ACKNOWLEDGEMENTS

The author greatly owe to the disabled and persons who volunteered themselves wholeheartedly to be the subjects of the experiments conducted. Without the cooperation of these persons, the work would not have been completed. Thanks are due to the following Institutes for their unstinted cooperation towards the study of different mobility aids produced by them. These are: The Vocational Rehabilitation Centres, Calcutta and Bombay; Regional Prosthetic and Orthotic Centre, N.R.S. Hospital, Calcutta; Orthopaedic Hospital, E. Railway, Howrah; Ramkrishna Mission Seva Pratisthan, Calcutta; Calcutta Medical College and Hospitals, Calcutta; National Institute of Prosthetic and Orthotic Training, Bairoi, Cuttuck, Orissa; All-India Institute of Physical Medicine and Rehabilitation, Bombay; Fellowship for the Handicapped, Bombay.

The author likes to express his regards and gratitude to his guide, Dr. Siddhartha Ganguli, Hony. Bioengineer and Project Director, Bioengineering Unit, Dept. of Orthopaedics, University College of Medicine (UCM), Goenka Hospital (GH), Calcutta University, for his valuable supervision and illuminating advice in conducting the present studies and preparing this dissertation. The author is indebted to
Dr. B.B. Chatterjee, Director, National Institute of Occupational Health, Ahmedabad, for his constant inspiration and valuable suggestions. Warm regards are due to Prof. K.S. Bose, formerly Prof. and Head of the Dept. of Orthopaedics, UCM, GH, CU, for his continuous effort in making the subjects available for this study and also for valuable suggestions.

Appreciation and thanks are due to the co-workers at Bioengineering Unit, UCM, GH, CU, specially to Dr. A.K. Ghosh, Sri S.K. Sarkar, Sri A.K. Banerjee, Dr. D.N. Tibarewala, Sri S. Sen, Dr. N. Bhadra and Sri S. Chakraborty. The author also appreciates the help and cooperation received from his personal friends and well-wishers, specially from Sri U. Biswas, Sri R. Roy and Sri A. Mohanti. Acknowledgements are also due to Dr. A.K. Datta, Secretary, University College of Medicine, GH, CU, and Dr. A. Samanta, Assistant Research Officer, Dept. of Occupational Health, All-India Institute of Hygiene and Public Health, Calcutta.

The author also acknowledges with thanks the cooperation and suggestions received from Dr. P.K. Nag, Sri C.K. Pradhan, Sri B.P. Chatterjee, Dr. P. Chatterjee and Sri S.P. Asthekar of National Institute of Occupational Health, Ahmedabad. Thanks are also due to Sri R.C. Das, Stenographer, who has taken the trouble of typing out the manuscript.
The author wishes to acknowledge the financial support provided by the Ministry of Social Welfare, Govt. of India, for the investigation reported in this dissertation.

Lastly the author likes to express gratitude to his family members for their patience and forbearance with diminished attention during the long period of intensive search, serious thinking and long hours of writing.

ASIS GOSWAMI