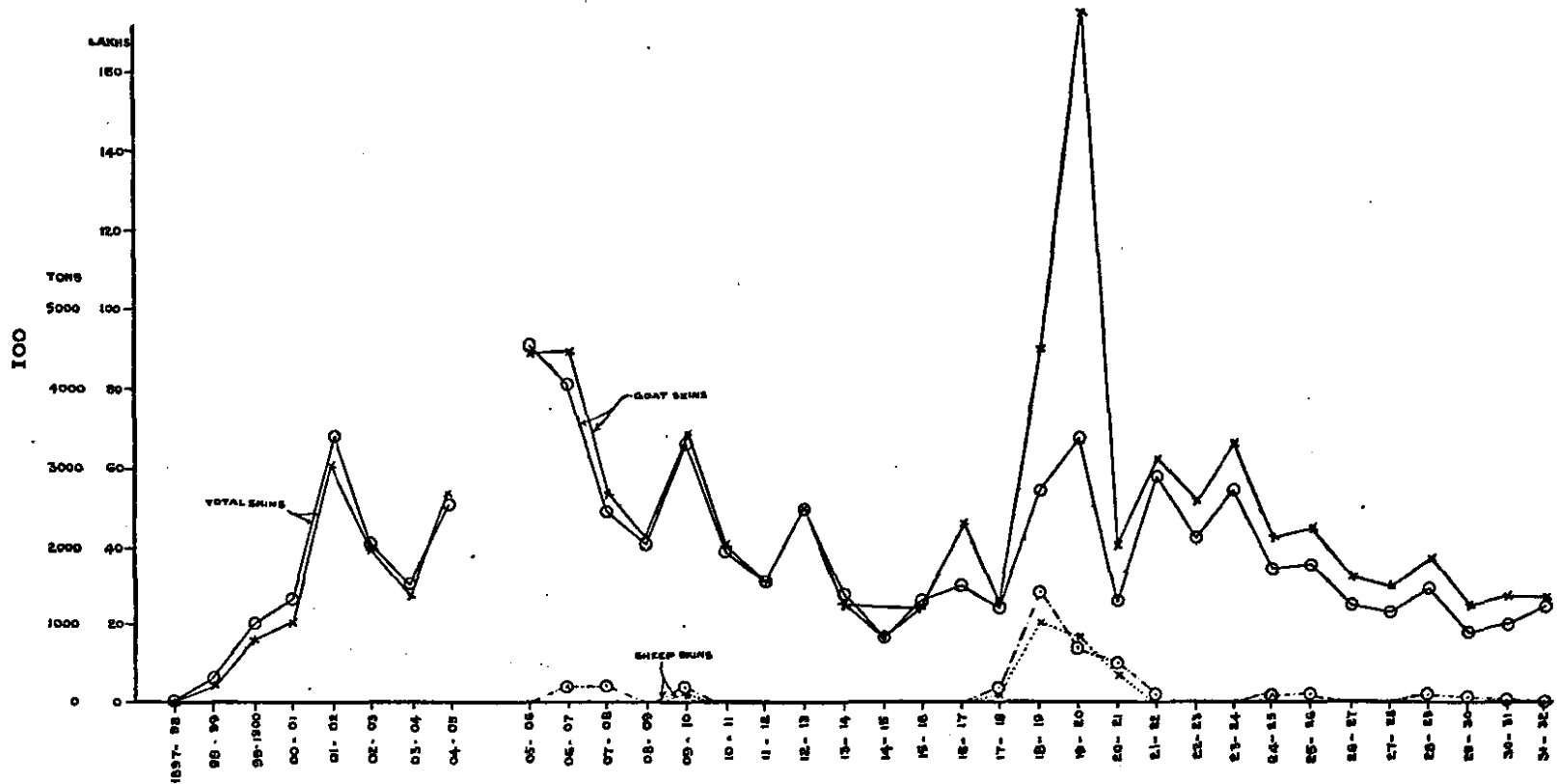
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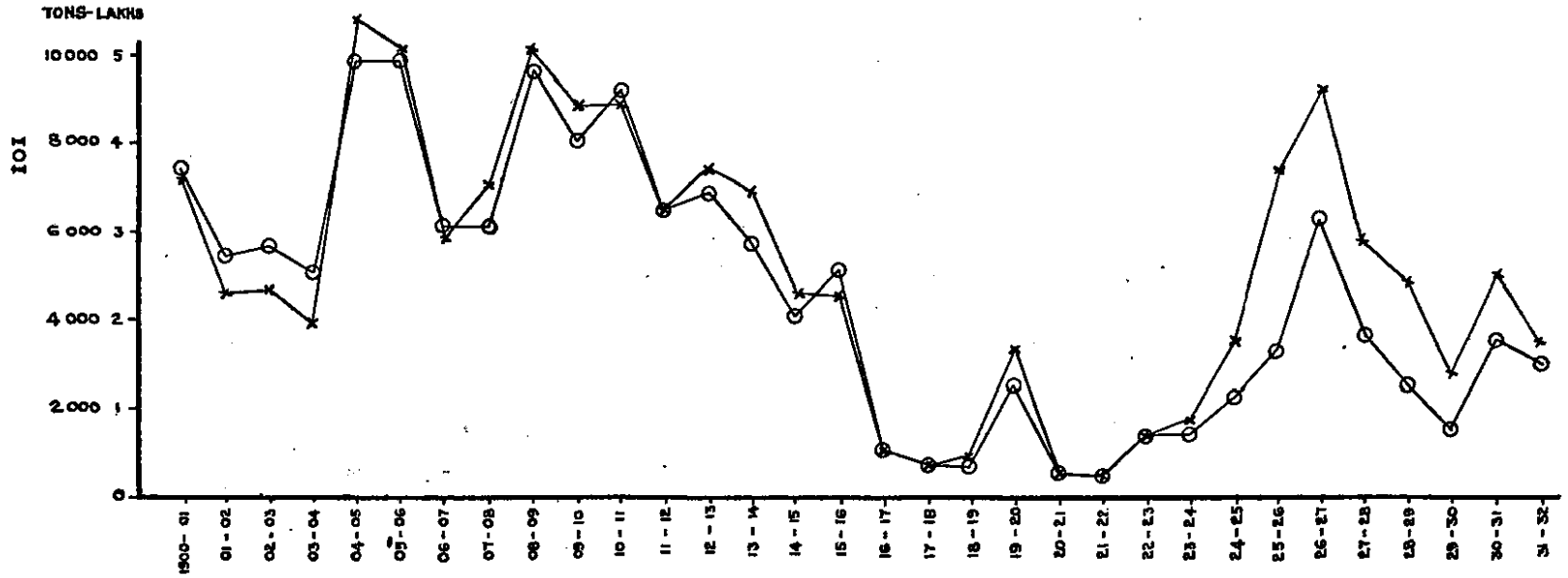
—○—○— Weight 1 Unit = 1,000 Tons.

—x—x— Value 1 Unit = 20 Lakhs.

