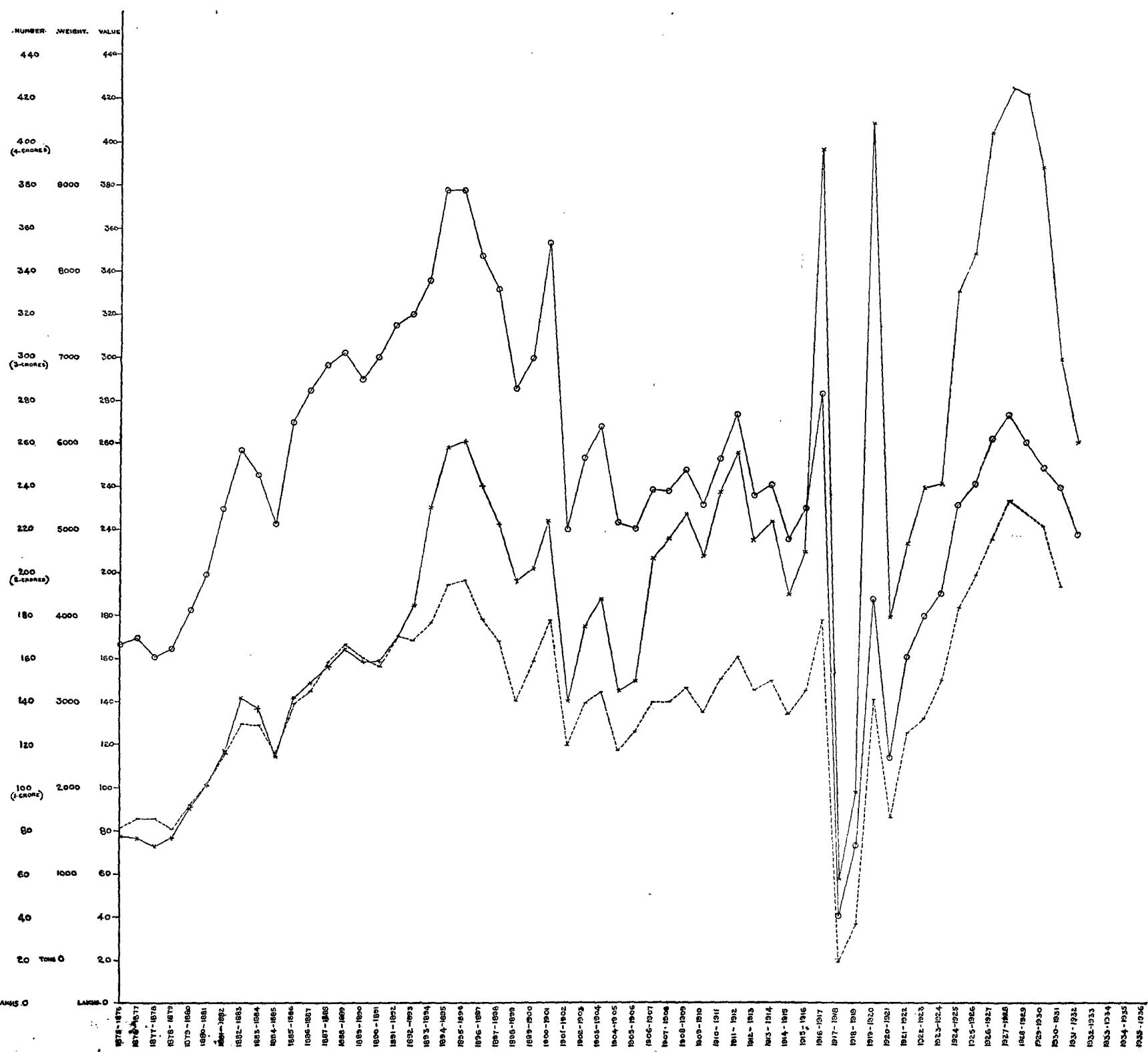


No. 2.—Exports from Madras Presidency—Tanned Skins.

Weight —○— 1 Unit = 500 Tons.

Value —×— 1 Unit = 20,00,000 Rs.

Number ······ 1 Unit = 2,000,000 Skins.

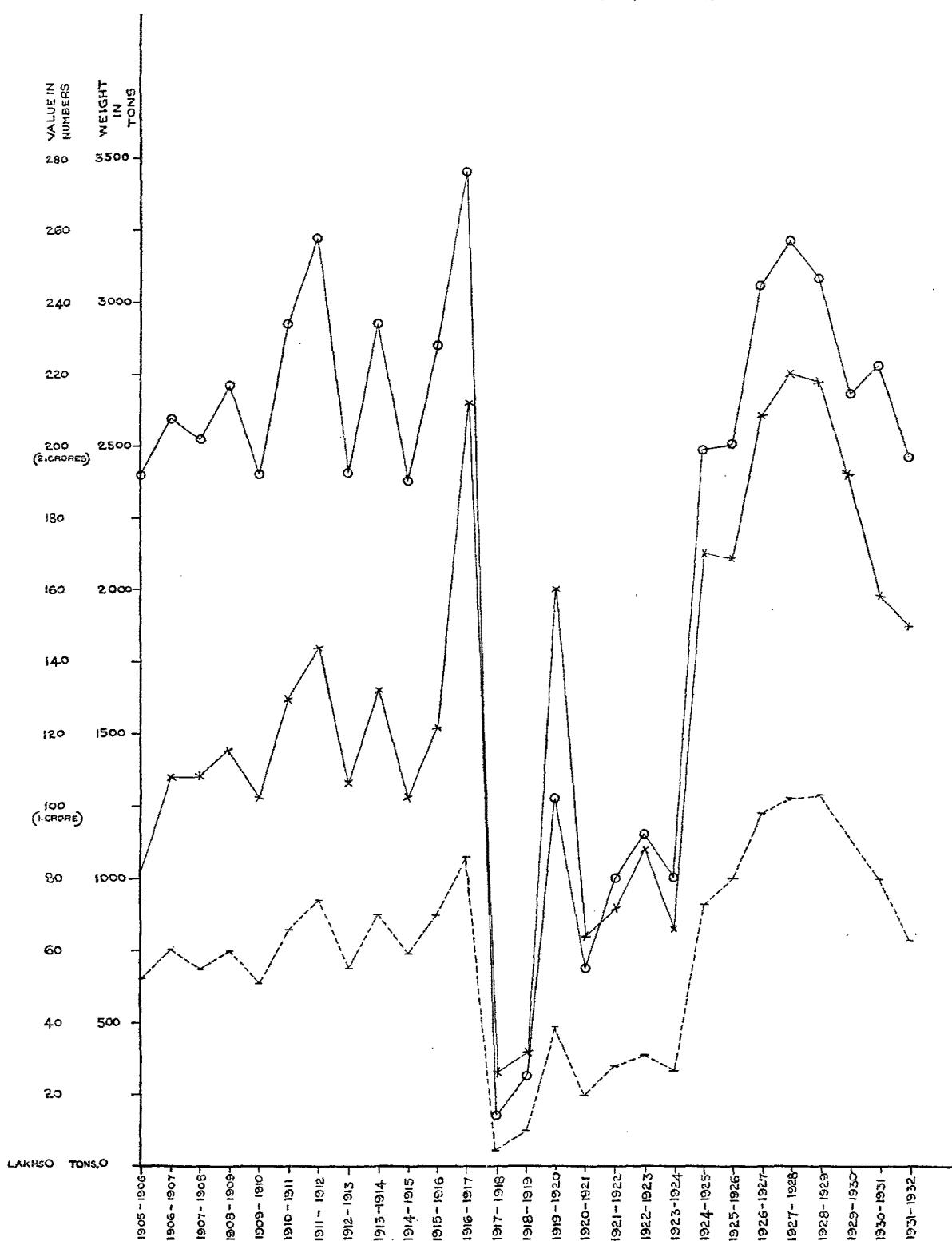


No. 3.—Exports from Madras Presidency—Tanned Goat Skins.

Weight—○—1 Unit—250 Tons.

