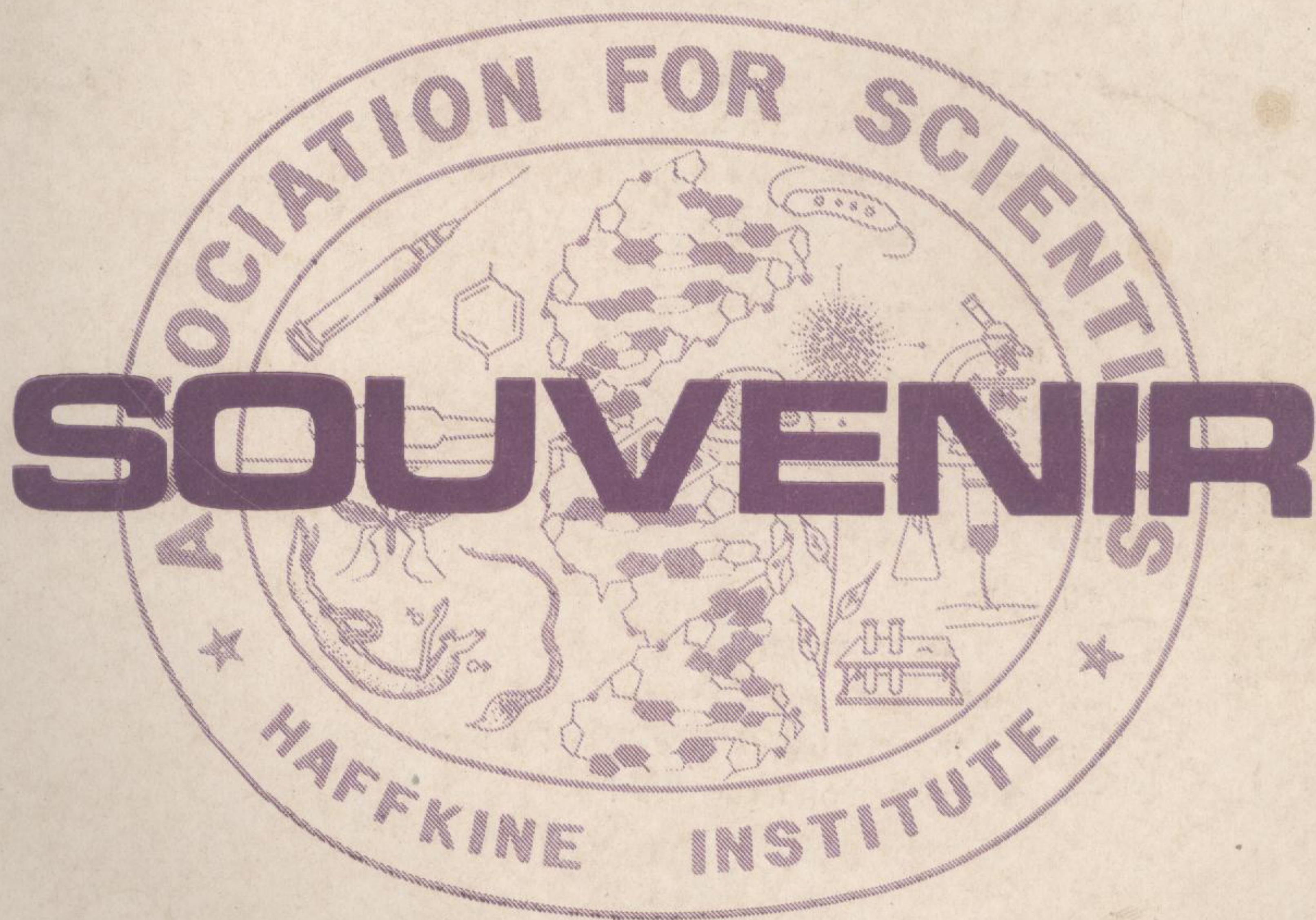


HAFFKINE



DAY



BOMBAY
9th JANUARY 1981

The Organizing Committee
Association for Scientists of The Haffkine Institute

Expresses its deep gratitude to our Director,
Dr. K. D. Sharma, for his whole-hearted support
and encouragement for making this function a success.

Special thanks are due to

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And all those who graciously helped to make this
programme a grand success !



MINISTER FOR
EDUCATION, PUBLIC HEALTH AND
FAMILY WELFARE

GOVERNMENT OF MAHARASHTRA
Mantralaya, Bombay 400 032

January 1, 1981

On this auspicious Haffkine Day commemorating the noble contributions of Dr. Haffkine to the welfare of mankind, I am happy to be associated with the celebrations, organized by the progressive Association for Scientists of the Haffkine Institute.

Since I understand that the purpose of this Association is to perpetuate the memory and good humanitarian work of the eminent founder of the Institute, I wish them all success in their endeavours.

Hiray

(Dr. Baliram Hiray)

Haffkine Institute and Public Health

DR. K. D. Sharma

Application of biomedical skills, knowledge and resources in the prevention, treatment and control of tropical diseases of public health importance has been the foremost objective of Haffkine Institute since the time of Dr. Waldemar Mordecai Wolfe Haffkine, the first Director of the Institute. The execution of a programme relating to prevention, control and treatment of diseases of public health importance is an enormous effort which requires a multidisciplinary approach. The present theme of the Institute relates to programmes for protecting public from diseases transmitted from animals to man, identifying medical problems and developing models for studying them, establishing new diagnostic methods, searching for better drugs and biologicals to combat tropical diseases. The programmes of this Institute are in areas like leprosy, tuberculosis, malaria, anthelmintics, hepatitis and plague. Part of the activities include field studies and educational programmes, demonstrations and services in rural areas during outbreaks of diseases.

In order to achieve result oriented programmes several scientific disciplines were established to meet the expertise required for a multidisciplinary approach to public health problems. Presently the Institute has the following departments: a) Bacteriology b) Biochemistry c) Chemotherapy d) Clinical pathology e) Immunology f) Immunohematology g) Pharmacology h) Toxicology i) Virology j) Zoonosis. Apart from these, units such as Human pharmacology and Bioavailability, Rabies research unit, Radiation biology unit, Phytochemistry and Testing units contribute to the required expertise. The establishment of a separate department of Epidemiology is on its way. The Institute has a well equipped Library offering facilities to its Scientific community.

Contributions to public health in the areas of plague, cholera, rabies, influenza poliomyelitis, malaria, beri-beri, tuberculosis, malnutrition, leprosy, oriental sore, guinea worm diseases, anemia states, hook worm infection,

polyvalent freeze-dried antsnake venom serum, hyperimmune rabies serum, dried plasma blood products, influenza vaccine and antimicrobial drugs are well known.

Multidisciplinary approach to public health problems also involves collaboration and coordination with National and International agencies such as the Department of Science and Technology, Government of India, The Indian Council of Medical Research, The World Health Organisation, The Food and Agricultural Organisation etc. Haffkine Institute has the privilege of having collaborated with a number of National and International Agencies in executing many of its projects.

