

203

Machine Tools Souvenir

1954 - September

VOL. I. No. 1

JL  
D6,8m2193,NSC  
NSC.1.1  
9 26 58

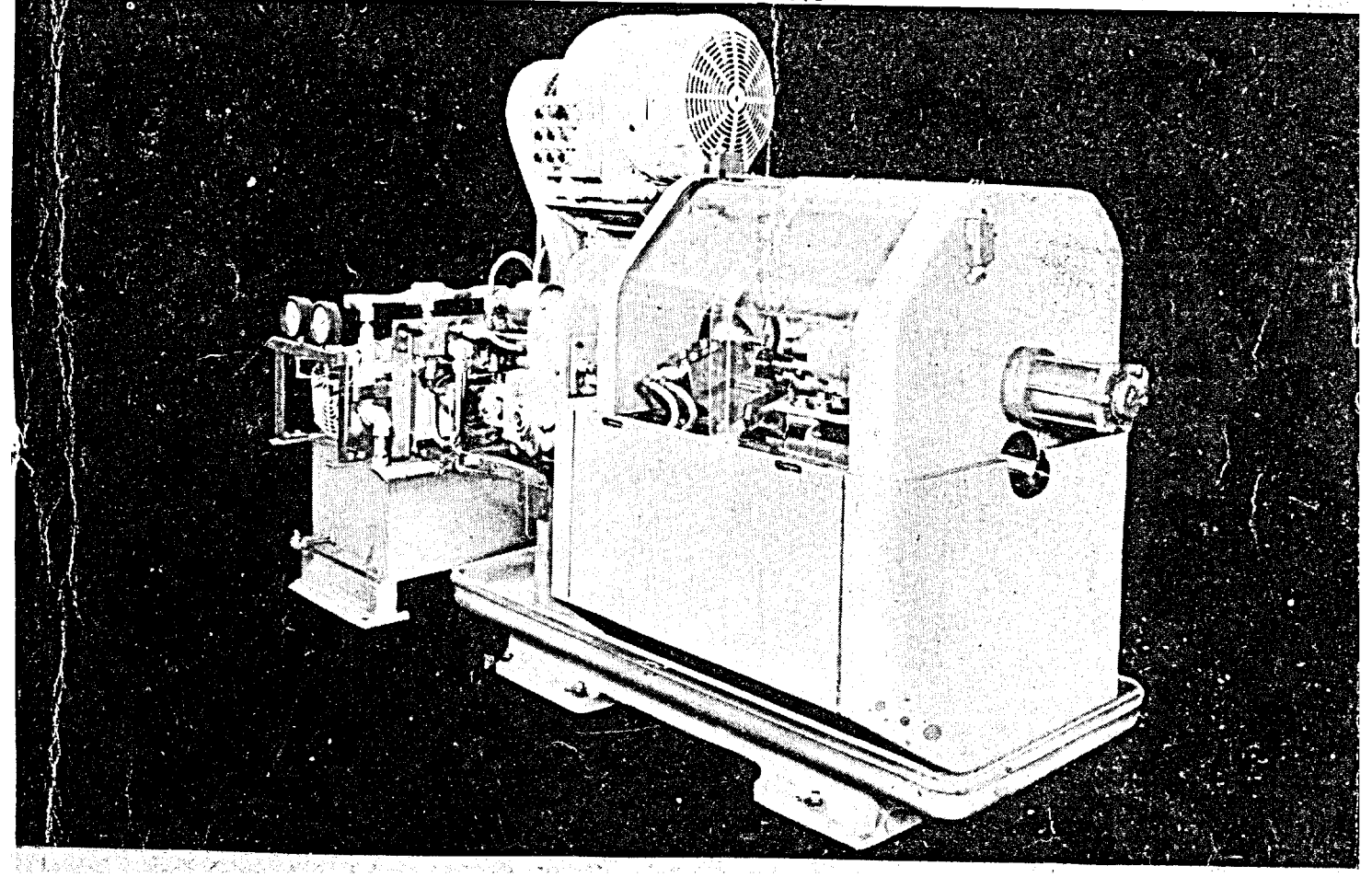
# MACHINE TOOLS SOUVEN

(A Quarterly technical Journal devoted to Machine Tool Industry)