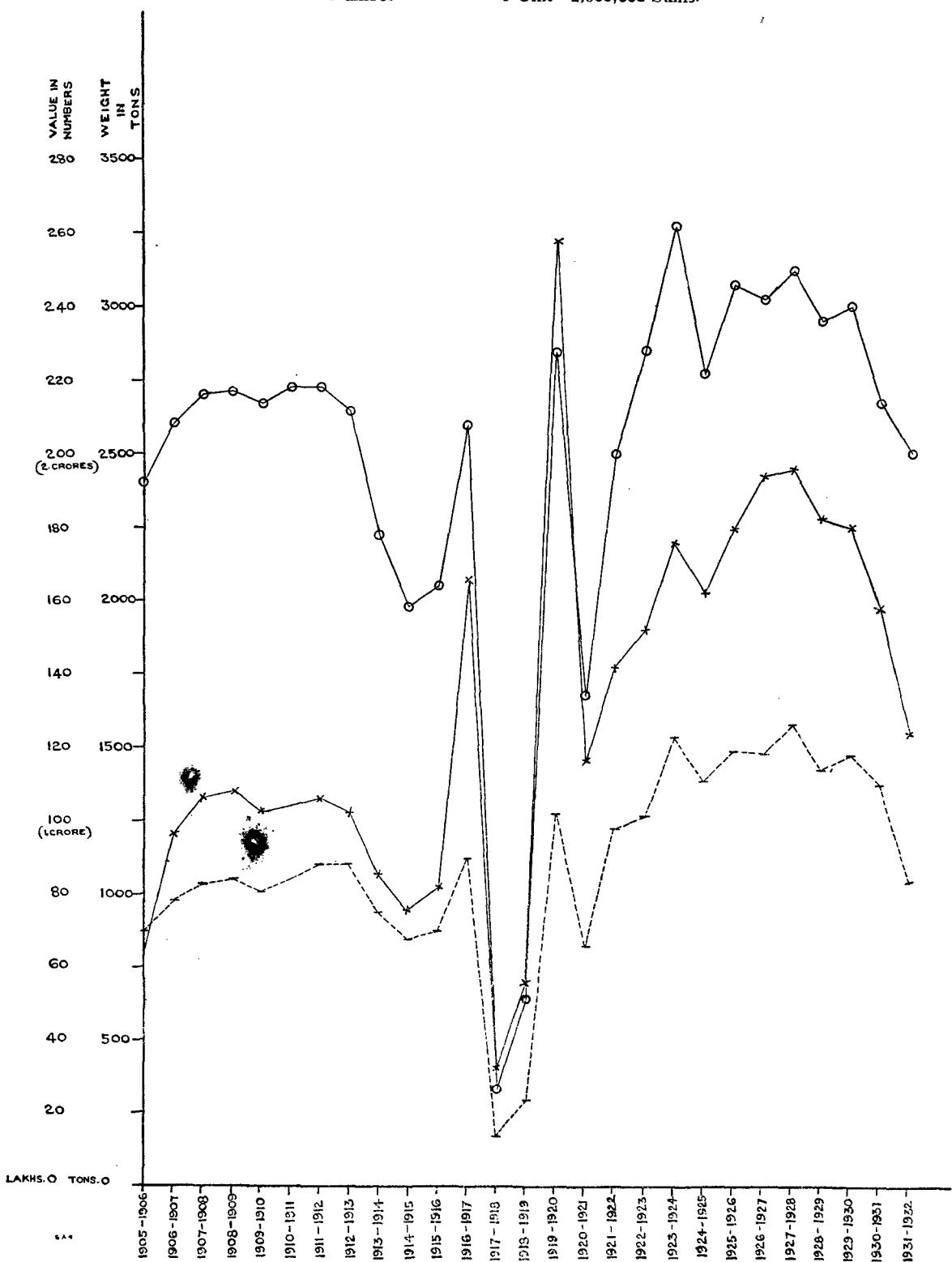
Value—×—1 Unit—20,00,000 Rs.

Number ······ 1 Unit—2,000,000 Skins.



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

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



PARTMENT OF INDUSTRIES, MADRAS

BULLETIN No. 40

ANDBOOK OF THE TANNING
TRADE OF SOUTH INDIA

BY

MAJOR A. GUTHRIE, M.B.E., V.D.

Officer on Special Duty, Leather Trades Institute, Madras.

MADRAS

PRINTED BY THE SUPERINTENDENT GOVERNMENT PRESS

PRICE, RS. 3-6-0]

1934

DEPARTMENT OF INDUSTRIES, MADRAS

BULLETIN No. 40

**HANDBOOK OF THE TANNING
TRADE OF SOUTH INDIA**

BY

MAJOR A. GUTHRIE,

Officer on Special Duty, Leather Trades Institute, Madras

MADRAS

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS

1934

P R E F A C E

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.

INTRODUCTION

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.

C O N T E N T S

PART I—GENERAL.

		PAGES
CHAPTER	I. History of the trade	1-7
"	II. Statistics	7-21
"	III. South Indian tanneries	21-24
"	IV. Processes	24-27
"	V. Tannery-owners, staff and operatives ...	27-30
"	VI. Technical education, advice and research	30-36
"	VII. Miscellaneous	36-40

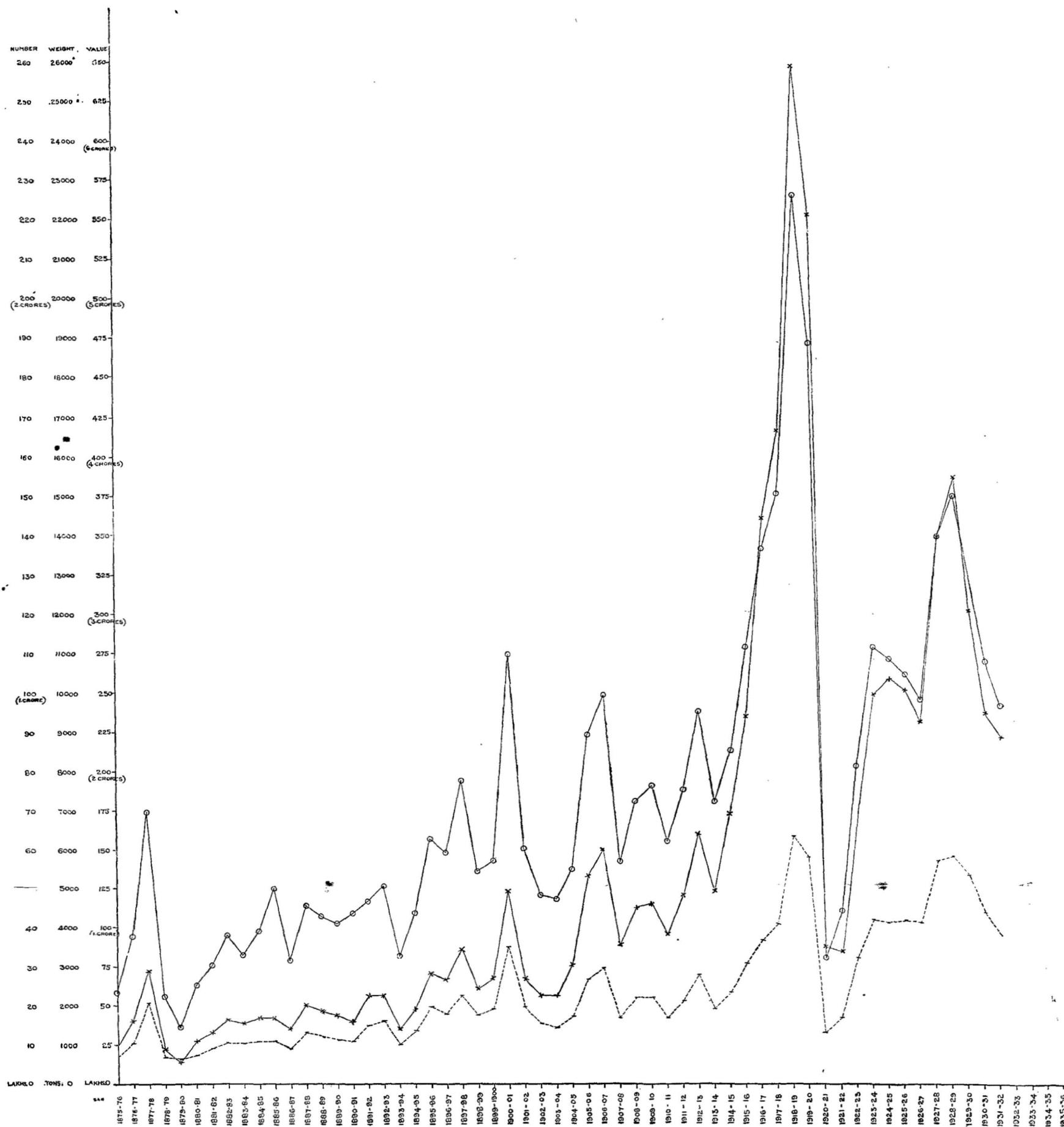
PART II—TECHNIQUE OF THE INDUSTRY.

CHAPTER	VIII. Raw materials	41-57
"	IX. Washing	57-64
"	X. Liming	64-70
"	XI. Elangaram	70-76
"	XII. Tannage	76-83
"	XIII. Finishing and exporting	84-89
"	XIV. By-products and waste materials	89-92