Within the concepts of public health organisation, one includes education research, service and training. Therefore facilities for postgraduate teaching and research in various disciplines of science and medicine leading to award of degrees of Bombay and other universities also exists at Haffkine Institute. Apart from this such training that forms a must for any technician in such multisectoral public health programme are also given in the form of Diploma in Laboratory Medical Technology and Drug analysis courses.

Looking into the future Haffkine Institute will certainly have an important role in public health programmes. With more and more desire to understand Host-Parasite relationship, Structure activity relationship of drugs and their toxicity, Physio-pathology of tropical diseases, Virology and Genetic Engineering, Immunology, Development of resistant strains of organisms, this Institute with its infrastructure will go a long way in contributing answers in understanding medical problems. The basis, if sufficient funds in future are available, for increasing the existing nucleus of expertise exists at this Institute. What, with the most important instinct of survival in man, one cannot have two opinions about expansion of public health institutes if fruitful research and National/International coordinations are envisaged for solving problems of how to live longer.

ASHI — A MANIFESTO OF ABIDING HOPE AND FAITH IN OUR YOUTH

Dr. M.V.N. Shirodkar

ASHI acronyms our Association *for* Scientists of The Haffkine Institute. The preposition *for* epitomizes what ASHI is and desires to be - a congregation of like-minded scientists, organized *by* them and maintained *for* their benefit. ASHI was born out of a process of strife - of diametrically opposed views - on certain fundamental scientific, ethical and philosophical questions such as: Exactly who is a scientist? What makes and nurtures a complete scientist? What is a code of ethics for such a scientist and, finally, what attempts are to be made towards resolving such questions.

According to ASHI's founders, science is nothing more than a search for the truth - this defines the scientist as a seeker of the truth. Since, at Haffkine, it is primarily scientific knowledge - or truth - which we seek, our scientist must possess, at least a baccalaureate level qualification in the humanities and sciences. Once this definition is accepted, ASHI's aims crystallize: ASHI will stand for the creation of a new order of Haffkine scientist, who will fearlessly pursue scientific truth in a proper academic, social and cultural environment, so as to maximally contribute not only to science, but to culture and society, as well, so as to attain scientific *Nirvana* for himself, his associates and successors. ASHI will help our scientists achieve this goal, through action which is positive, including the positive discouragement of all that negates such noble ideals. ASHI demands justice for all scientists, including those whose pecuniary circumstances did not endow them with the luxury of basking in the sunshine and reaping of the fruits stemming from the possession of higher degrees. According to some centurions of science, these talented, but economically unfortunate "technicians" are, forever, to be relegated to the ranks of the galley slaves rowing a flotilla of grinding mills of the publication trade on the oceans of science and never to be elevated to the ranks of the noble ones - the "scientists". According to ASHI, this is a feudalistic concept, which must, forever, be effaced from the minds of our young scientists, if Indian science is ever to be purified. ASHI stands as a veritable Rock of Gibraltar against charlatanism and the exploitation of our scientific youth and for the active encouragement of its talent irrespective of whether, or not, the contributor possesses a master's or a doctoral degree. ASHI's first sacred duty is to ascertain that justice is meted out to all seekers of the truth, irrespective of their label - senior technologist, research fellow, or junior scientific officer - for, are they all not scientists, differing only as to their stages of embryonal scientific development? Should we not, then provide them with the wherewithal and the incentive to better their own knowledge and status?

The second of ASHI's sacred commitments is the creation of a proper academic climate for the nurture of the complete scientist. Good research can only be done in an environment which is not merely economically bountiful, but intellectually stimulating and spiritually invigorating, as well. No doubt, of

all ways of life, scientific pursuit is among the most expensive and no sane scientist should dream of embarking upon such a pursuit without the guarantee of victuals for the physical survival of the scientist and "core-money" for his scientific projects. However, the pursuit of productive science also presupposes communication and communion, *par excellence*, amongst its devotees, for, of what earthly use is his exciting discovery, if the scientist is not provided with the means of telling his comrades all about it? If however, the finding is of real significance, the contributor must be encouraged to present and discuss it at the intra—and inter-departmental, institutional, inter-institutional, national and, if warranted, at international forums.

What are some of the other important components of the academic climate which ASHI could help accentuate at Haffkine? The first is the encouragement of a proper attitude of mind and heart towards learning and the second of on appreciation of the oneness of science. In effect, both these are so closely interwoven as to cause and effect that it is difficult to say which comes first, like the proverbial chicken and egg! Certainly, ASHI's founders understand a generation — gap between seniors and juniors, but never a courtesy — gap amongst fellow-scientists, whether juniors, colleagues, or seniors.

But, what, one might ask, are the positive steps which ASHI has taken towards the ultimate solution of the above-mentioned problems? Well, as a modest beginning, an ASHI Award has today been instituted — this should provide some incentive for our scientists of the future, especially those who will, year by year, top the list from amongst the children of our HITRT workers. Again, even before the birth of ASHI, a founder had recommended the establishment of a Teacher's Council. This has been appreciated, today, as a positive step towards the development of a healthy attitude towards learning and a sound student-student-teacher relationship. The Council, meets regularly and discusses all proposed postgraduate research projects and their progress and, ultimately, the findings of its critical evaluation of the synopses of the theses are incorporated prior to submission to the University. Thus, the student is provided with an opportunity not only to face a preparatory *viva voce* but far more importantly, to appreciate the significance of looking at his own work from the multidisciplinary, biomedical approach, rather than the limited unidisciplinary one.

Another significant step in the same direction has been the introduction of regular meetings of an inter-departmental Journal Club, wherein, at an intimate and informal level, our scientists from the different biomedical disciplines can present their topics of current interest and where group discussions are actively encouraged. These appear to be popular, since the number of participants has steadily increased. ASHI has also been actively encouraging the mutual exchange of information between the contributions of its own scientists and those from the several biomedically-oriented institutions of learning and research in our vicinity. These efforts, too, seem to be successful, since there has been a recent trend towards an honest exchange of scientific

information between these institutions, specially in the form of seminars and lectures.

In addition to all these accademic activities, ASHI realizes that the scientist's bright image can never be sustained in a cultural and social vacuum. Even the finest of academic climates cannot produce the mature, intellectually, spiritually and socially conscious biomedical scientist of our dreams, without a modicum of the other two ingredients of our recipe — cultural and social development. This is the *raison d'être* for our emphasis on these two aspects being highlighted in today's programme. The scientist, the technologist, the artist and the artisan must be free partners in the development of the microcosmos of the biomedical intelligensia of ASHI's hopes, for there must be a true spiritual and intellectual union between the generators and the practitioners of the sciences and the arts.