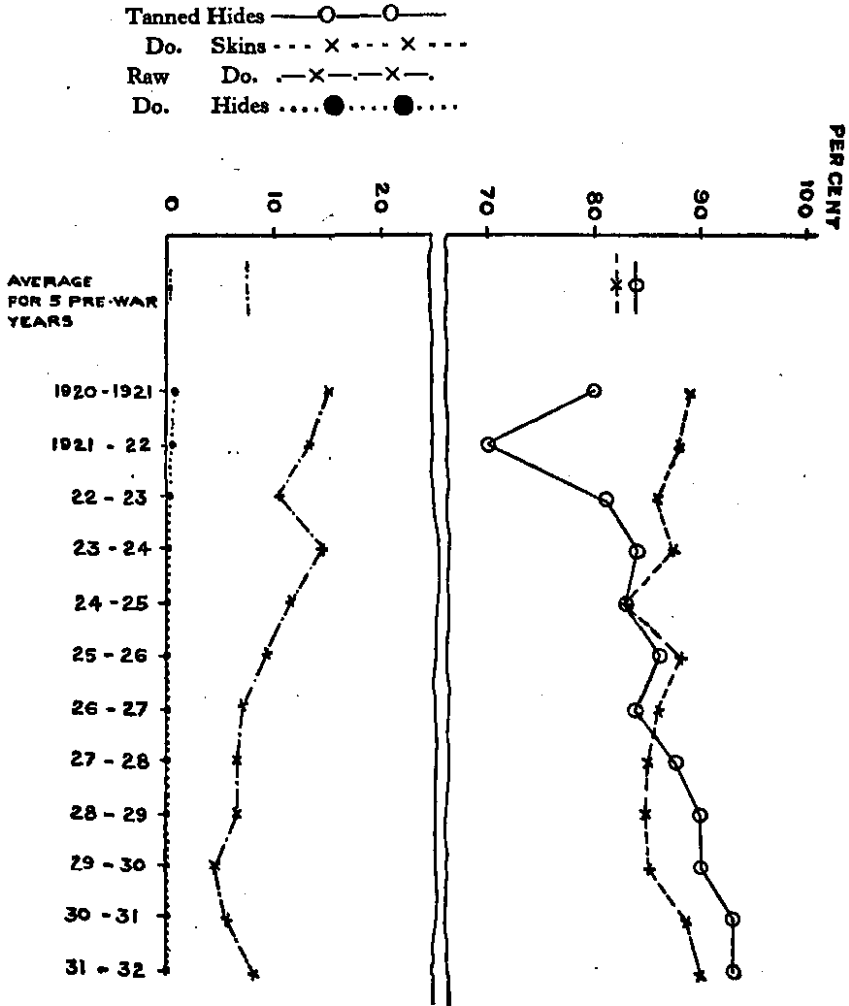


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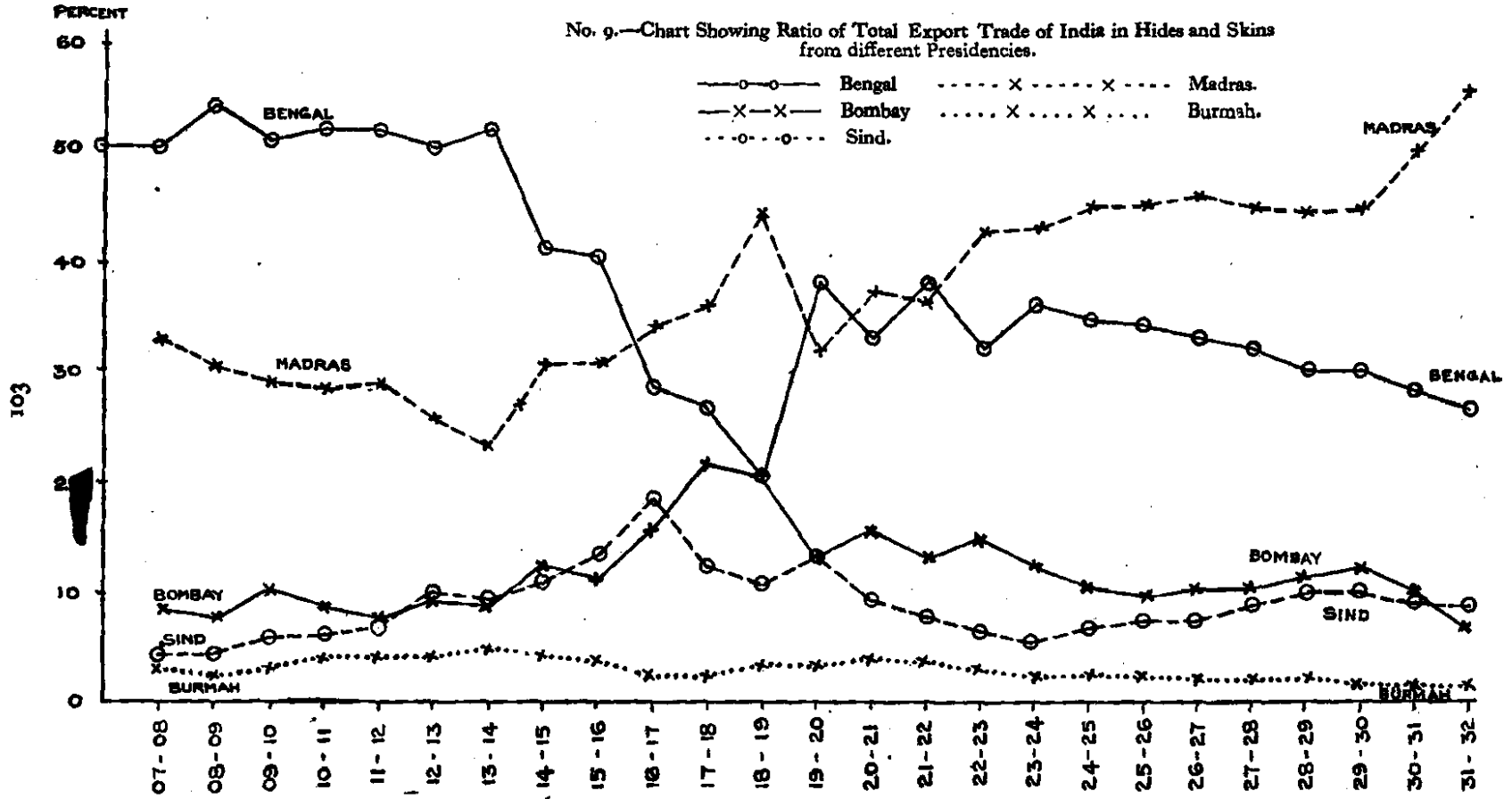
—○—○— Weight 1 Unit = 2,000 Tons.  
 —×—×— Value 1 Unit = 1 Lakh.