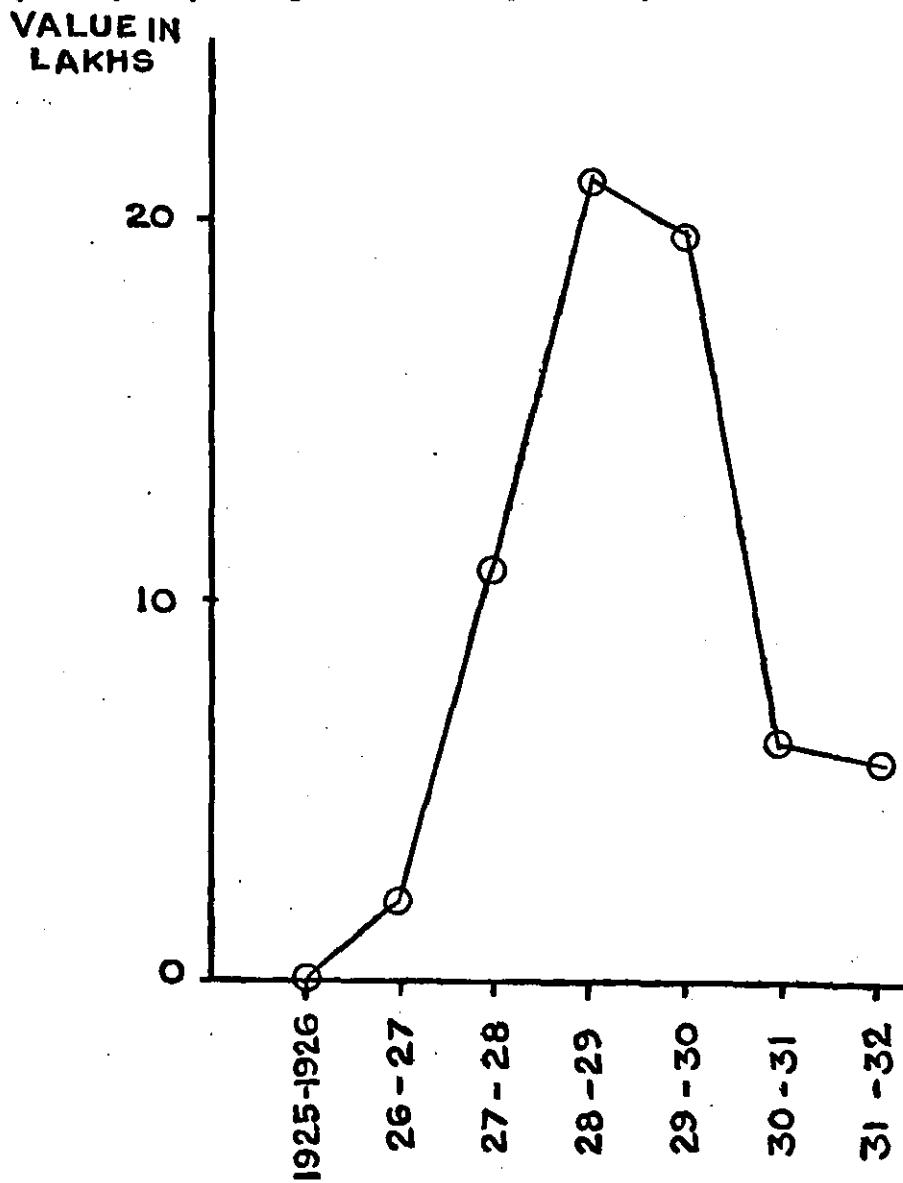
APPENDIX

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

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

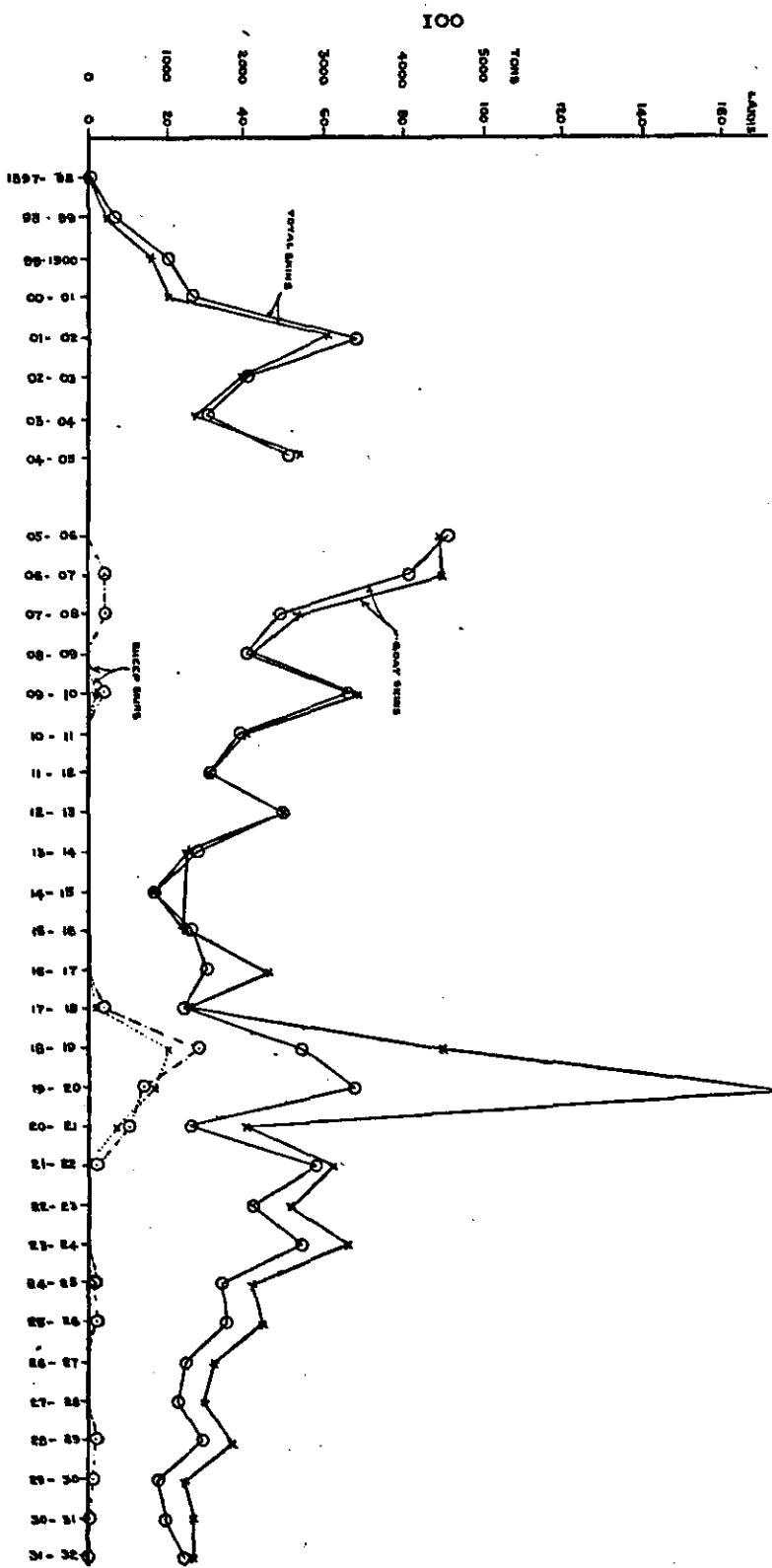


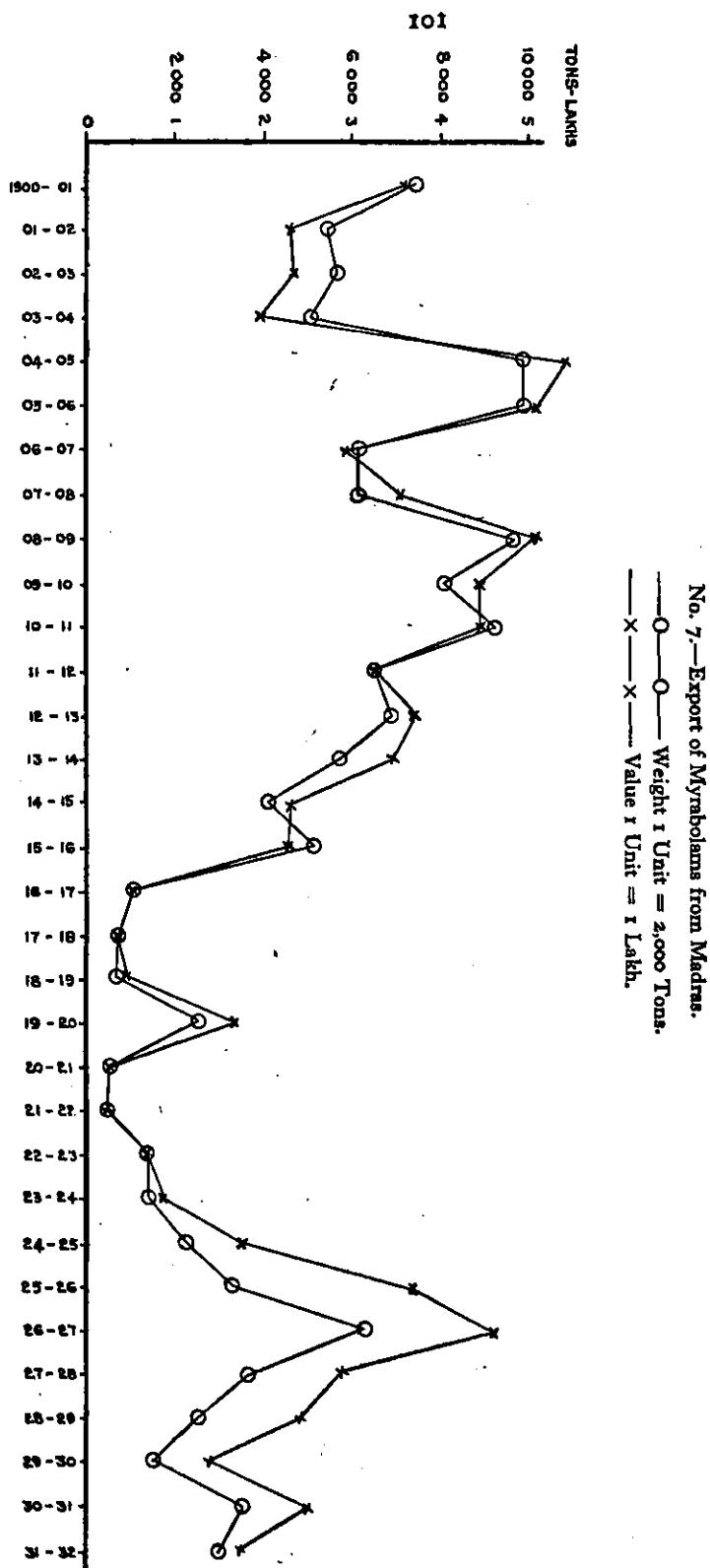
No. 5.—Graph showing Value of Tanned Reptile Skins exported from Madras.