203

Vol. I No. I

SEPTEMBER 1954



September 1954

MACHINE TOOLS SOUVENIR

# MACHINE TOOLS SOUVENIR

2260, BHUTGOSWAMY VATTARAM

MANOJIAPPA STREET

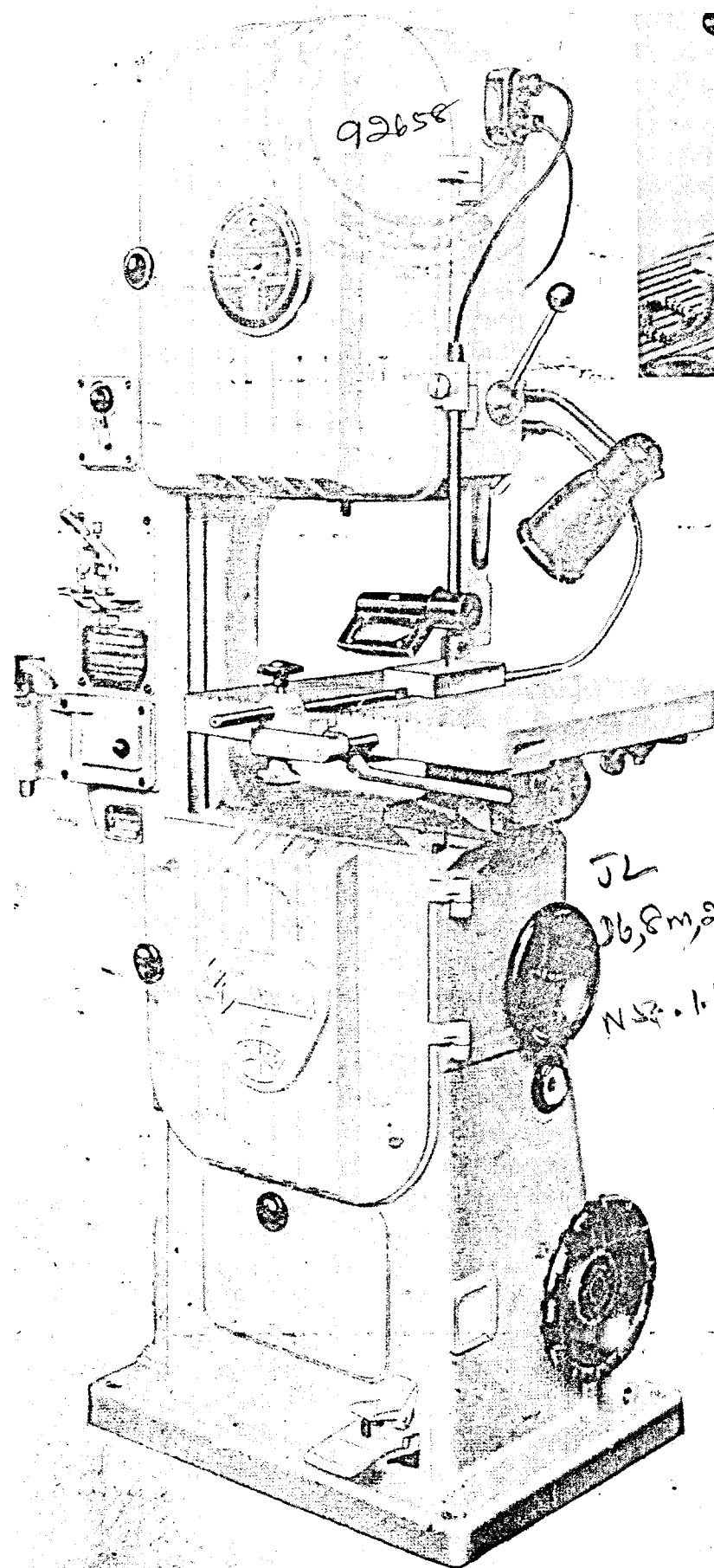
TANJORE

(South India)