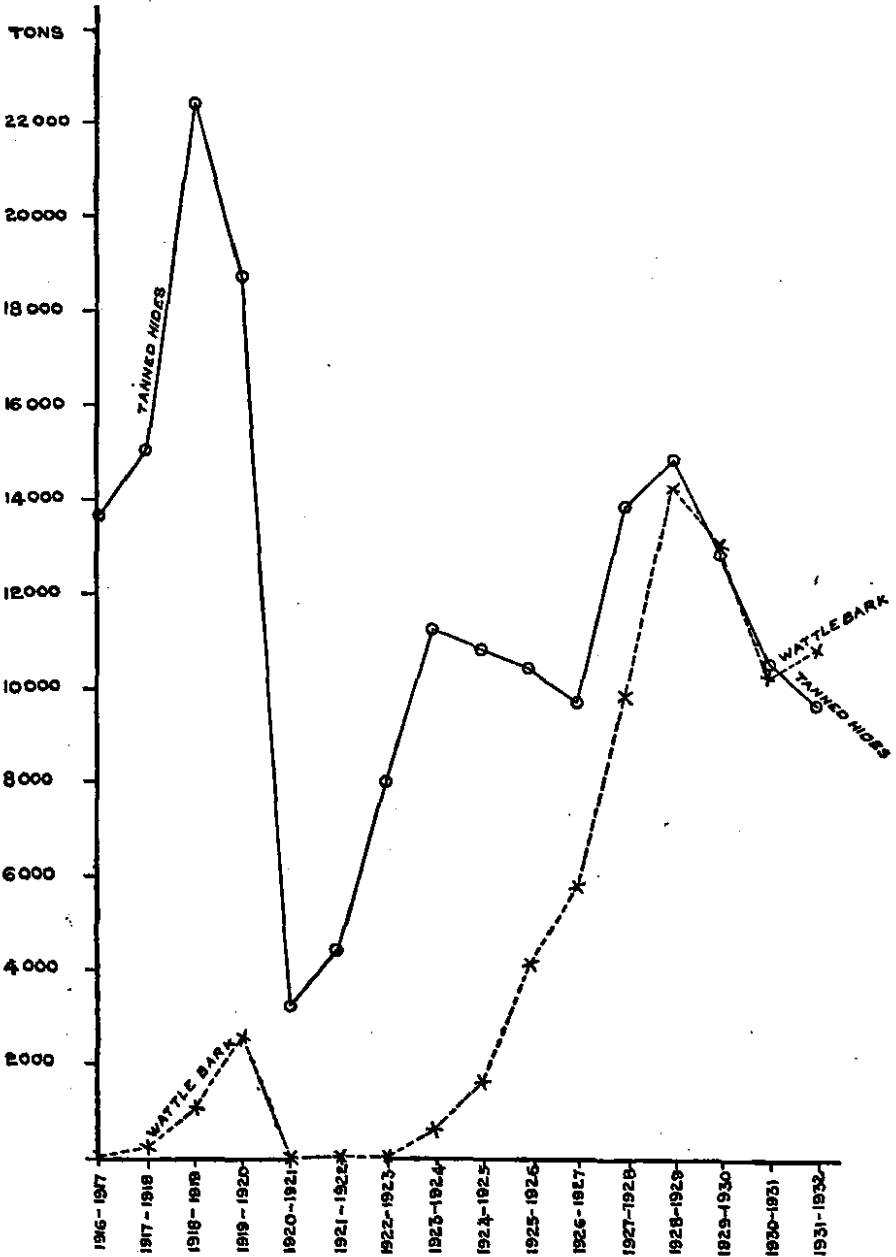
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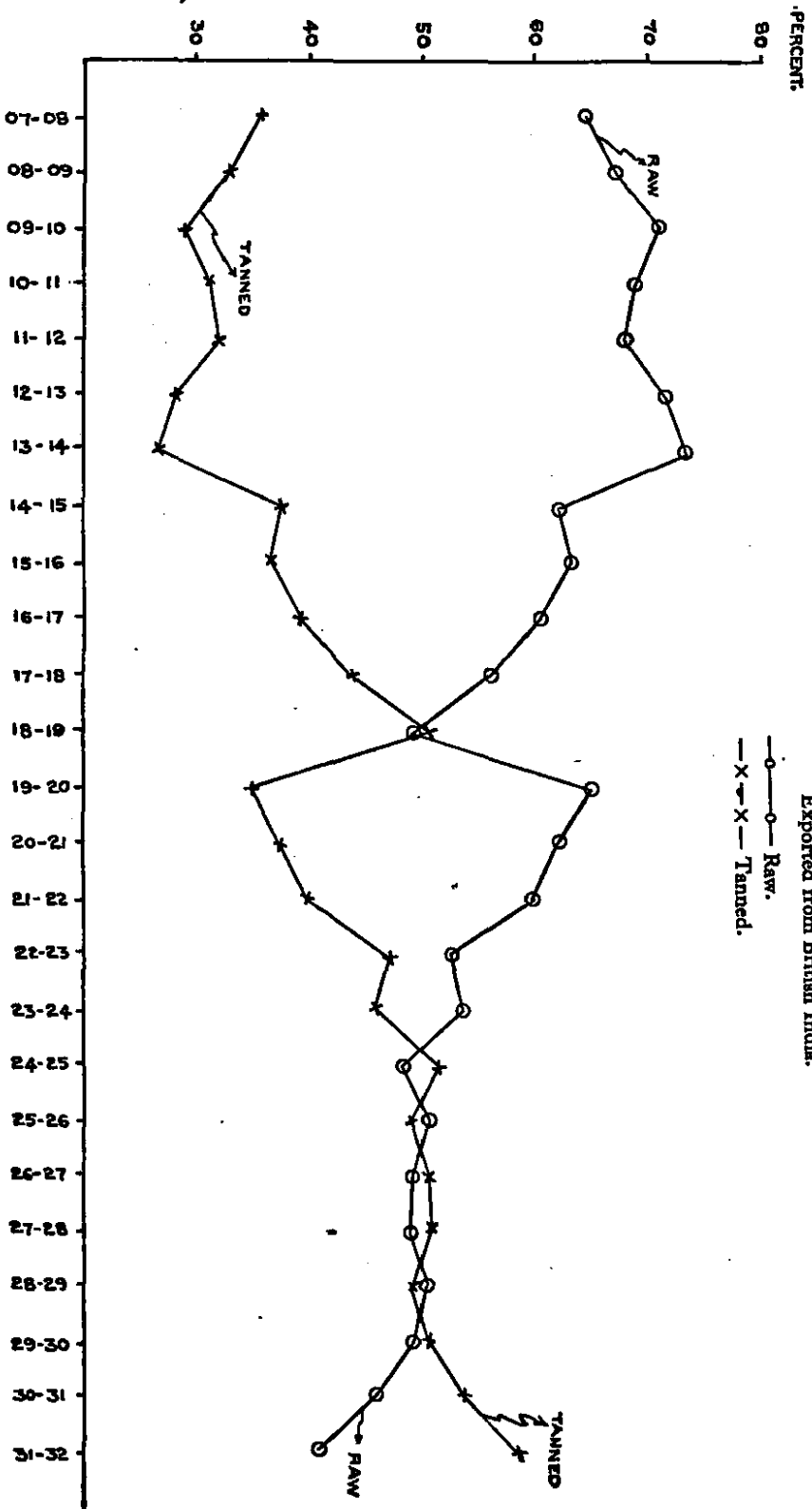


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 1 Unit = 2,000 Tons.