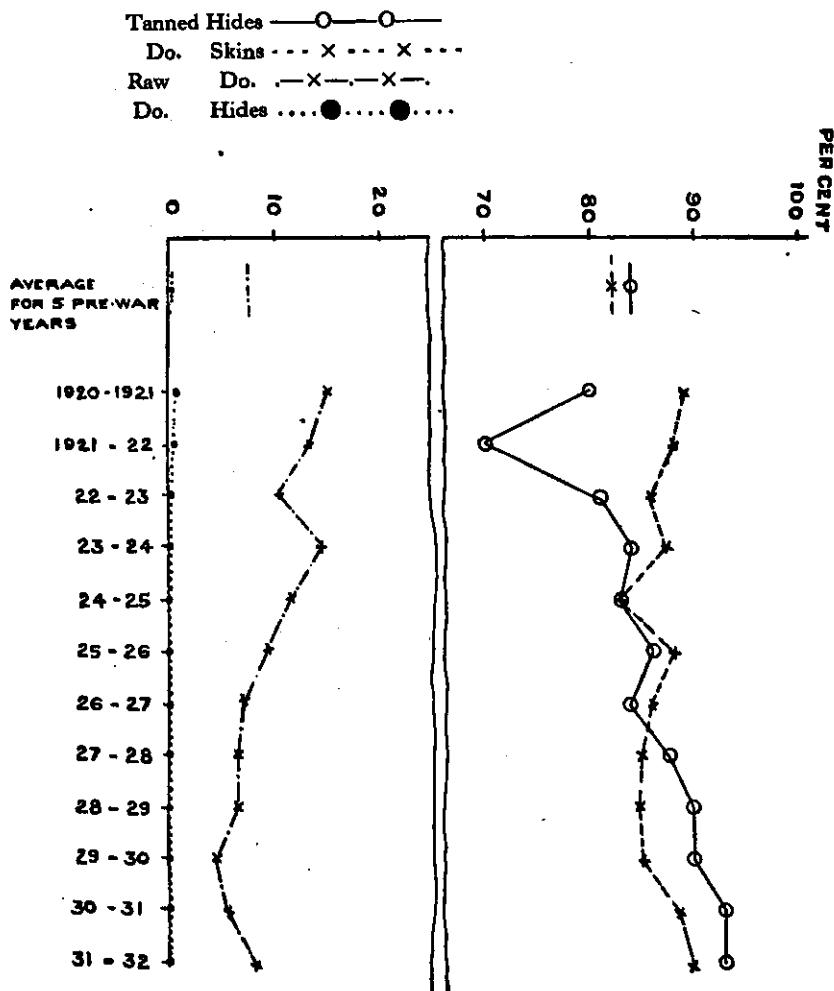
No. 6.—Export of Raw Skins from Madras.

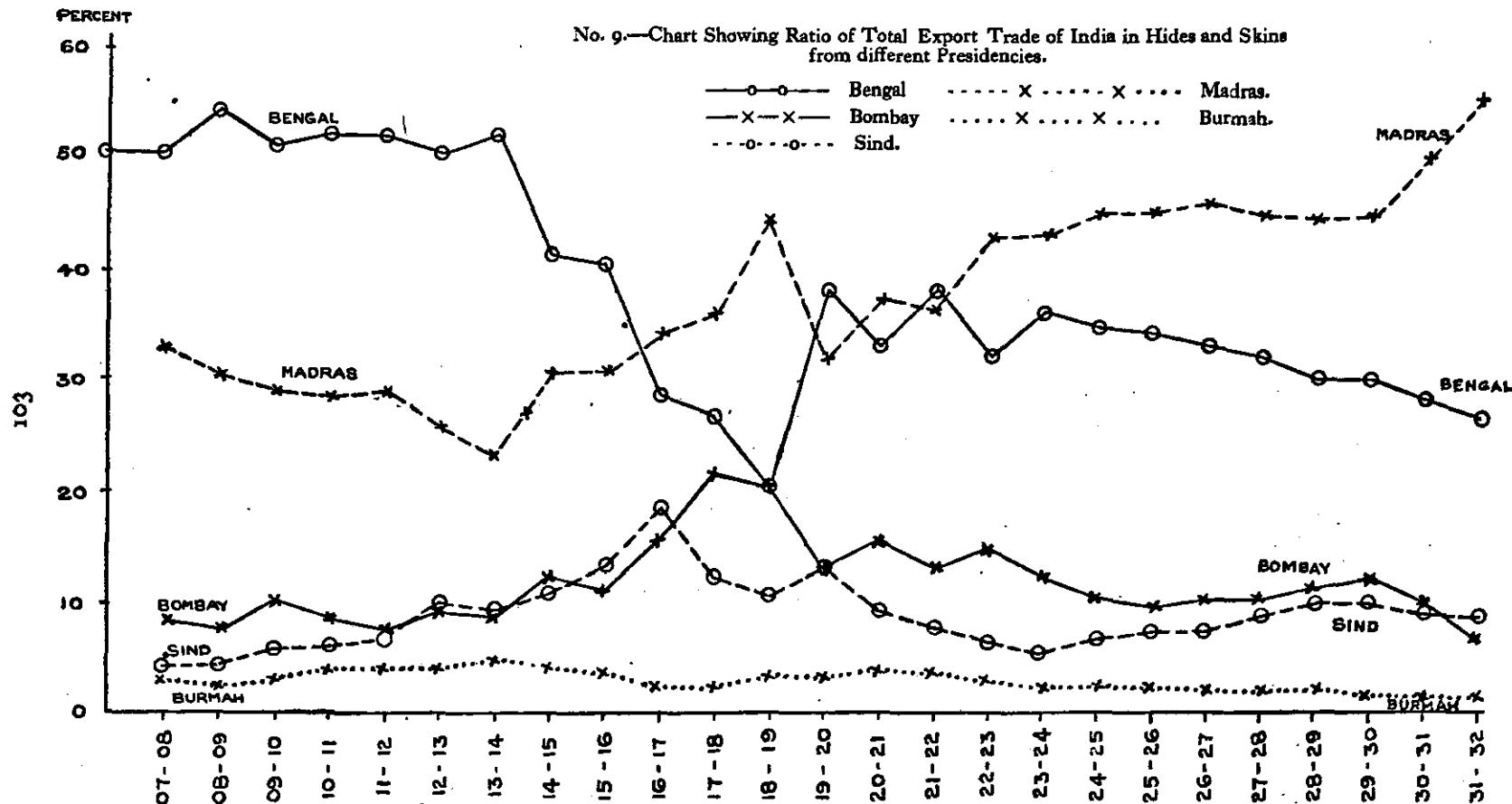
—○—○— Weight : 1 Unit = 1,000 Tons.
—×—×— Value : 1 Unit = 20 Lakhs.