If we are asked to define ASHI's credo, we would state emphatically that we believe in taking positive steps towards the ultimate ideal of developing a scientist who represents a true communion between scientific, cultural and social interaction. In science, as in all other forms of constructive human endeavour, "the child is the father of the man". Hence, the budding scientist is our prime concern. We must see to it that he be endowed with the wherewithal-material, intellectual and spiritual — and encouraged in his right to pursue science in accordance with his own peculiar genius, in a proper academic, cultural and social environment. He must imbibe deeply of a rich blend of the products of interaction of the biological and physical sciences and be keenly aware of and participate in the cultural and social activities ASHI desires to encourage at Haffkine. Such a scientist must be capable of spawning and of leading his spawn of future generations of scientists who are complete — within, of course, the ambit of human imperfection — towards the model of scientific endeavour which we have indicated.

Thus, at present and in the future, ASHI looks forward to sustained and dedicated constructive efforts to ensure — again to improvise on Abe Lincoln's immortal words — that "with malice towards none and with charity for all" a nucleus of young and complete scientists is spawned and nurtured, which will light the flame of scientific truth and knowledge in model fashion, so that the science of our ancient motherland, the same which gave birth to some of the greatest of human concepts, such as those of the zero and the decimal system, shall, once again come into its own. There is no doubt that the basic genetic raw material abounds in our youth — only the ideal academic, cultural, social and, of course, economic environments must be amplified. Herefrom will emerge the true Haffkine scientist of tomorrow, who will, as is ASHI's fervent hope, lead his brethern to guarantee that "science of the people, by the people and for the people shall not perish from the earth"!

Scientific Activities at the Haffkine Institute

Dr. S. Mukerji

The Haffkine Institute for Training, Research and Testing is engaged in research in the communicable diseases of viral, bacterial, fungal, and parasitic aetiology. This requires maintenance of the agents concerned on appropriate culture media *in vitro* and *in vivo* and the development of suitable models for study of their modes of infection and the immunological responses generated. These studies are useful in the development of suitable vaccines for immunoprophylaxis as well as for trials of suitable drugs originating from synthesized organic compounds, or indigenous plants and herbs, for therapeutic purposes. Various Departments and Sections of the Institute work in collaboration towards the solution of these problems and various organizations, such as the WHO, DST, ICMR, the Ministry of Defence, Government of India and the Central Council of Research in Ayurvedic and Siddha Systems of India finance some of the research projects of the Institute.

These research problems are pursued by talented young scientists working towards post-graduate degrees under the guidance of senior scientists. Other students seeking careers in diagnostic laboratories, or pharmaceutical concerns, receive training towards a diploma, or a certificate in Medical Laboratory Technology, or in Drug Analysis. Students from the economically developing countries of South East Asia also avail themselves of such training facilities through the WHO, or at the Governmental level.

Various drugs manufactured for human use, or for pesticidal activity by pharmaceutical concerns are tested for their potency and toxicity by standard pharmaceutical procedures and through the use of suitable animal models. Diagnostic facilities in clinical pathology, clinical virology, clinical biochemistry and Blood Transfusion Aid are provided to the public at reasonable rates.

In the Immunization Clinic, free vaccination services against polio, rabies, tetanus, diphtheria, whooping cough, cholera, typhoid and paratyphoid are provided.

DEPARTMENTS AND SECTIONS OF H.I.T.R.T.

- | | |
|--|--------------------------|
| 1. BACTERIOLOGY | 10. PHARMACOLOGY |
| 2. BIOCHEMISTRY | 11. PHYTOCHEMISTRY |
| 3. CHEMOTHERAPY | 12. RABIES RESEARCH UNIT |
| 4. CLINICAL PATHOLOGY | 13. RADIATION BIOLOGY |
| 5. DIRECTOR'S RESEARCH CELL | 14. STATISTICAL UNIT |
| 6. HUMAN PHARMACOLOGY AND
BIOAVAILABILITY | 15. TESTING |
| 7. IMMUNOLOGY | 16. TOXICOLOGY |
| 8. IMMUNOHAEMATOLOGY | 17. TRAINING |
| 9. INSTRUMENTATION CELL | 18. VIROLOGY |
| | 19. ZOONOSES |

COURSES OFFERED

Degrees (By research)

- | | | |
|----------|---|--|
| M.Sc. | : | Microbiology, Biochemistry, Zoology. |
| | : | Organic chemistry, Applied Biology. |
| Ph.D. | : | Organic Chemistry, Applied Biology, Pharmacology |
| M.Pharm. | : | Pharmacology |

Degrees (By papers)

- | | | |
|-------|---|---------------------------------------|
| M.Sc. | : | Microbiology, Biochemistry |
| M.D. | : | Microbiology, Pathology, Pharmacology |

Diploma

- | | | |
|----------|---|--|
| D.M.L.T. | : | Diploma in Medical Laboratory Technology |
|----------|---|--|

Certificates

- Drug Analysis
- Clinical Pathology
- Entomology and Parasitology

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(A Scientific, Cultural and Social organisation)

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PROGRAMME INAUGURATION

Date **9th January, 1981** **Friday**

- | | | | |
|------------|---|---|--|
| 09.30 a.m. | : Suswagatam | : | Mrs. Anuradha Sawant
Mrs. Anuprita Pandit,
Padmaja Wanve,
Clara Quinny,
✓ Vinayak Ahire, —
Milind Mohite
Maya Ahuja and
Hemlata Patil |
| 09.35 a.m. | : Welcome Address | : | Dr. M.V.N. Shirodkar,
Chairman, ASHI |
| 09.40 a.m. | : Presidential Address | : | Dr. K.D. Sharma,
Director, Haffkine Institute |
| 09.45 a.m. | : Inaugural Address | : | Dr. Baliram Hiray,
Minister for Public Health
and Family Welfare,
Government of Maharashtra |
| 10.00 a.m. | : Souvenir Release and
Founding of ASHI
Endowment Award | : | Dr. Baliram Hiray,
Minister for Public Health
and Family Welfare
Government of Maharashtra |
| 10.05 a.m. | : Vote of Thanks | : | L. S. Patil,
Secretary, ASHI |
| 10.10 a.m. | : Vande Mataram | | |
| 10.15 a.m. | : Tea | | |
| 10.30 a.m. | : Exhibition Inauguration | : | Dr. Baliram Hiray,
Minister for Public Health
and Family Welfare,
Government of Maharashtra |

SCIENTIFIC SESSION

- | | | | |
|------------|-------------------|---|---|
| 10.45 a.m. | : Welcome Address | : | Dr. D. M. Renapurkar
Vice-Chairman, ASHI |
| 10.50 a.m. | : | : | Professor B.M. Udgaonkar, TIFR
Topic : "Research and Societal
Expectations" |
| 11.05 a.m. | : Vote of Thanks | : | Dr. B. G. Khadse,
Treasurer, ASHI |