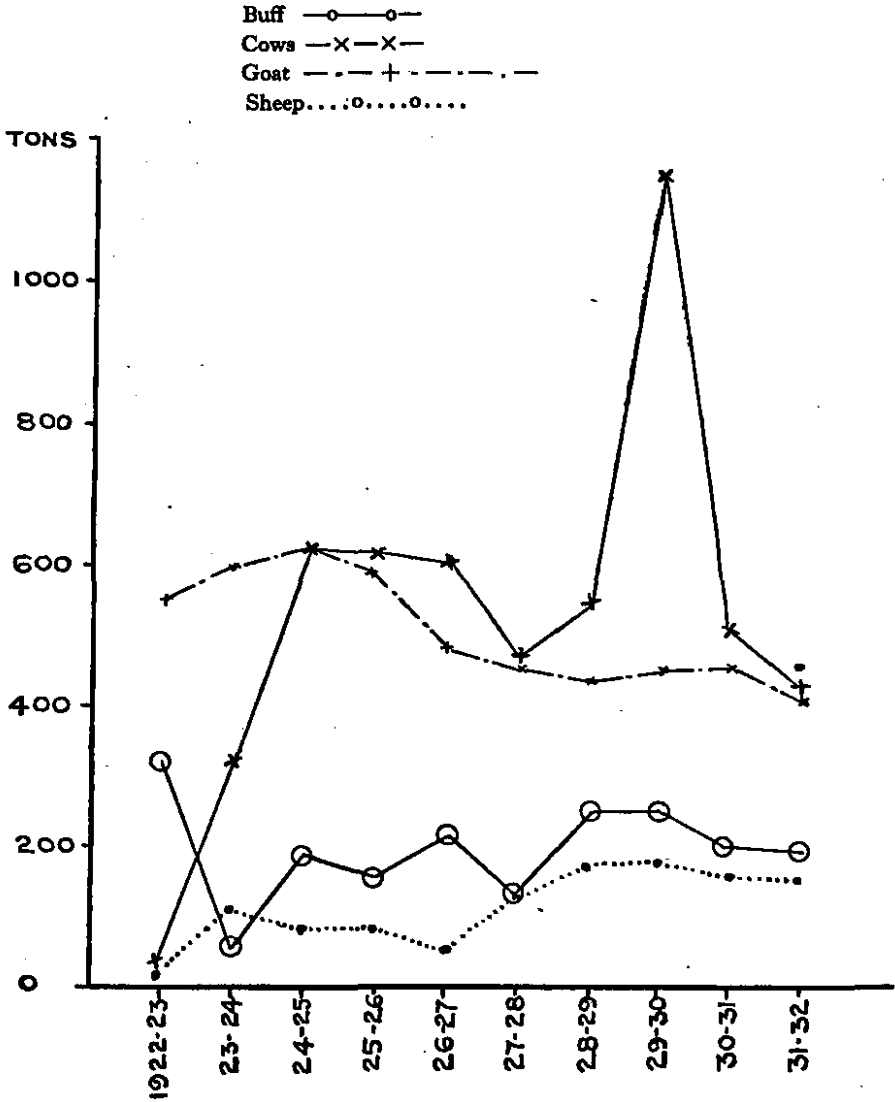




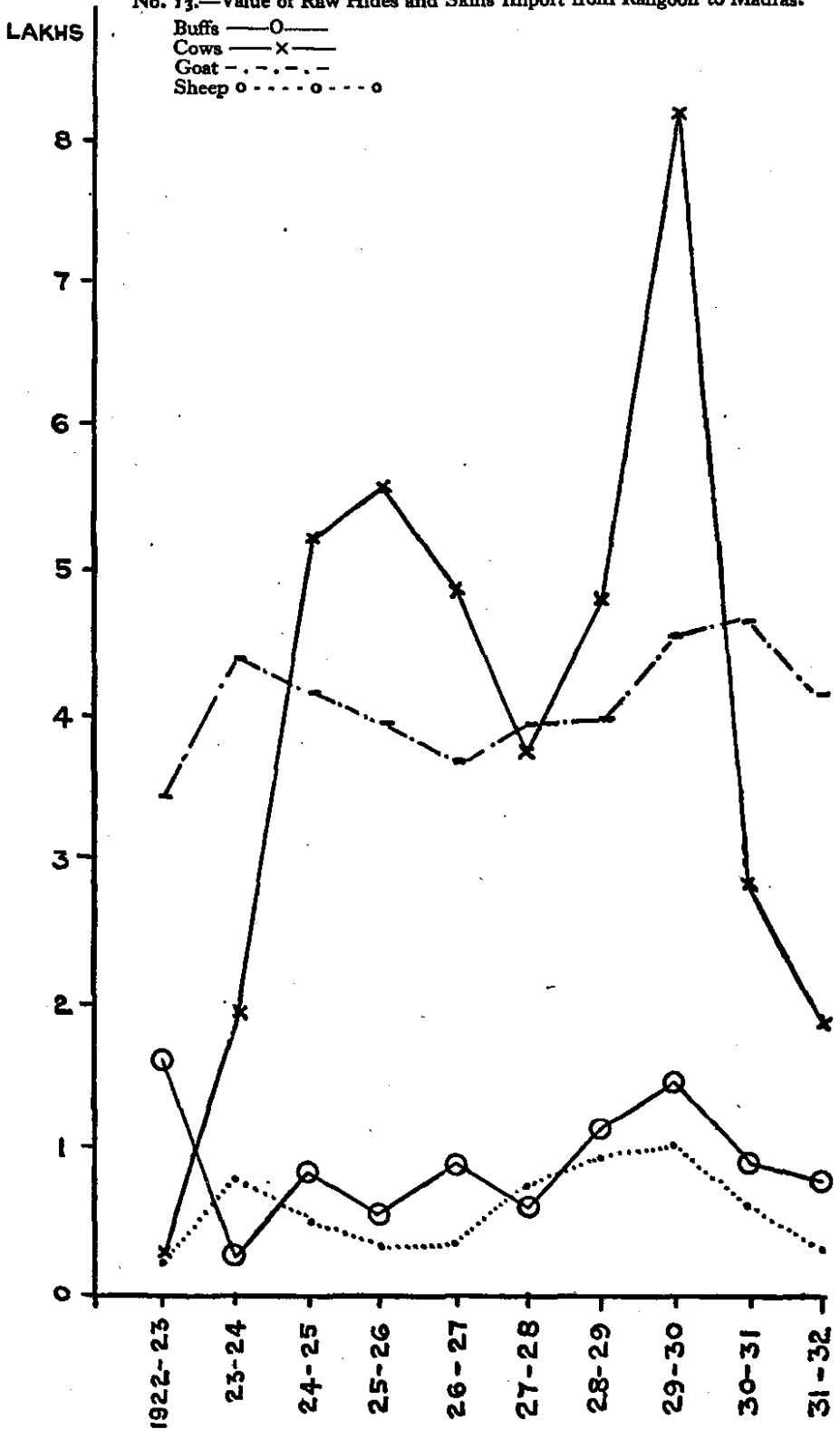
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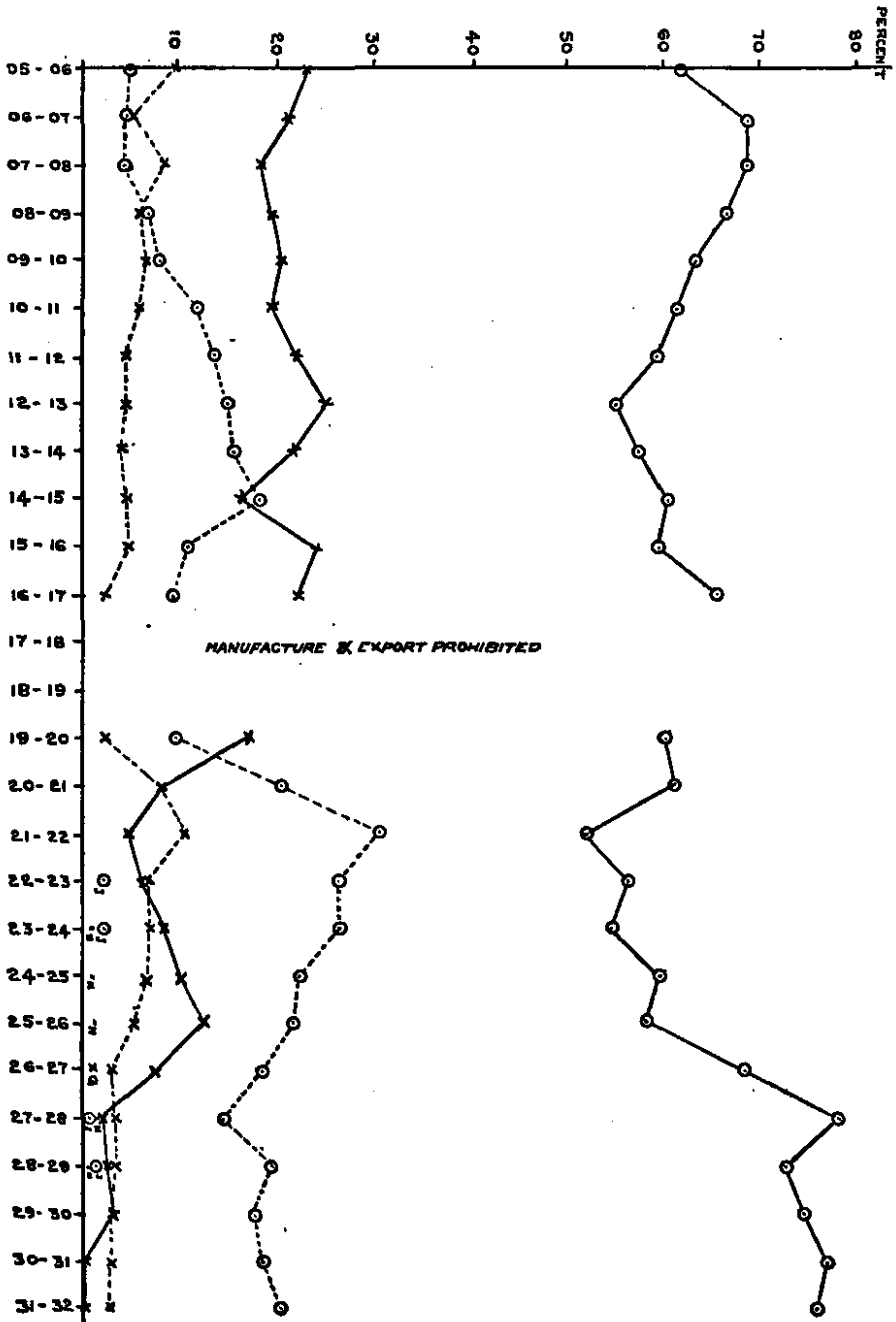
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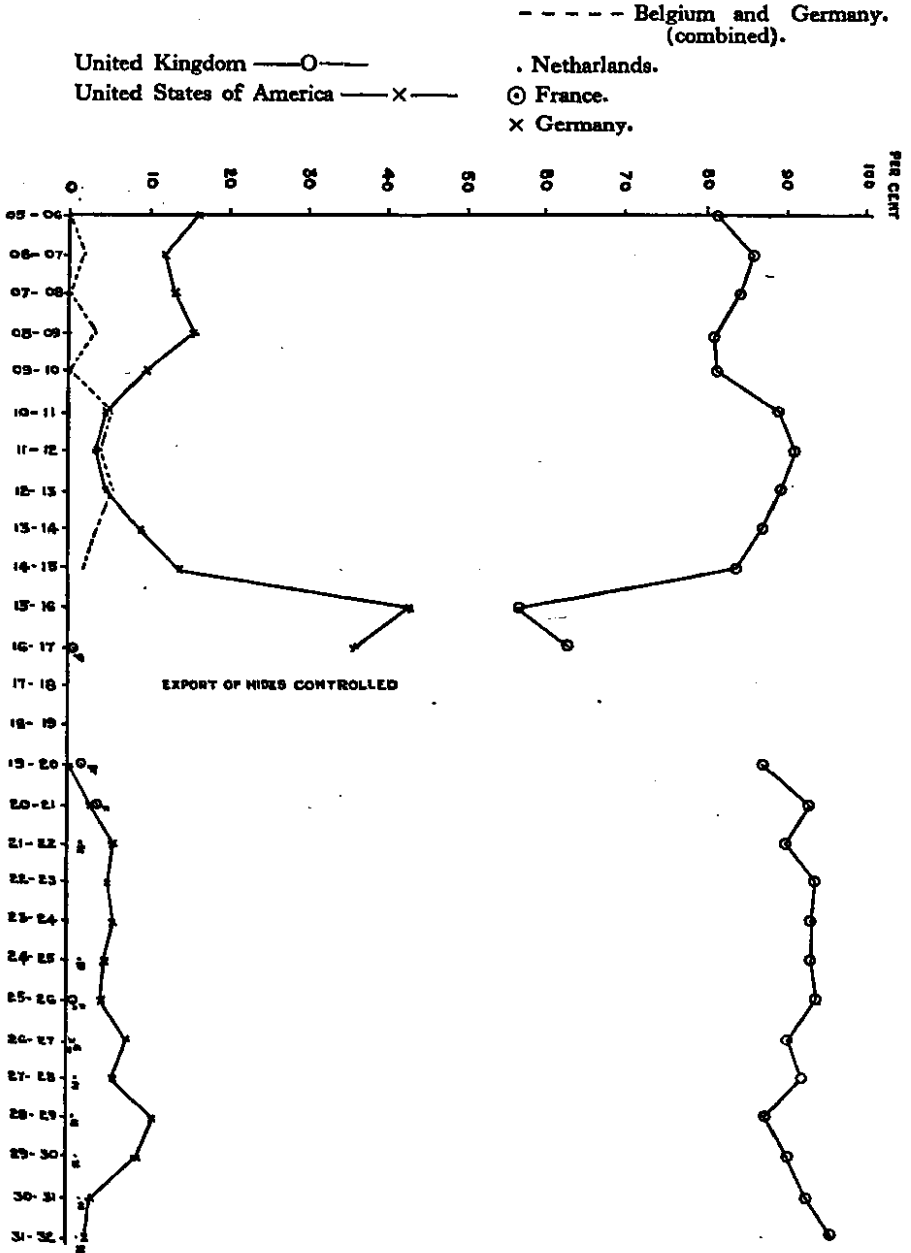
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United Kingdom ———○———  
 United State of America ———×———  
 Straits - - × - -  
 Japan - - - ○ - - -