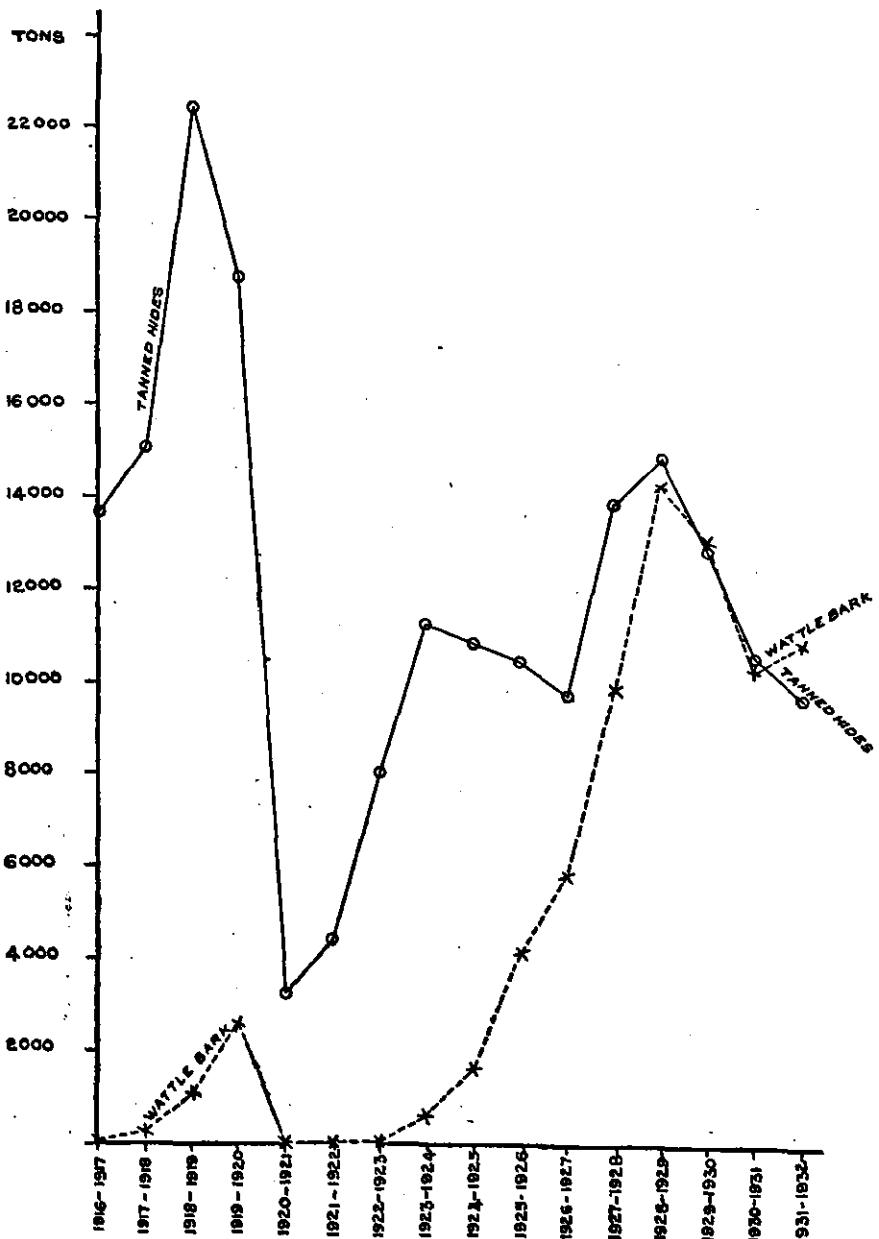


No. 8.—Graph showing Madras Share of the Export Trade of India in





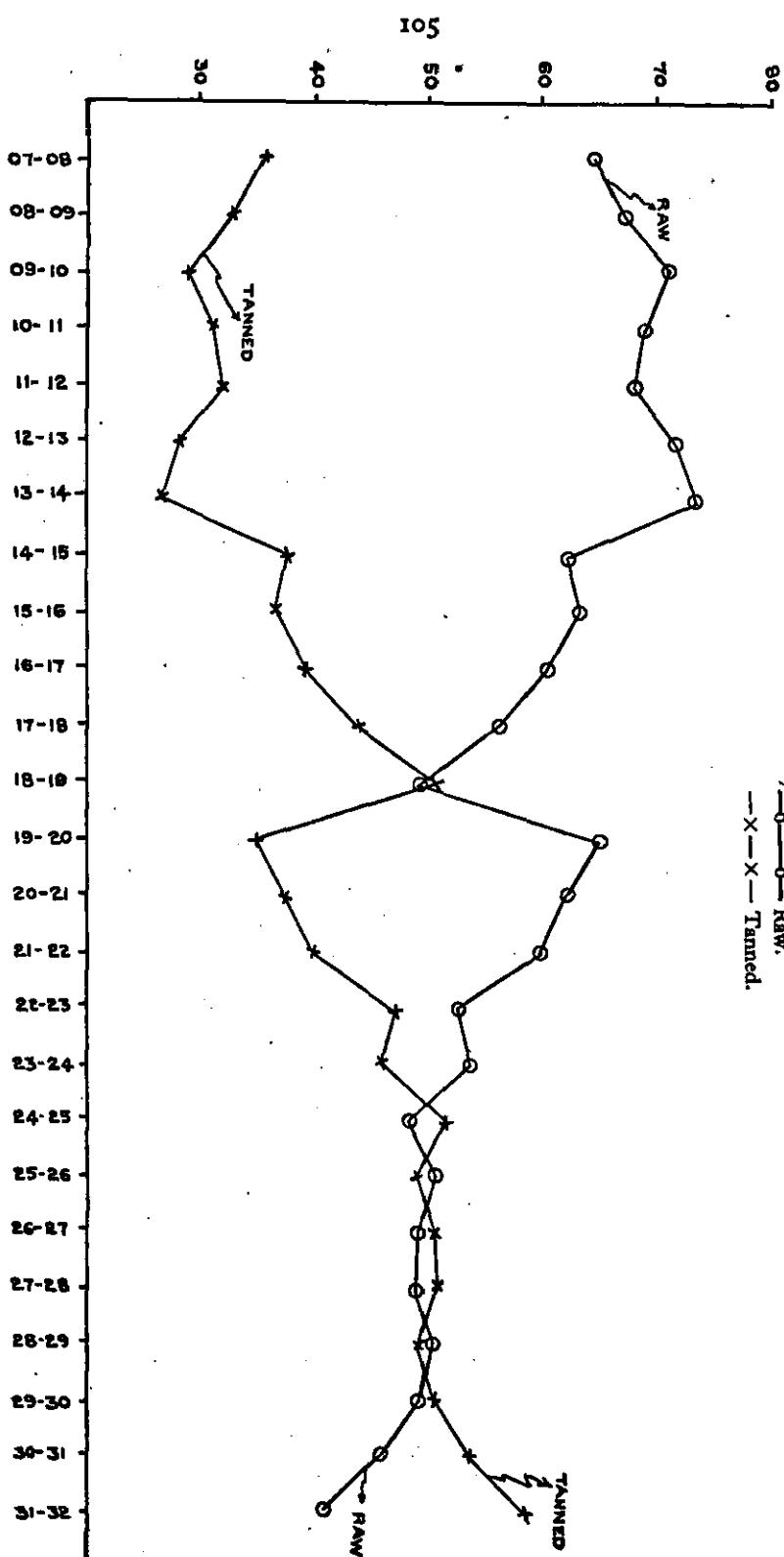
No. 10.—Export of Tanned Hides ——○—
 Imports of Wattle Bark - - - X - - -
 1 Unit = 2,000 Tons.



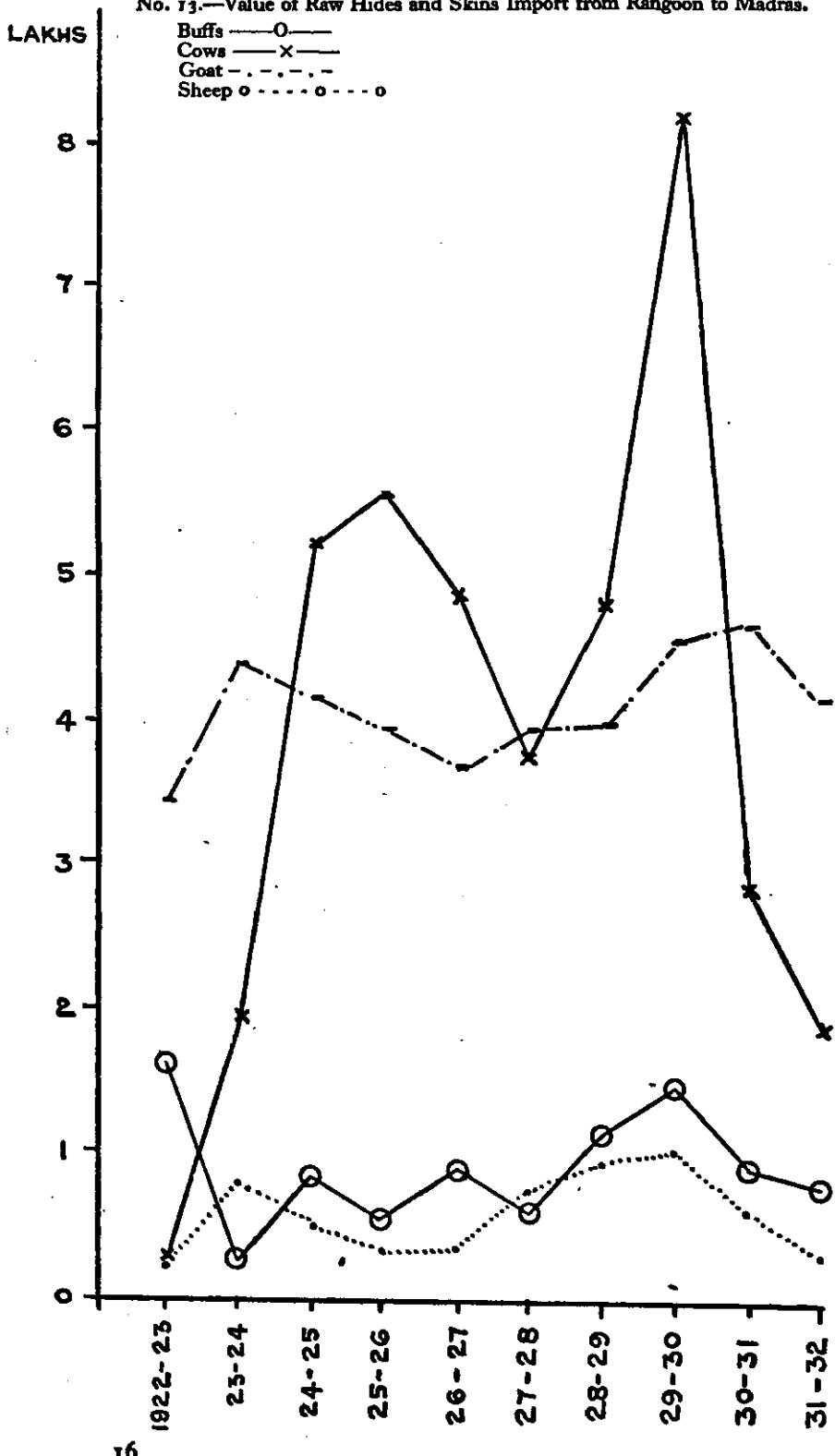
PERCENT.

No. 11.—Chart showing Ratio of Value of Raw and Tanned Hides and Skins Exported from British India.

—○—○— Raw.
—X—X— Tanned.