○

## CONTENTS

|                                                                  |    |
|------------------------------------------------------------------|----|
| I. EDITORIAL                                                     | 5  |
| 2. BSA's FIFTY YEARS OF PROGRESS                                 | 6  |
| 3. THE BRITISH MACHINE TOOL INDUSTRY                             | 8  |
| 4. DIVERSIFIED PRODUCTION PROGRAM BY CANADIAN MACHINE TOOL MAKER | 9  |
| 5. HYDRAULIC AND AUTOMATIC MSO GRINDING MACHINE                  | 13 |
| 6. THE STORY OF HARRINGTON                                       | 18 |
| 7. WEISSER HEILBRONN'S PRODUCTION LATHES                         | 21 |
| 8. COPY-MILLING MACHINE NASSOVIA VII                             | 28 |
| 9. PORTABLE POWER TOOLS IN INDUSTRY                              | 29 |
| 10. THE FRENCH MACHINE TOOL INDUSTRY                             | 32 |
| 11. A RANGE OF DEWEX MACHINE TOOLS                               | 34 |



Precision Band Saw and Filing  
Machine

Many years experience have indicated that Metal Saws have to be precision saws. Sawing with these machines is not just a matter of cutting metal anyhow—if used properly the cut can be made accurate enough for the article to be used without further finishing.

When set up for band filing, the same precision qualities are still required. The bandfile is properly guided and supported close to the cutting-point with guides approx. 12" long.

This machine is based on the well-known THIEL design is and produced in co-operation with the proprietors of the THIEL patents in the NASSOVIA Maschinenfabrik Hanns Fickert G. m. b. H. As a result of several innovations and improvements to both the design and the construction of this machine, it now represents a considerable improvement of the original by patented design.

## NASSOVIA

MASCHINENFABRIK HANNS FICKERT G.M.B.H.  
LANGEN BÉZ. FRANKFURT AM MAIN  
GERMANY

## Our Editorial Board Hony. Members



**Mr. M. B. JAMBHEKAR**  
THE MYSORE KIRLOSKAR LTD.



**Mr. E. W. H. SCAIFE**  
MACHINE TOOLS (INDIA) LTD.



Calcutta,  
13th May 1954.

I am very pleased to learn that you are bringing out a quarterly journal entitled "MACHINE TOOLS SOUVENIR" from August of this year devoted to the Machine Tool Industry. The need for such a Publication in India can hardly be stressed and I take this opportunity of congratulating you on this venture and wish your journal all success in the future.

Mr. F. FUCHS, v. D. I. Representative in India of DEWEX, Association of German Machine Tool Makers, of whom Messrs. Chowgule & Co., (Hind) Ltd., of Calcutta, Bombay, Madras & New Delhi, are Sole Agents in India.



Harihar,  
17th May, 1954.

Machine Tool Industry is vital to the interests of the Nation in peace as well as in War. Every effort therefore should be made to make the Country self sufficient in the supply of machine tools.

In India we have just started this industry and will therefore have to make big strides in the manufacture of the machine tools both by Govt. and Private Factories. Duplication of effort in manufacturing similar machines should therefore be scrupulously avoided. In addition to this a constructive development plan in manufacturing new types of machines every year so as to cover the whole field quickly should be mapped out by Govt. even by subsidising such efforts.

In short avoiding duplication of effort and planning to manufacture more types and sizes of machine tools is the only sure way to protect our Nation.