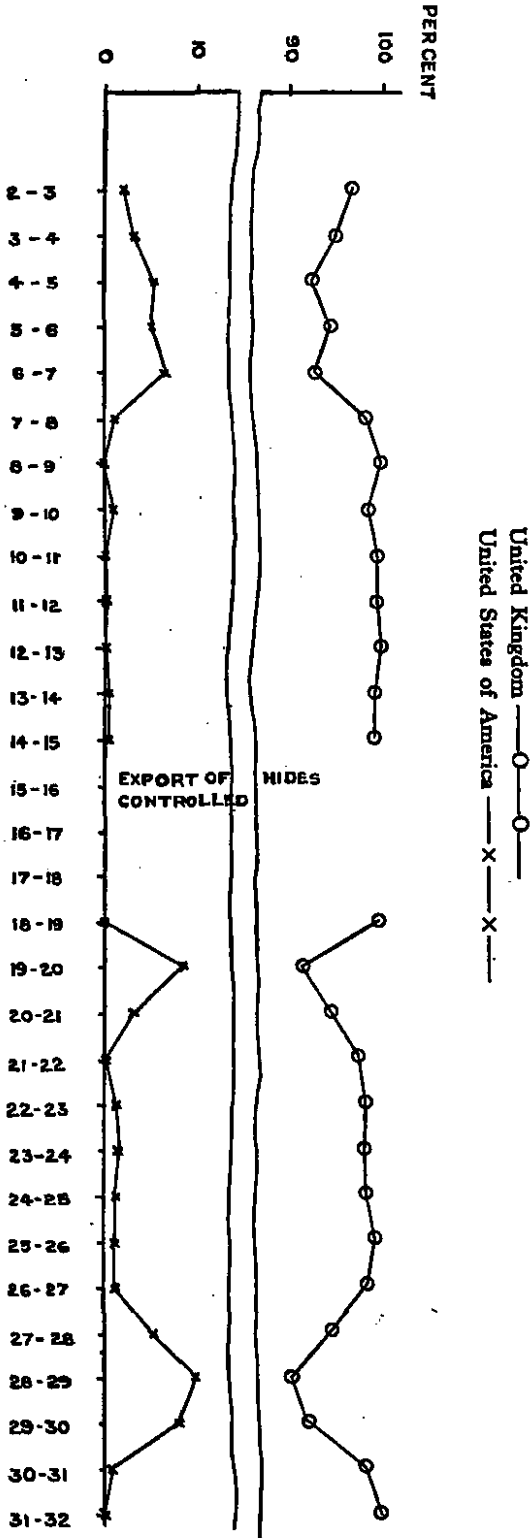
⊙ J. = Java.  
 . N. = Netherlands.  
 × G. = Germany.