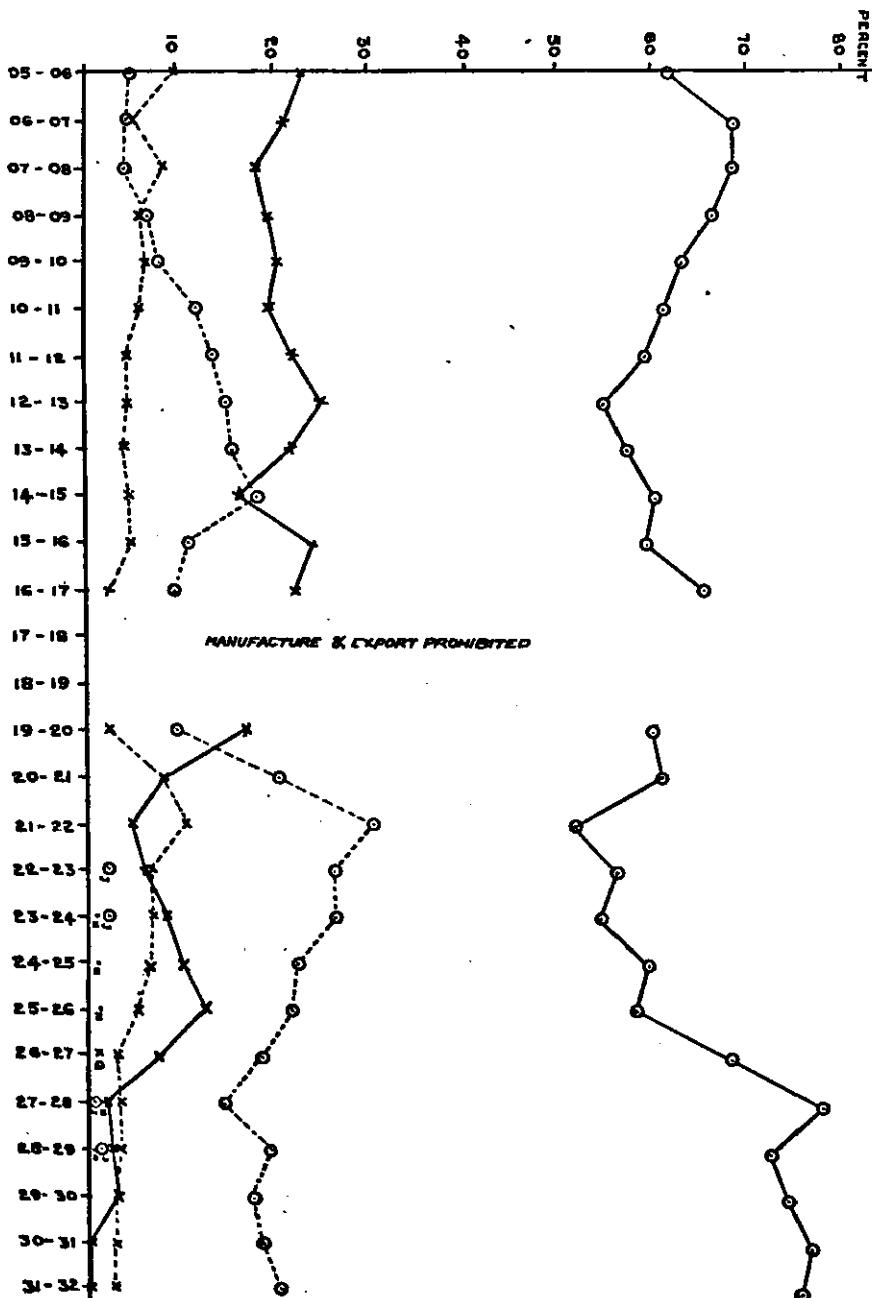
No. 13.—Value of Raw Hides and Skins Import from Rangoon to Madras.



No. 14.—Ratio of Export of Tanned Sheep Skins to different Countries.

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

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



No. 15.—Ratio of Exports of Tanned Goat Skins Exported to different Countries.

— — — Belgium and Germany.
(combined).

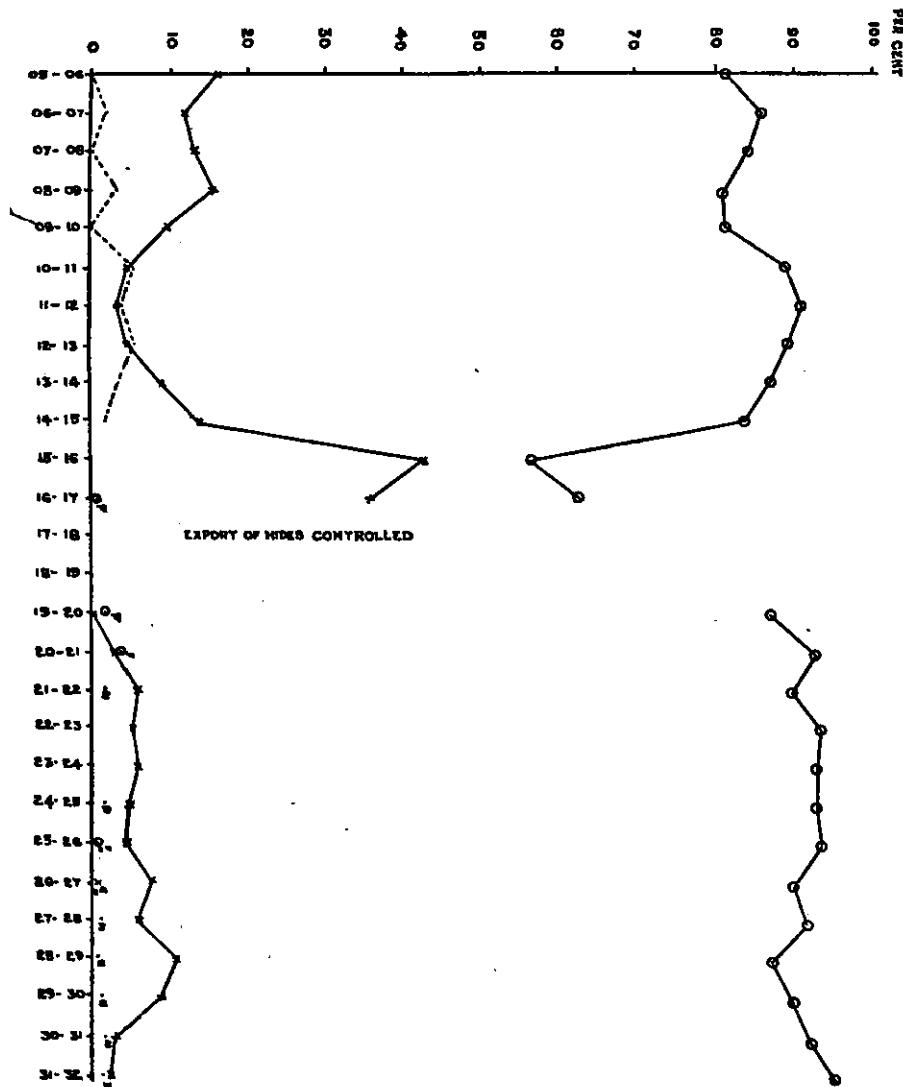
United Kingdom —○—

. Netherlands.

United States of America —×—

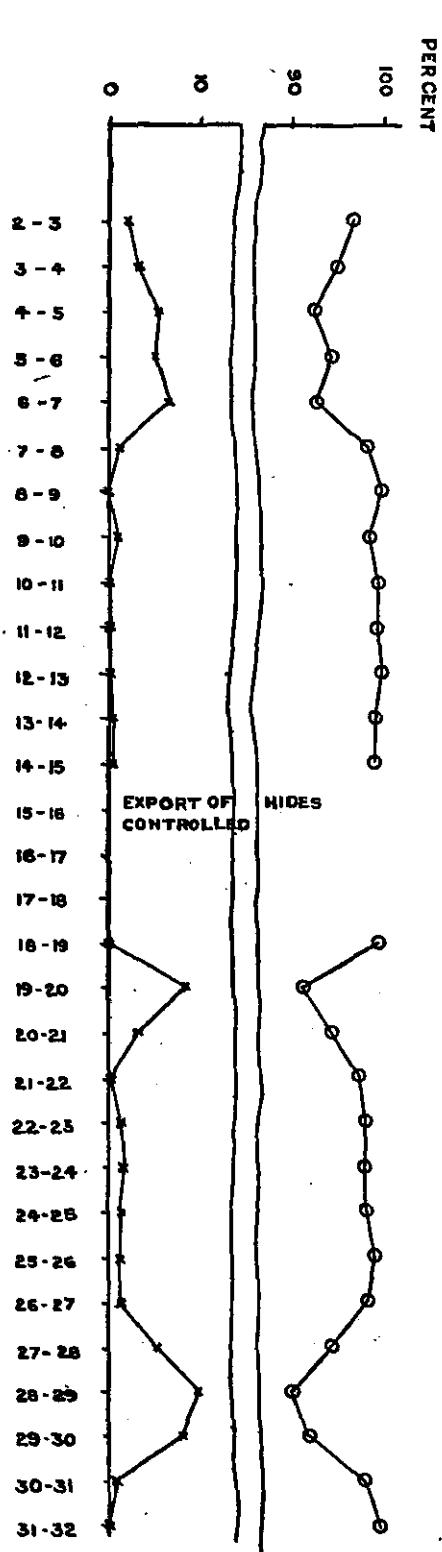
○ France.

× Germany.