*M. B. Janabekov*

## EDITORIAL

IN India to-day there are very few technical journals devoted to various aspects of Engineering. We are now entering the era of Machine age. It is needless to say that Machine Tools are the labour-saving equipments so essential to any industry. How far Machine Tools are vital in the development of Engineering Industry is the main objective of this technical journal which we have pleasure to present to all those interested in the Machine Tool trade. This basic Industry is the backbone of any Nation both during peace and war time. Our country cannot boast of having made rapid strides in the manufacture of high precision tools, yet there are two private and two state-owned machine tool factories whose objective is to attain self-sufficiency in certain type of machine tools. Though it is not our intention to criticise Government's policy to have its own machine tool factories, it is our fond hope that there should not be any duplication in the range of manufacture which other private factories are competent enough to produce such equipments to meet the country's requirements.

We can safely say that this is the first technical journal to be produced in the whole of Asia for the first time. This journal besides being a valuable source for technical information and dissemination of technical advancements made in other countries will also be a means, in its own humble way, for recording the achievements of our indigeneous Industry.

We are confident that with cooperation and assistance of so many distinguished personalities on our Editorial Board we will endeavour to make our journal to be of immense value to the manufacturers and technicians alike.

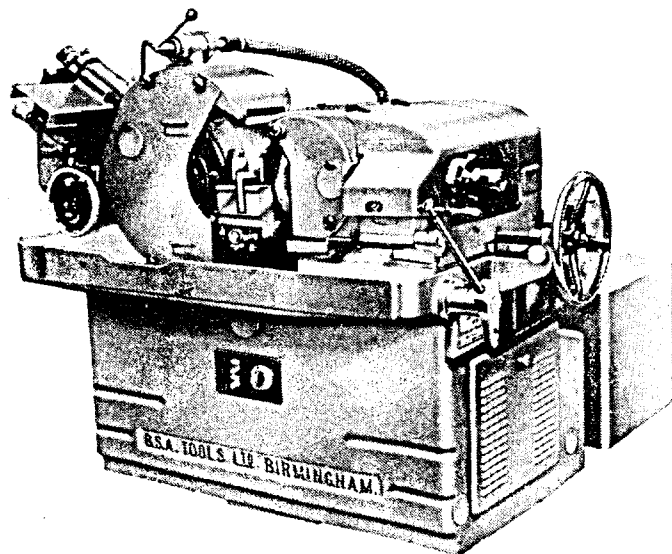
We take this opportunity of thanking the eminent personalities who constitute our Editorial Board for their so kind response to our request to serve the Machine Tool Industry through this media. We invite our Indian technicians to utilise the columns of this journal for publicising their research activities and offer constructive suggestions with a view to secure maximum efficiency and keep production level as high as possible.

## BSA's Fifty Years of Progress

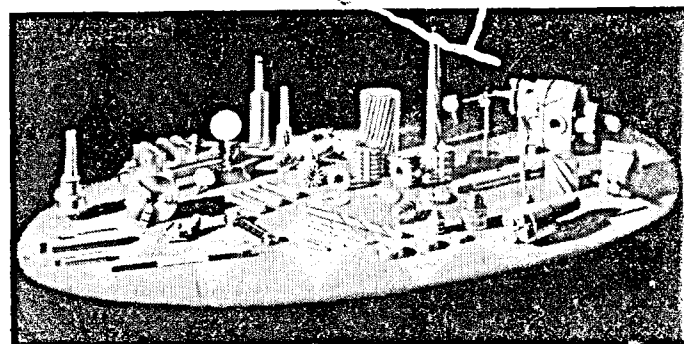
**B.** S. A. TOOLS LIMITED is today one of the World's leading manufacturers of machine tools and small tools and is providing an ever-expanding service to industry and the Company can claim over a half-century of really rapid development. In the year 1900 a branch of the Birmingham Small Arms Company began producing drills, reamers and milling cutters. The parent Company, formed as long ago as 1861, was at that time engaged primarily in the manufacture of arms; the production of small tools was merely an offshoot. Whether it was then foreseen that it was to grow with such rapidity is doubtful, for in a few years this tools branch developed into a substantial organization for the large-scale manufacture of precision machines and accessories.

During the first world war this B. S. A. unit expanded still further and in addition to considerably increasing its output of small tools also undertook the production of gauges and machine-gun parts.