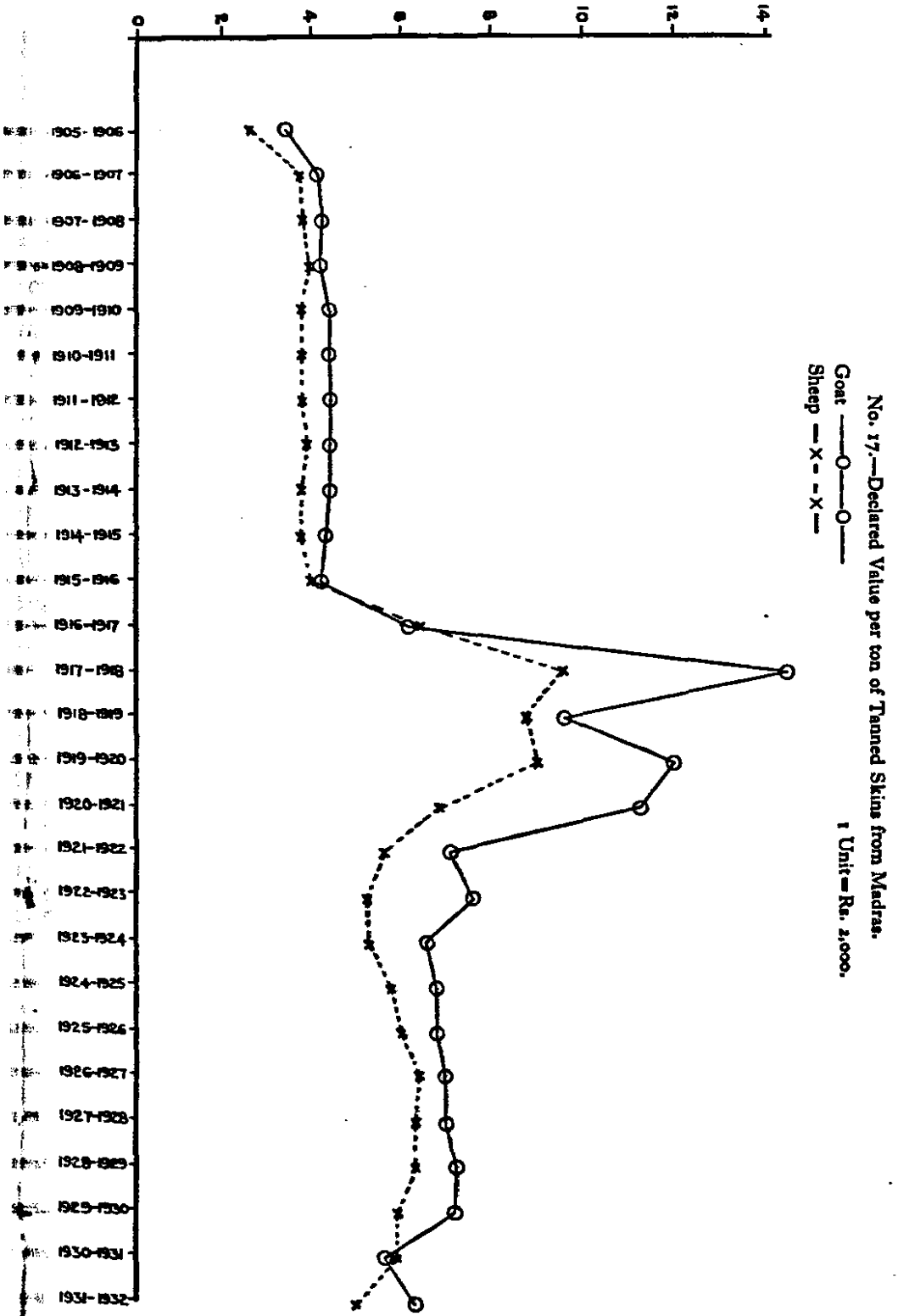
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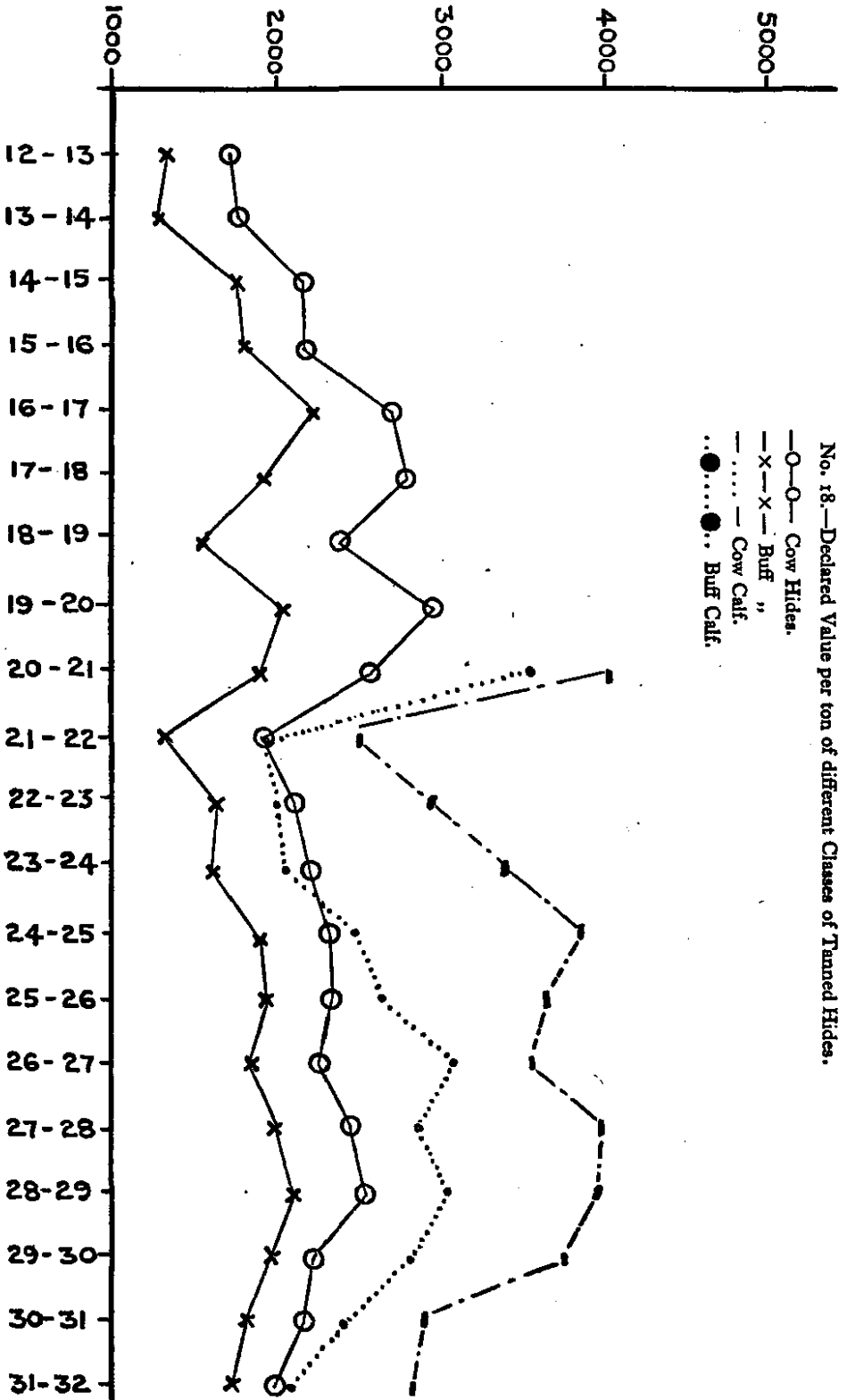


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VALUE IN THOUSANDS OF RUPEES





No. 18.—Declared Value per ton of different Classes of Tanned Hides.