CULTURAL PROGRAMME

	Welcome	: S. R. Chavan Vice-Chairman, ASHI
	Chief Guest	: C. Ramachandra Music Director
	Vote of Thanks	: B.D. Sathe Joint Secretary, ASHI
2.00 p.m. :	Puja Dance	: Chandra Pujari
	Geet Ramayana	: Vinayak Ahire ✓
	Film Song	: Mrs. Anuprita Pandit
	Koli Geet	: Mrs. Anuradha Sawant and Dilip Ashtekar
	Film Song	: Clara Quinny
	"	: Sumitra Arolkar
	"	: Mrs. Anuradha Sawant and Milind Mohite
	Record Dance	: Gita Ranganathan, Chandra Pujari and Jyoti Shah
	Mimicry	: Subhash Dalvi
	Hindi Play	: Manoj Shah
	'Napunsak'	University Student
	Garba Dance	Jyoti Shah, Shilpa Shah, Geeta Ranganathan, Clara Quinny, Maya Ahuja, Seema Naidu, Hemlata Patil, Anjali Gaidhani, Suchitra Naigudkar, Chandra Pujari
	Film Song	: Padmaja Wanve
	Marathi Lavani	: Mrs. Anuprita Pandit
	English Song	: Clara Quinny and Valerian D'Souza
	Marathi Lavani	: Mrs. Anuradha Sawant
	Film Song	: Mrs. Anuprita Pandit and Milind Mohite
	"	: Hemlata Patil

Konkani Song : Valerian D'Souza
 Ras Dance : Jyoti Shah, Shilpa Shah, Geeta
 Ranganathan, Clara Quinny, Maya
 Ahuja, Seema Naidu, Hemlata Patil,
 Anjali Gaidhani, Sucheta Nigudkar,
 Chandra Pujari
 Marathi Play : Mohan Pawar, Gopal Bairagi, Ajay Soni
 "Ek Hota Aurangzeb" Balasaheb Shinde, Adikrao Nalawade,
 R.B. Tambe, Vinayak Ahire
 Film Song : Padmaja Ahire
 Marathi Lavani : Vinayak Ahire
 Film Song : Mrs. Anuradha Sawant and
 Mrs. Anuprita Pandit
 Semi-Classical : Seema Naidu
 Dance
 Lovely Dance : Kishore Amin, Pradeep Gudadhe, Gopal
 Bairagi, Balasaheb Shinde, Adikrao
 Nalawade, Ajay Soni
 Lok Geet : Sahir Satpute and Mandali
 Fish-Pond : Pradeep Gudadhe and
 Mrs. K.N. Joishy, Dilip Ashtekar