B. S. A. Tools Limited, as a registered Company, was formed in 1919 when the range of products was greatly extended to include, jigs, fixtures and special machines. Among the manufactures at that time were multi-drillers for the railway carriage and wagon trade, gas control plant, gear grinding machines, power gear testers, four-head vertical insulating machines and, more unique, biscuit-tin lid rectifying machines, book-binding machines, and bulb-blowing machinery.



**B.S.A. No. 8 Centreless Grinding Machine.**



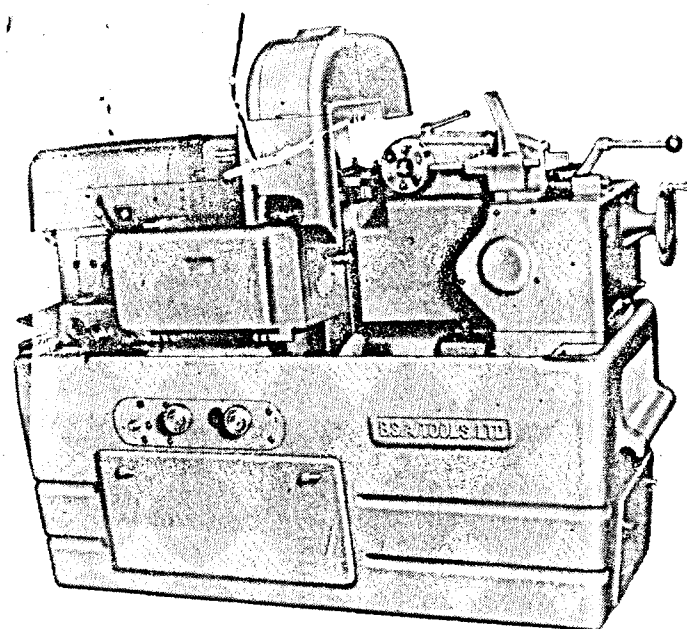
**General group of some of small tool items and workshop equipment supplied by the Small Tools Division of B.S.A. Tools Ltd.**

The demand for machinery of all types steadily increased; in all industries the call was for bigger, better and faster machines and so there began an intensive engineering drive on the part of B. S. A. Tools Limited. In 1921 the Company introduced a new machine—the B. S. A. Centreless Grinder. This was followed later by lapping and honing machines and the versatile B. S. A. Multi-Tool Lathe. The year 1926 saw the commencement of a long series of successes in the automatic field when the first B. S. A. Single-Spindle Automatic Screw Machine was delivered. Today B.S.A. Automatics are thoroughly established and the range is one of the most complete.

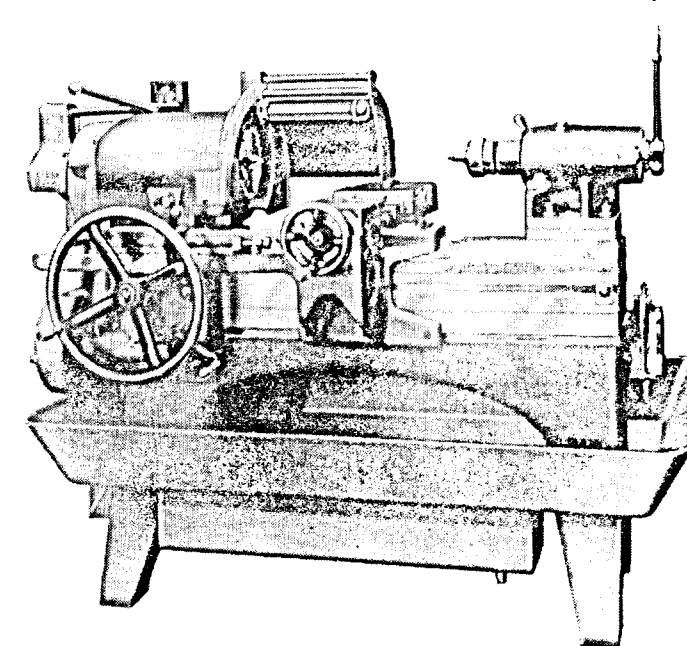
Throughout this early period the Sales Staff were engaged in establishing a sound export trade, in addition to maintaining an already healthy home market. Markets were developed in practically all countries abroad, India being no exception.