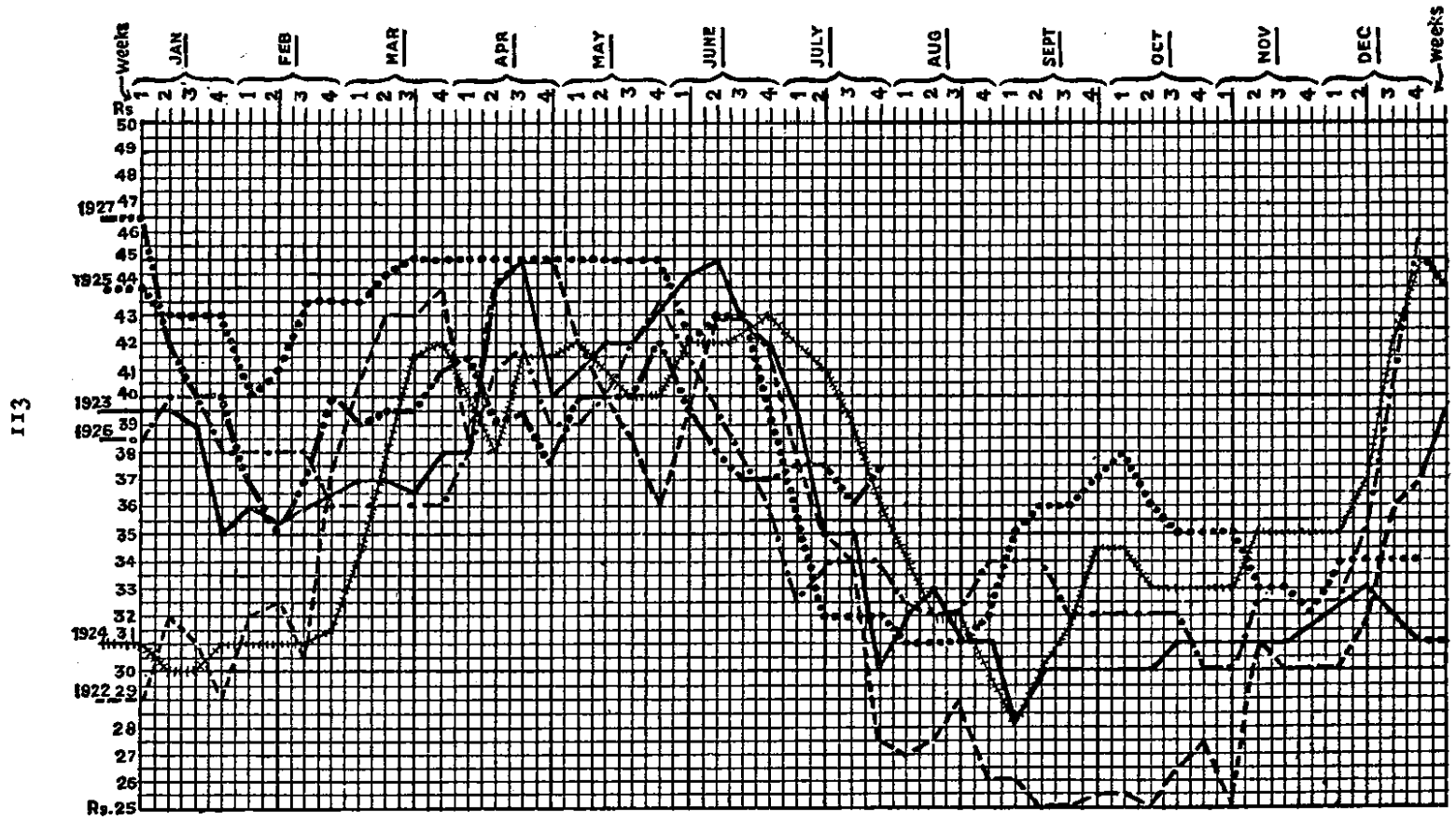


PLATE NO. 4—AVARAM BARK MARKET, MADRAS, PRICE PER CANDY.



# BULLETIN OF THE U. S. BUREAU OF LABOR STATISTICS.

NO. 260.

WASHINGTON.

NOVEMBER, 1919.

## WAGES AND HOURS OF LABOR IN THE BOOT AND SHOE INDUSTRY: 1907 TO 1918.

### INTRODUCTION AND SUMMARY.

Rates of wages (or earnings) per hour, hours of labor per week, and full-time and actual weekly earnings in the year 1918 in the boot and shoe industry of the United States are presented in this report. Comparable figures for 1916, and summaries for each year from 1907 to 1918, except 1915 and 1917, are also shown. Data were not collected for 1915 and 1917.<sup>1</sup>

In 1918 the average full-time weekly earnings of male employees in the selected occupations shown varied from \$19.36 for treers or ironers, machine, to \$32.29 for Goodyear welters.

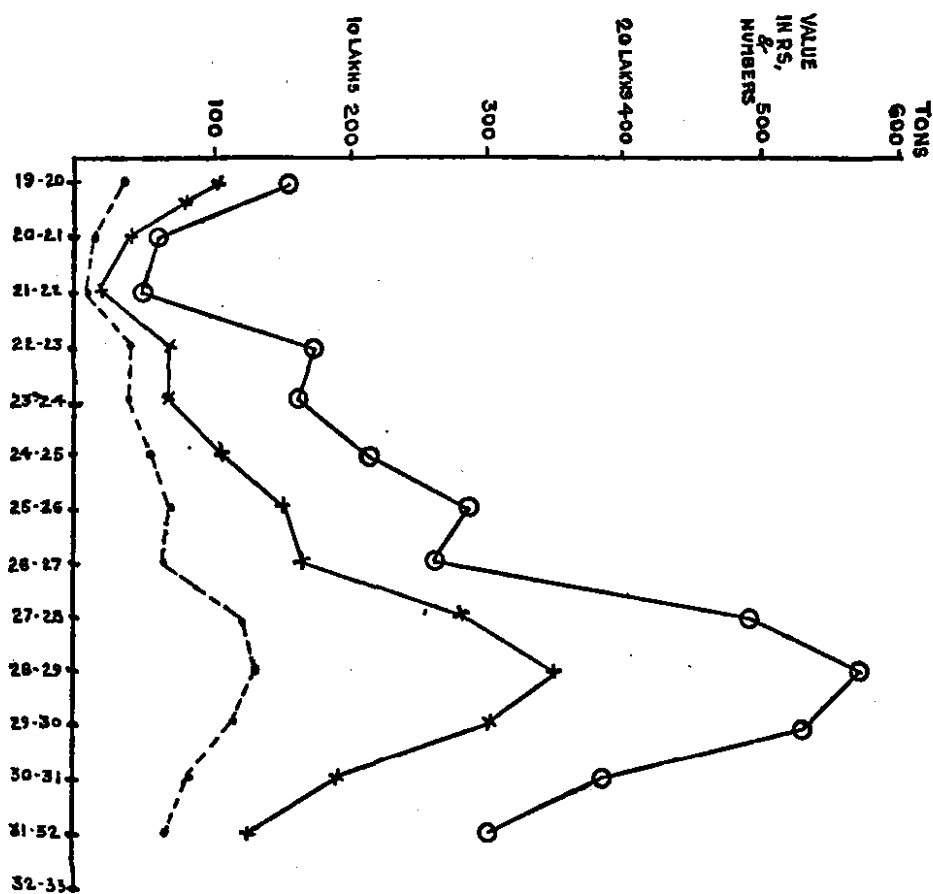
The full-time weekly earnings of female employees varied from \$12.06 for button fasteners to \$16.11 for vampers.

A summary of the rates of wages (or earnings) and hours of labor, in 1913, 1914, 1916, and 1918, in the principal occupations of the industry, and of other employees, is presented in Table 1 which follows:

<sup>1</sup> Previous investigations of wages and hours of labor in boot and shoe manufacturing have been made and published by the Bureau, as follows: Nineteenth Annual Report, covering 1890 to 1903; Bulletin No. 59 (July, 1905), covering 1903 and 1904; Bulletin No. 65 (July, 1906), covering 1904 and 1905; Bulletin No. 71 (July, 1907), covering 1905 and 1906; Bulletin No. 77 (July, 1908), covering 1906 and 1907; Bulletin No. 134 (August, 1913), covering 1907 to 1912; Bulletin No. 154 (May, 1914), covering 1912 and 1913; Bulletin No. 178 (August, 1915), covering 1913 and 1914; and Bulletin No. 232 (May, 1918), covering 1914 and 1916.