4.30 p.m.
 to
 5.30 p.m. : Orchestra : Milind Mohite and Others

6.00 p.m.
 to
 8.00 p.m. : Vocal Recital : Shrimati Shobha Gurtu

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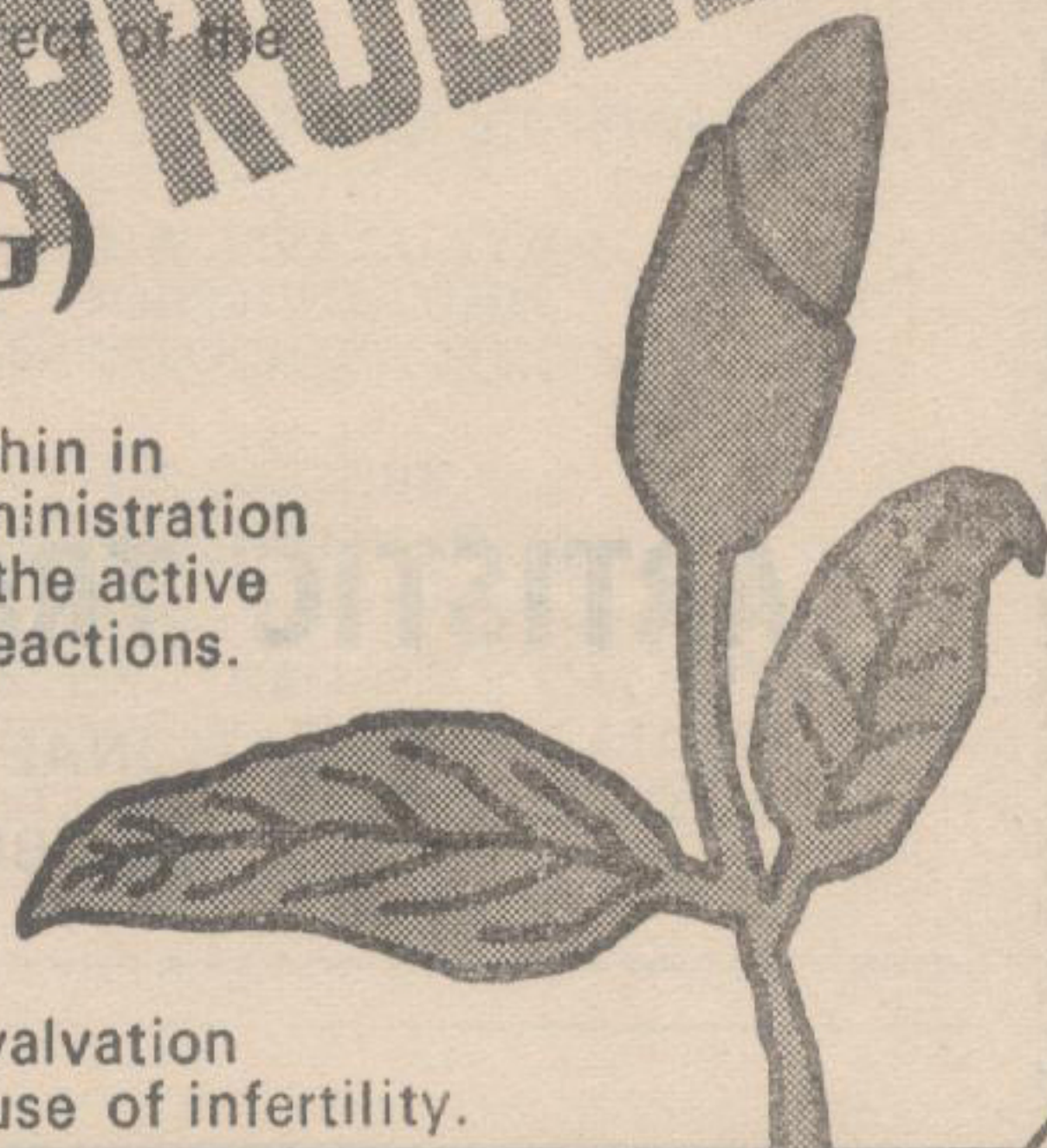
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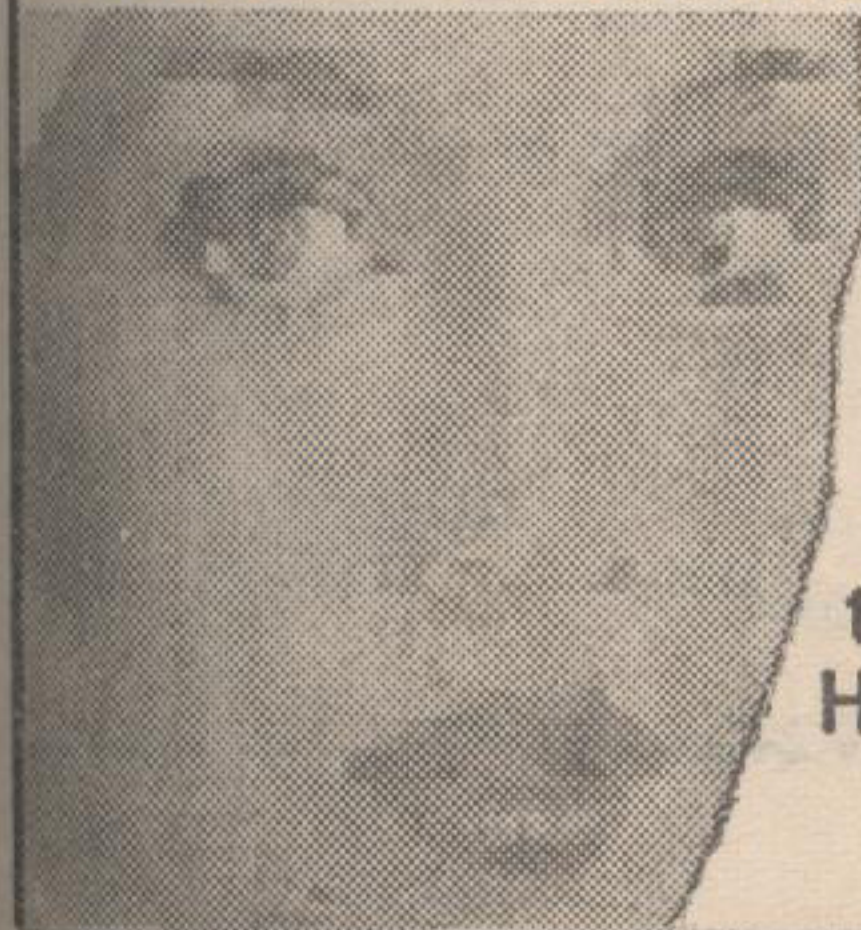
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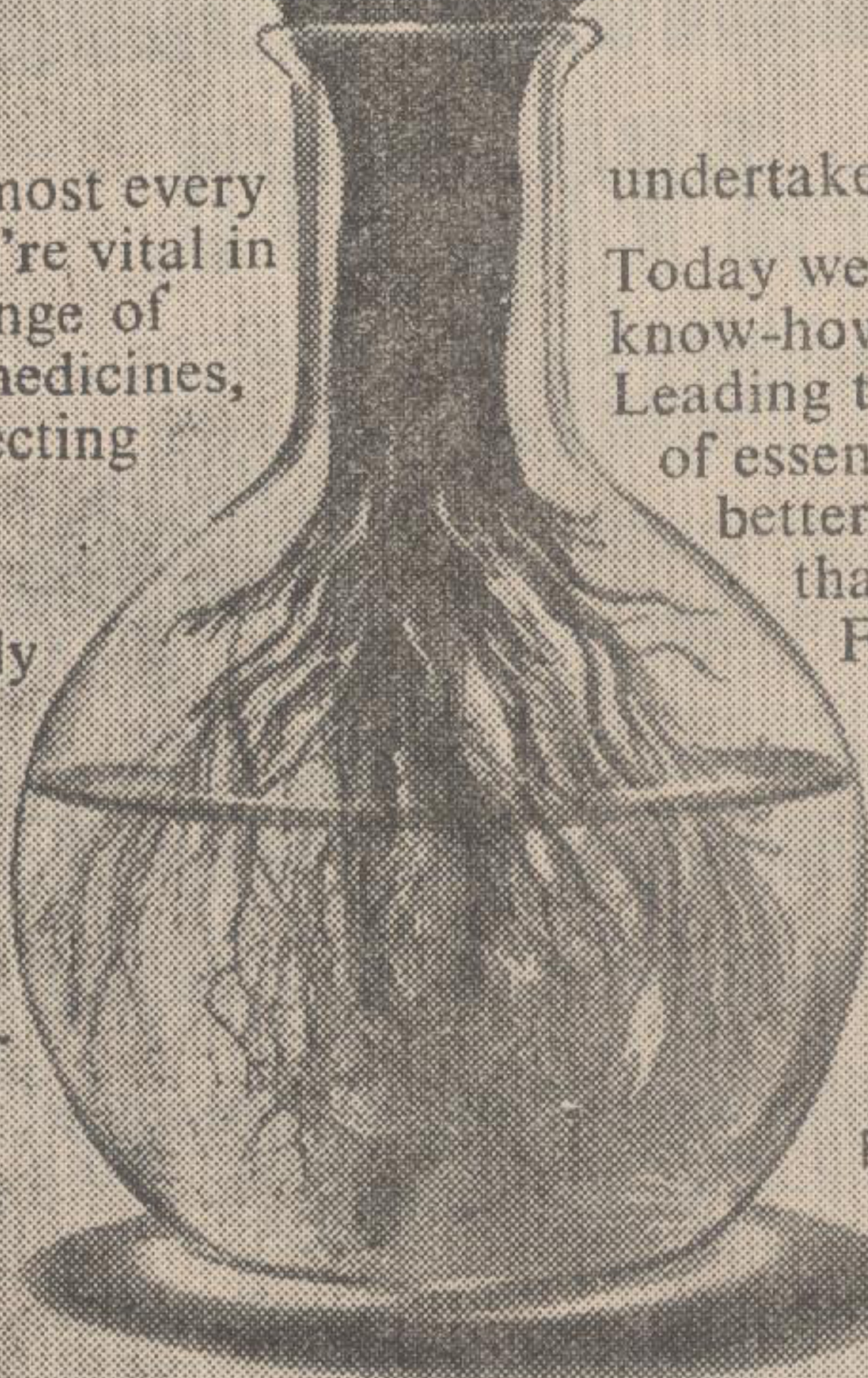
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Research at Hindustan Lever concerns itself both with solving present-day problems and helping to build a better life for the generations of tomorrow.

A consumer can give up some things—fruit juice or talcum powder. But she cannot give up edible oils. Our R & D releases thousands of tonnes of oils, traditionally used for soapmaking, for human consumption. Now we are doing Research and developing Technology in India to release more oils by producing synthetic fatty acids from paraffin, a fraction of petroleum which will be plentiful from Bombay High.