Another field of opportunity was opened when an agreement was reached with the National Acme Company, U. S. A., permitting B. S. A. Tools Limited to make the Acme Gridley Multi-Spindle Bar Machine. Other additions to the B. S. A. range at about the same time were the 5" and 9" Single-Spindle Chucking Machines and the American Potter and Johnston large turret lathe, the model 5D "Power-Flex" manufactured under licence.

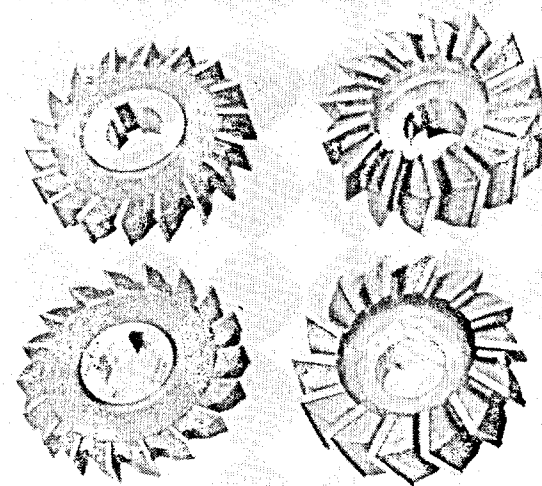
Meanwhile, expansion in small tools production continued. In fact there is now a separate B. S. A. Small Tools Division, devoted entirely to this field of manufacture and sales. The original range of drills, reamers and cutters was supplemented by taps and dies. Other items were added from time to time until today a



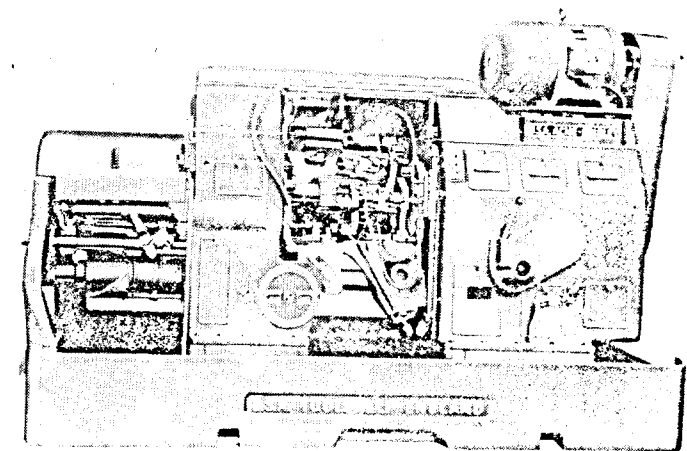
**B.S.A. 'L' Type Single Spindle Automatic Screw Machine.**



**B.S.A. Multi-Tool Production Lathe.**



**Group of B.S.A. Cast Milling Cutters, produced by a precision casting process.**



**B.S.A. Acme Gridley Multi-Spindle Automatic.**

complete line of B. S. A. machine tools, small tools and accessories is serving industry throughout the world.

B. S. A. machines are mostly intended for repetition work such as that involved in the original manufacture of component parts. Hence it is in the large number of industries supplying India with equipment such as electrical apparatus, signalling, telephones, heating, typewriters, and so on, that B. S. A. machines are being employed to great advantage.

Records show that India is one of the most-lively overseas markets of B. S. A. Tools Limited. Machines

(Continued on page 8)

and small tools have been, and are being, shipped regularly to India and are helping manufacturers in their efforts to increase production.

Naturally any organisation which boasts a comprehensive overseas market must ensure that it is adequately represented in the various territories. A great deal of the credit for the successful sales and operation of B. S. A. machines in all parts of the world, must go to the large number of overseas agents (there are over seventy) that have been specially appointed by the Company. The agents have been appointed with care,