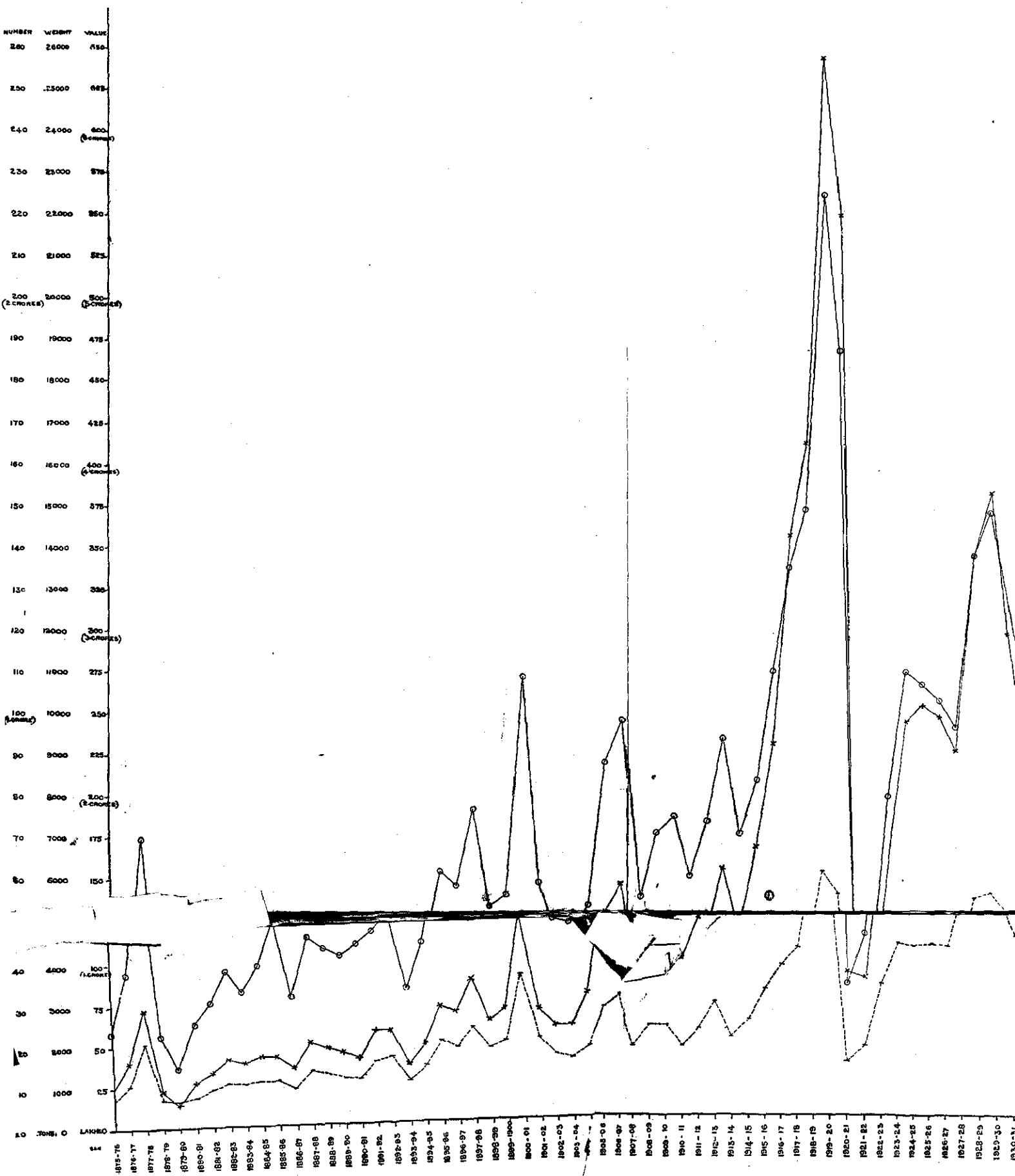
No. 22.—Export of Buff Calf Skins

1 Unit = 100 Tons —○—○—  
 1 Unit = Rs. 5 Lakhs —X—X—  
 1 Unit = Rs. 5,00,000 —o—o—o—o—o—

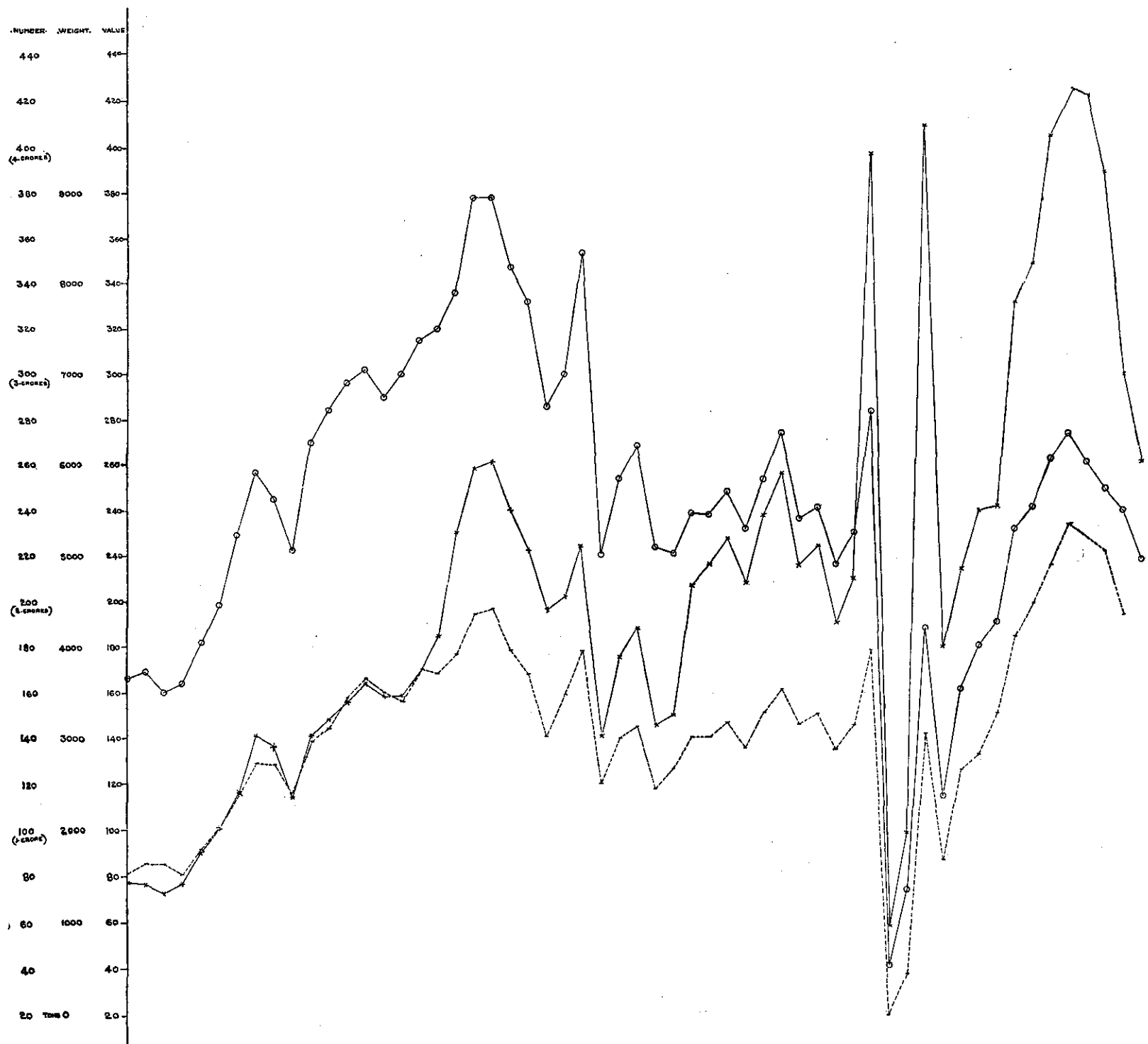


No. 1.—Exports from Madras Presidency—Tanned Hides.

Weight —○— 1 Unit = 1,000 Tons.  
 Value —x— 1 Unit = 25,00,000 Rs.  
 Number ..... 1 Unit = 1,000,000 Hides.



Weight —○— 1 Unit = 500 Tons.  
 Value —×— 1 Unit = 20,00,000 Rs.  
 Number ..... 1 Unit = 2,000,000 Skins.



No. 3.—Exports from Madras Presidency—Tanned Goat Skins.

Weight—○—1 Unit—250 Tons.  
 Value—×—1 Unit—20,00,000 Rs.  
 Number—●—1 Unit—2,000,000 Skins.