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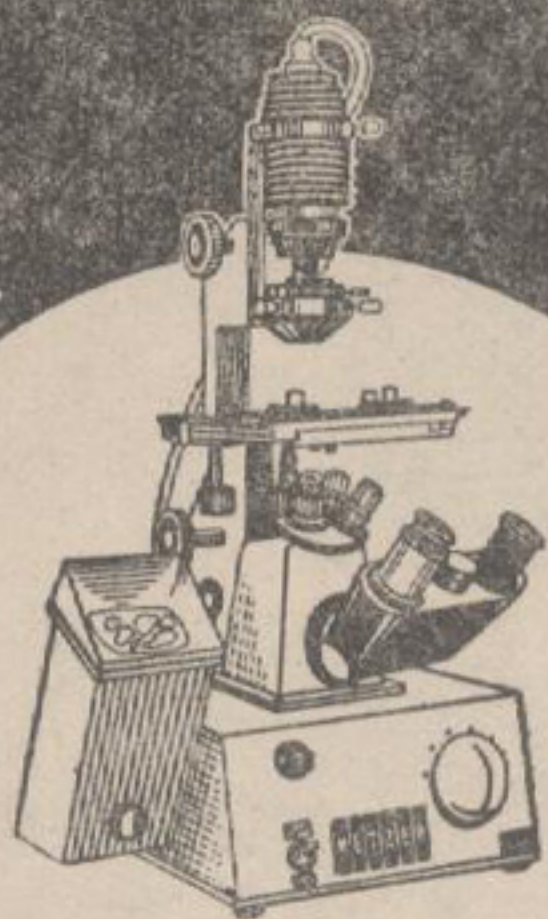


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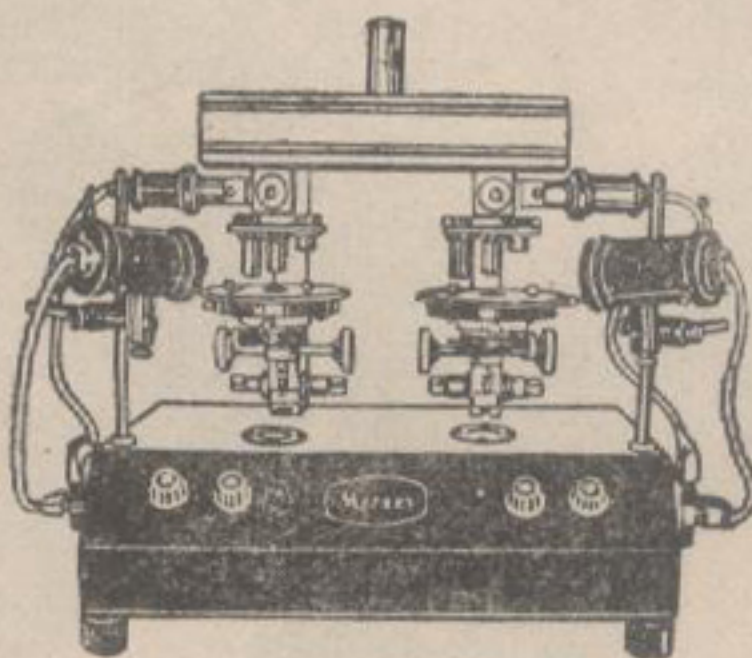


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COMPACT INVERTED MICROSCOPES (Seven models)