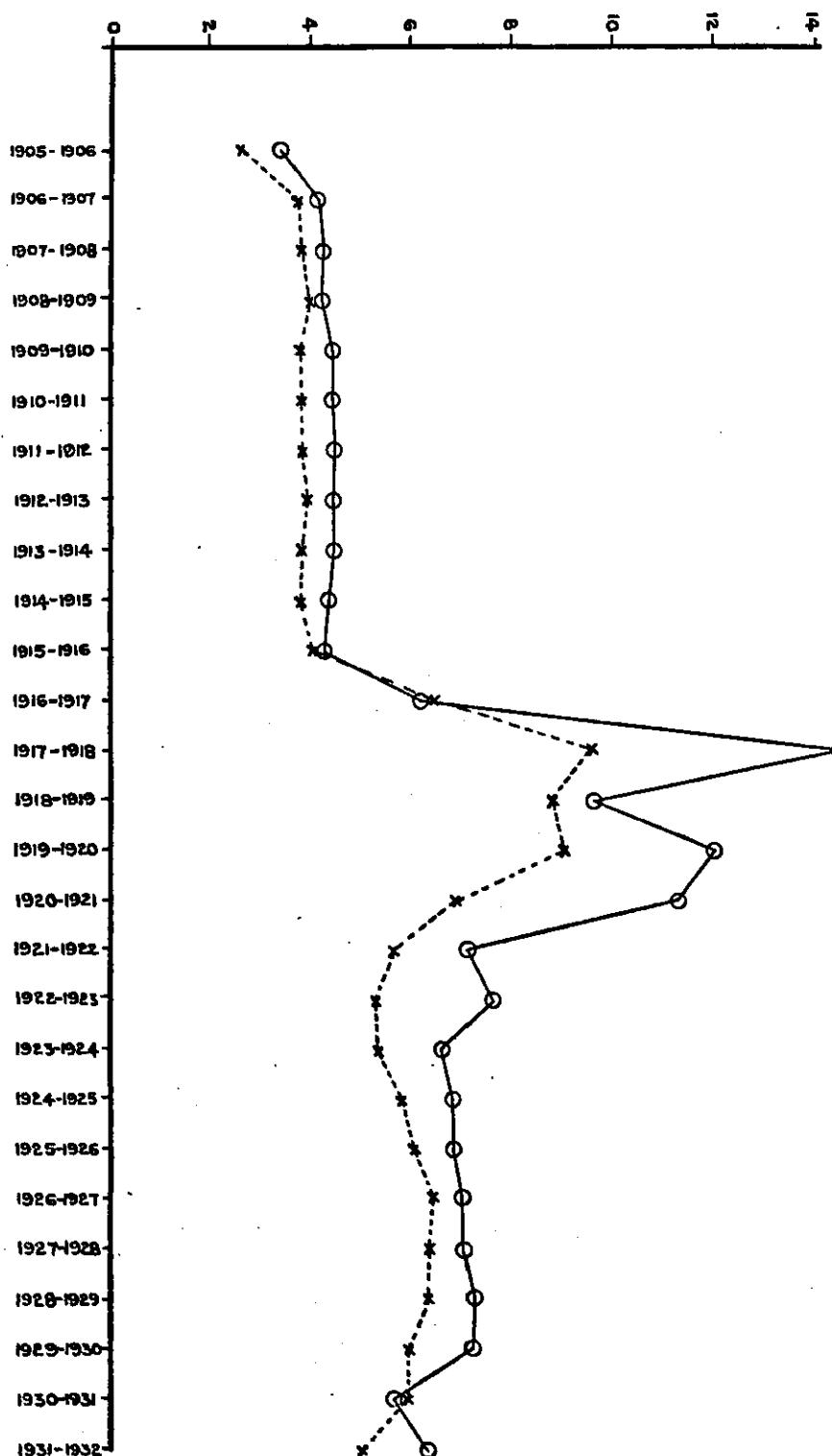


No. 16.—Ratio of Exports of Tanned Hides Exported to different Countries.

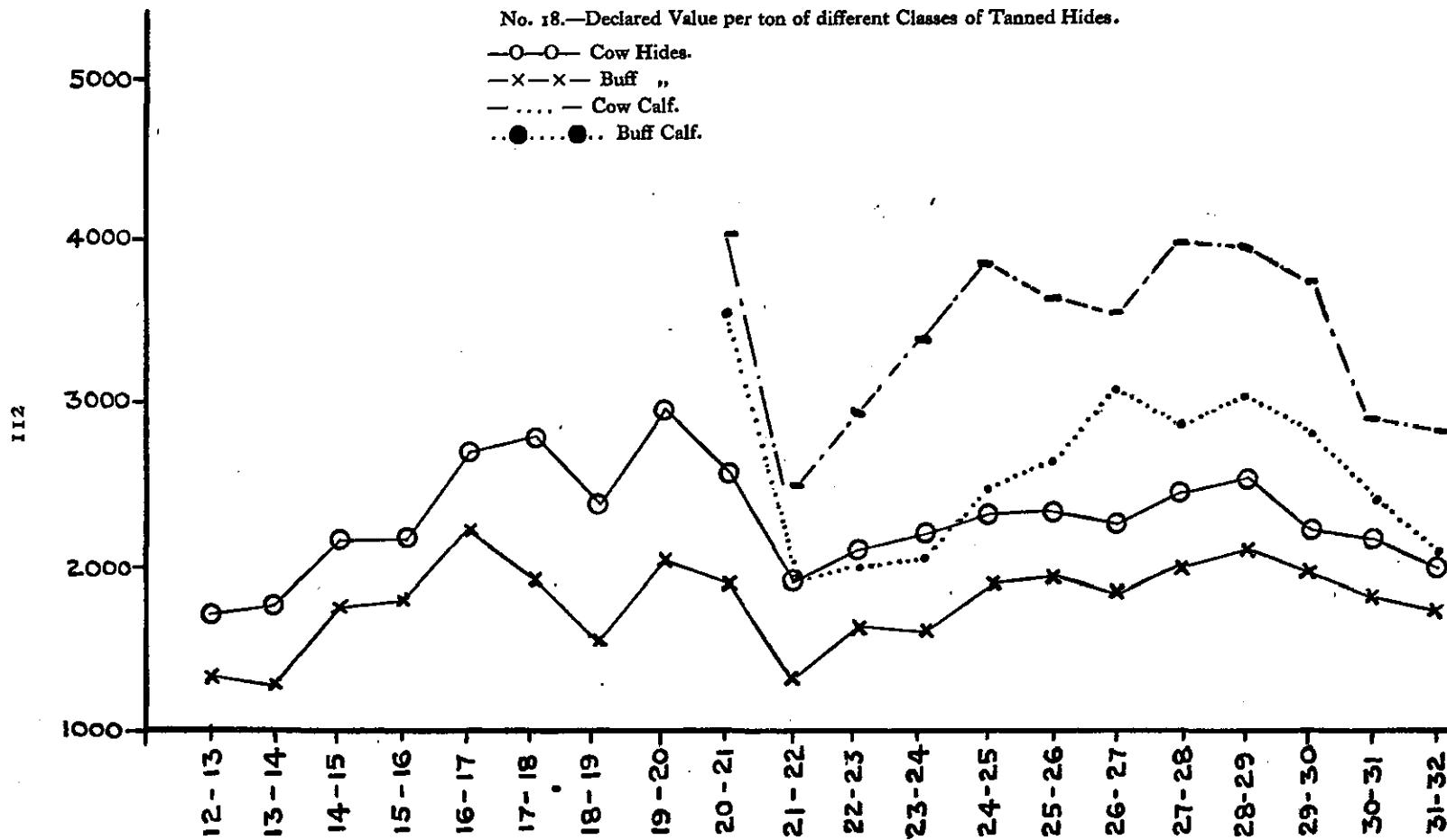
United Kingdom —○—
United States of America —X—



VALUE IN THOUSANDS OF RUPEES



No. 17.—Declared Value per ton of Tanned Skins from Madras.
1 Unit = Ru. 2,000.



No. 19.