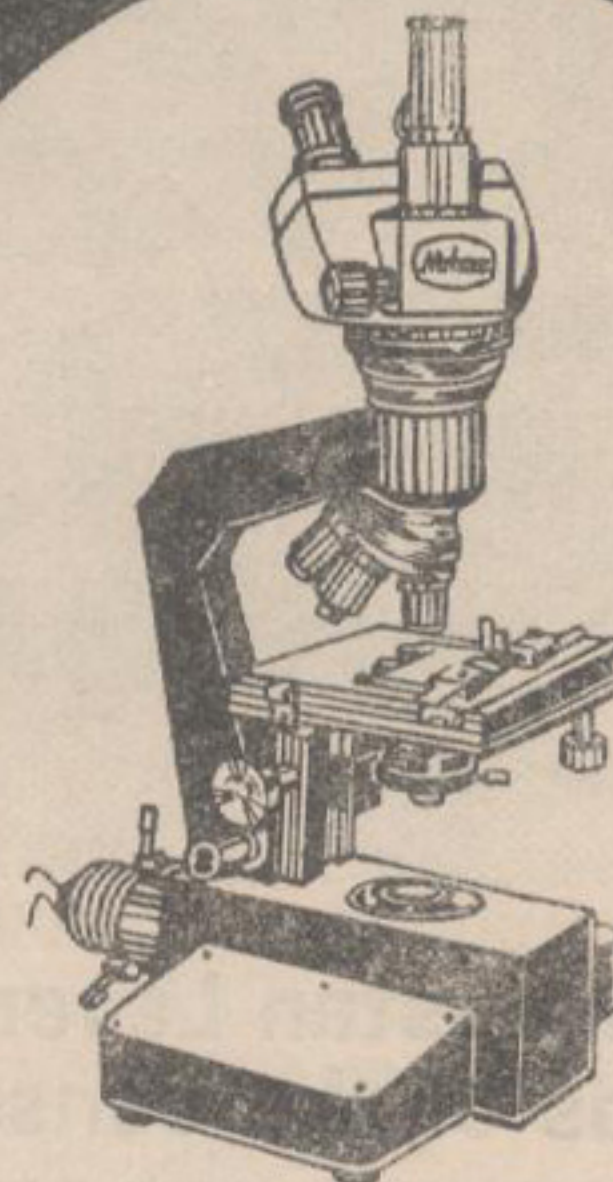
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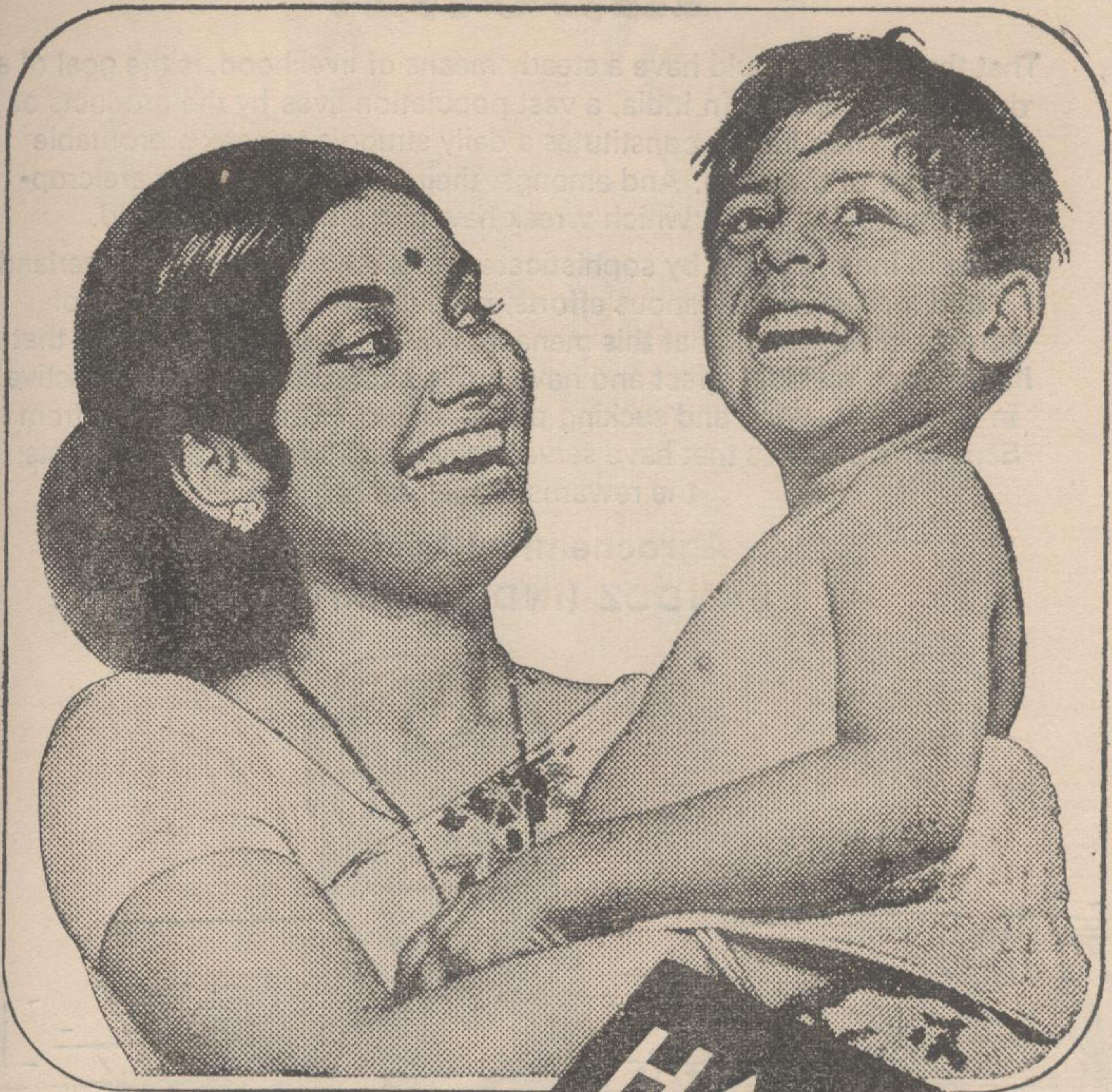
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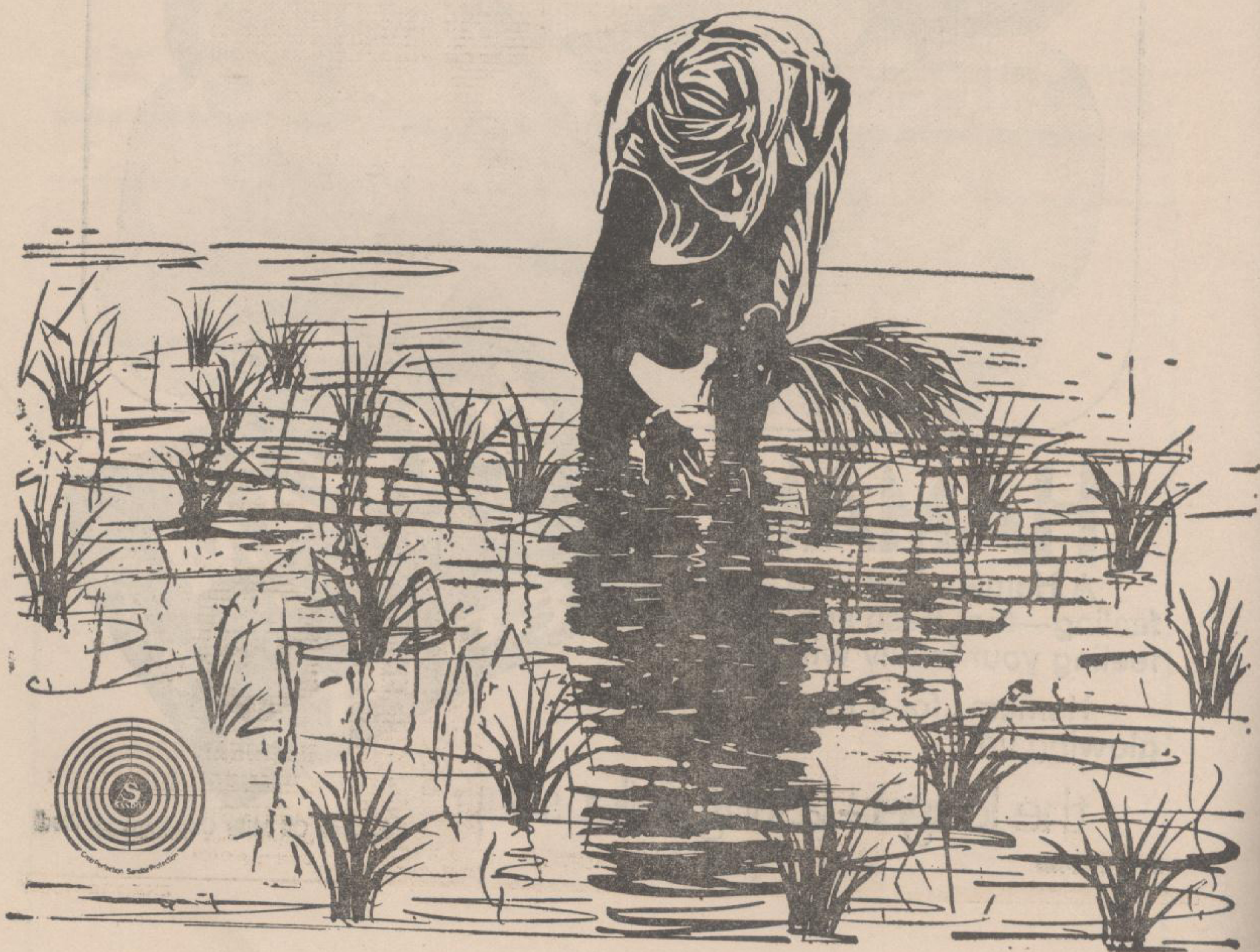


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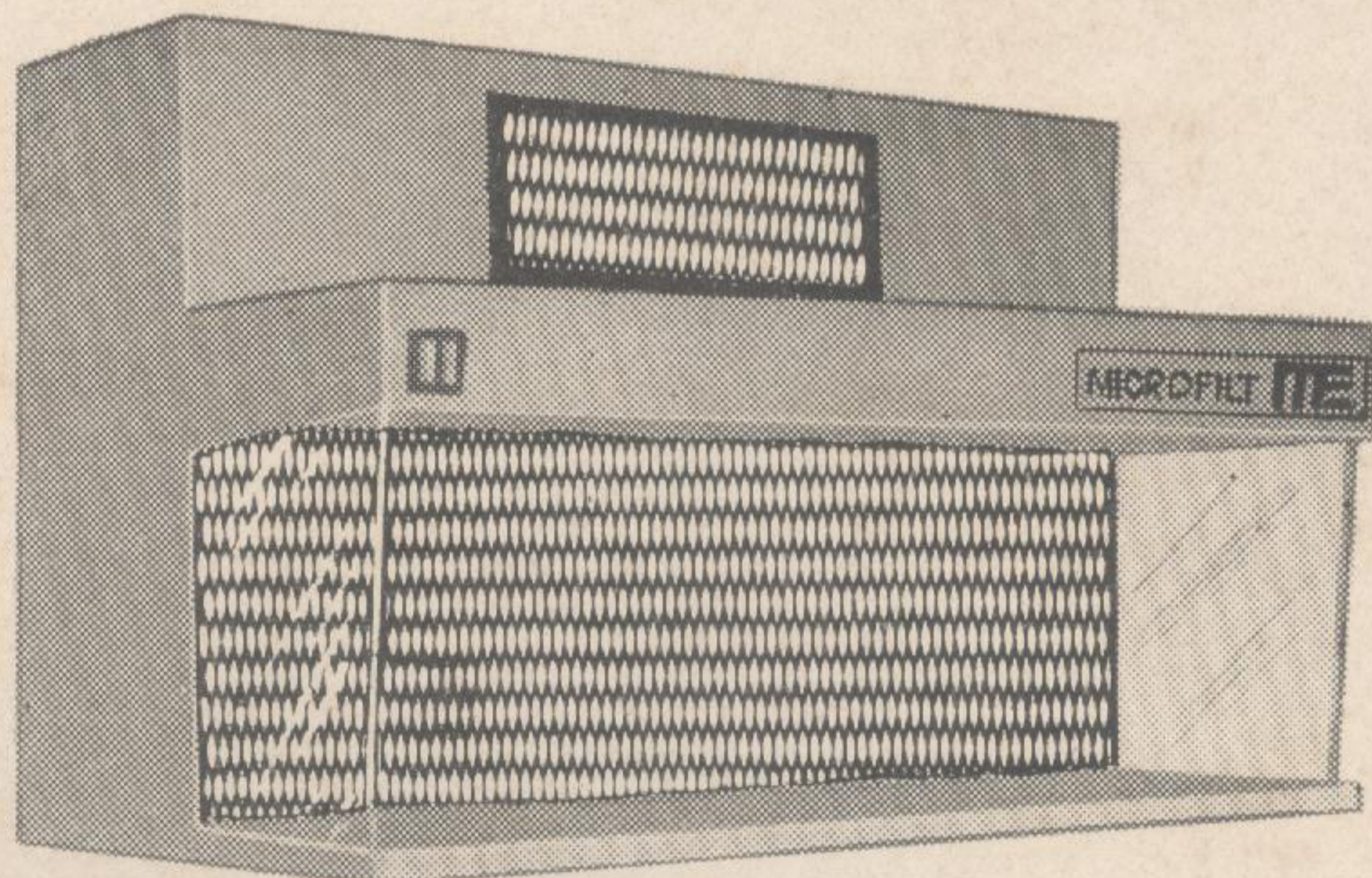
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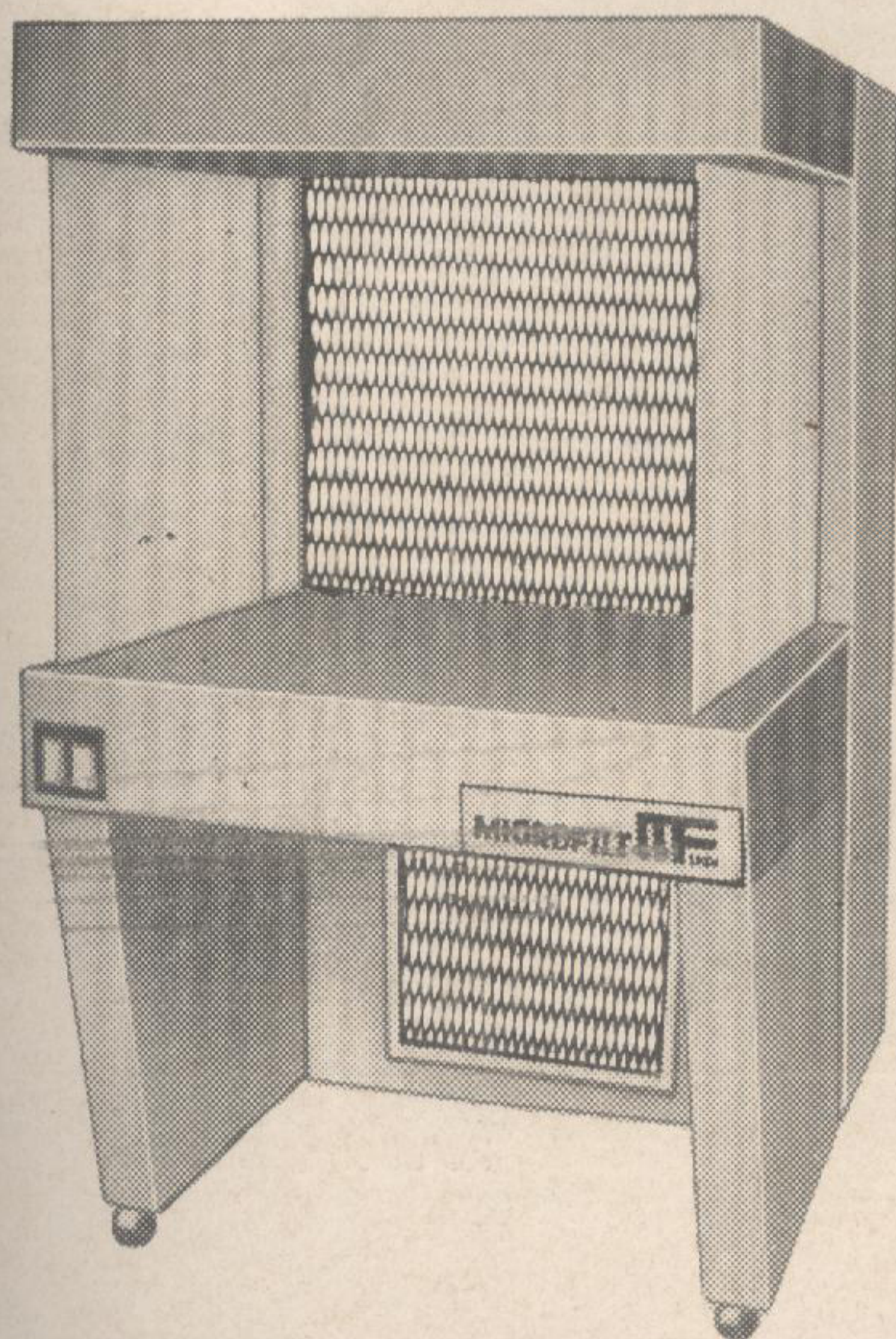
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- * The special capital intensive scheme operating only in selected areas now extended to units set up in undeveloped areas; additional concessions to units migrating to Taluka and Panchayat level.
- * Sanjay Gandhi Niradhar Yojana to assist destitutes and handicapped.
- * Sanjay Gandhi Swavalamban Yojana for self employment of youth by giving interest-free loan up to Rs. 2,500.
- * Indira Gandhi Pratibha Pratishthan to give recognition to and encouragement for the talented people in the fields of Literature and Fine Arts.
- * Drinking water supply to all villages in next five years and to 4,579 villages during the current year.

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