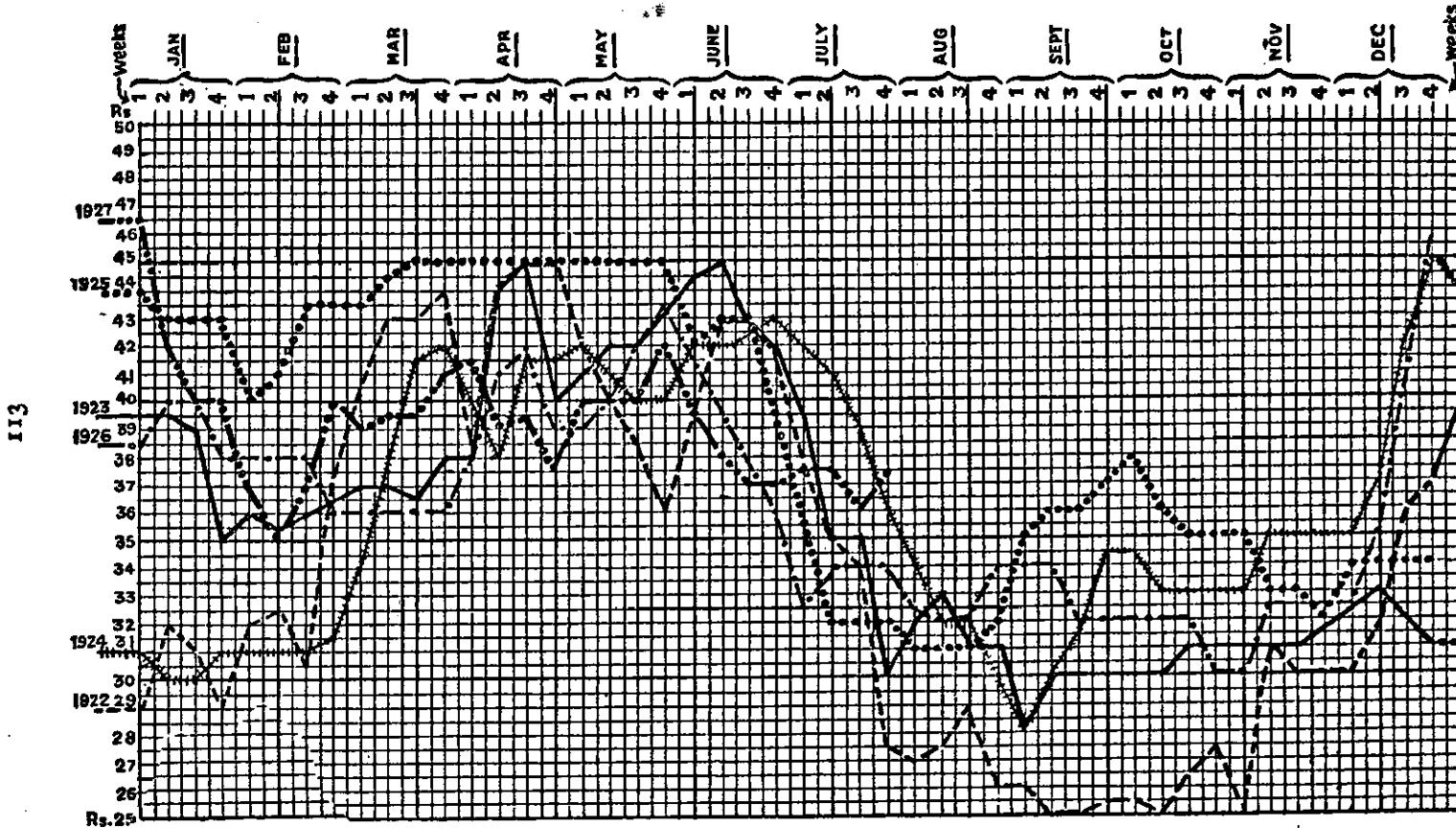
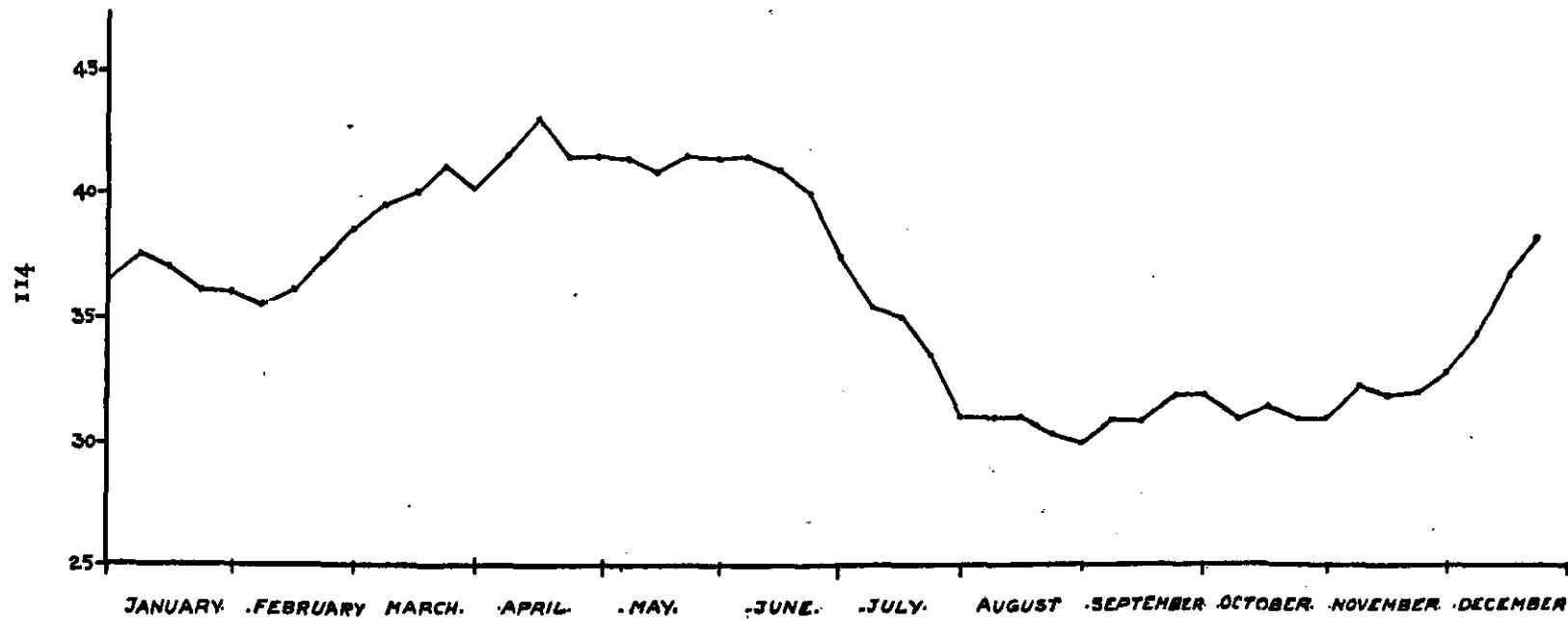
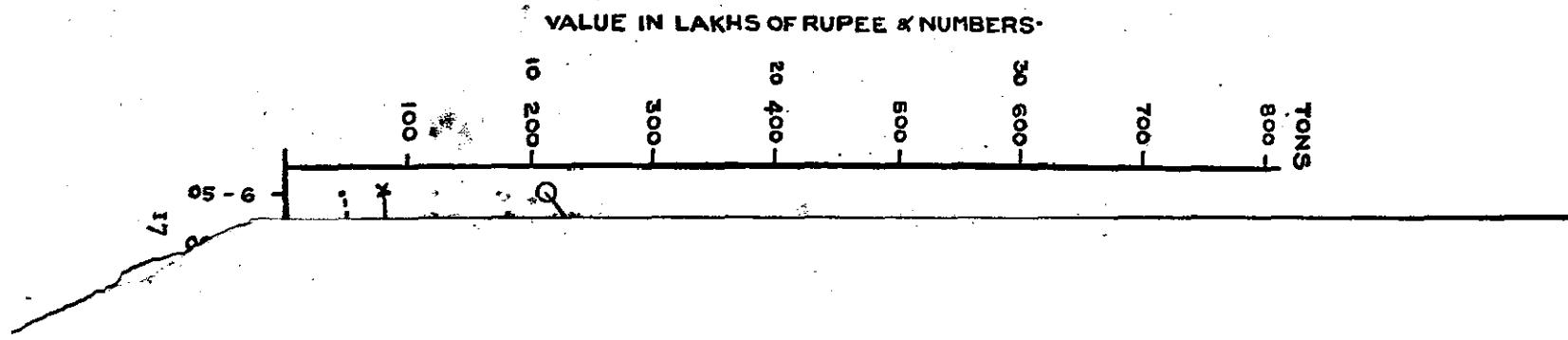


PLATE NO. 4—AVARAM BARK MARKET, MADRAS, PRICE PER CANDY.

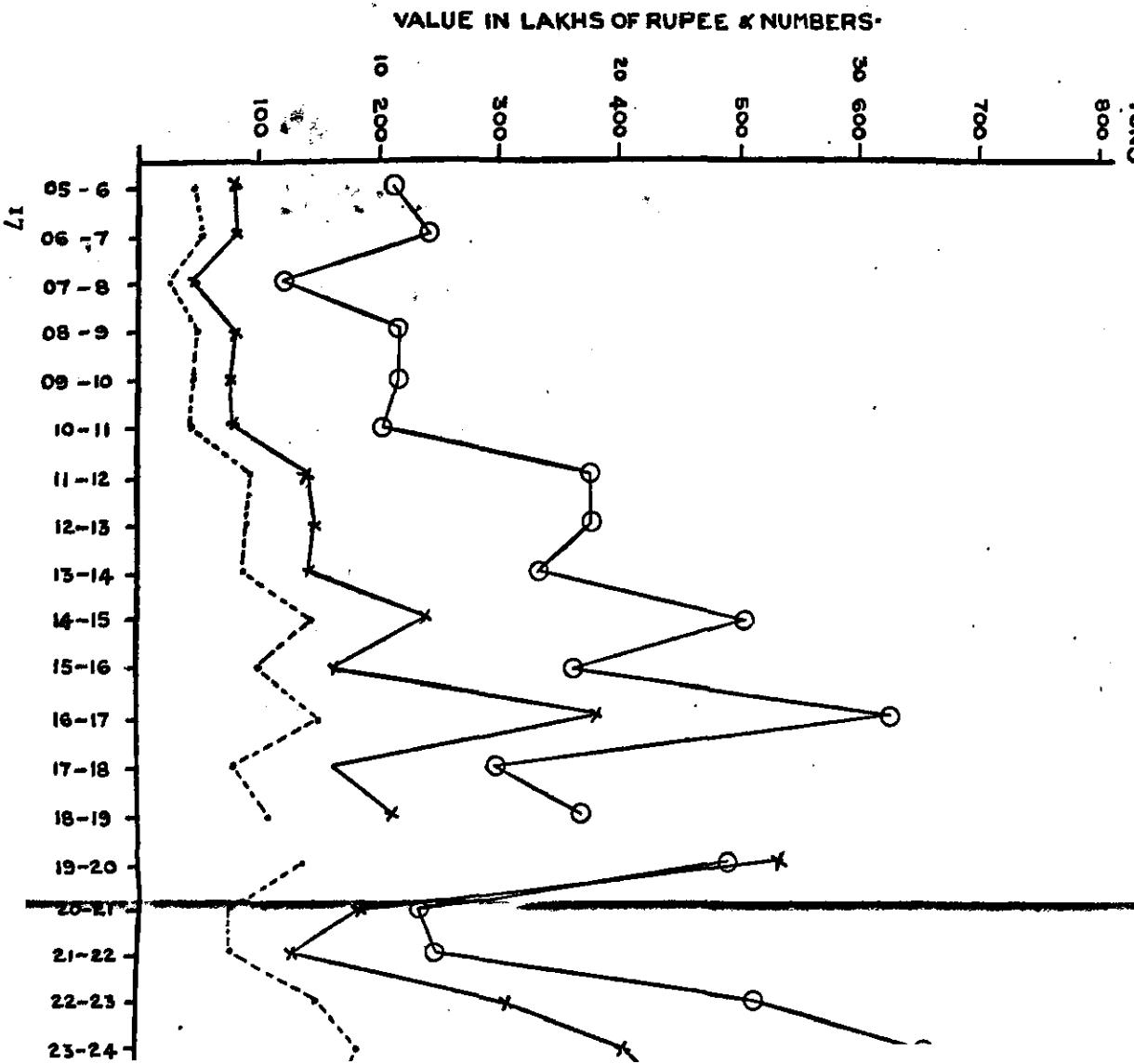
No. 20.—Chart showing average weekly price of Avaram Bark per Candy between January 1922 and July 1927.





1955-1959
Trained Other Skins1919-1933
Trained Cow C's

- 1 Unit = 100 Tons. —○—
- 1 Unit = Rs. 5 Lakhs —×—
- 1 Unit = Rs. 5,00,000 -·○··-



No. 22.—Export of Buff Calf Skins

- 1 Unit = 100 Tons —○—○—
- 1 Unit = Rs. 5 Lakhs —×—×—
- 1 Unit = Rs. 5,00,000 - ○ - ○ - ○ - ○

