

**ON THE ADVANTAGES OF THE  
STARCHED APPARATUS IN THE  
TREATMENT OF FRACTURES  
AND DISEASES OF JOINTS**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649419111

On the Advantages of the Starched Apparatus in the Treatment of Fractures and Diseases of Joints by Joseph Sampson Gamgee

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.  
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

[www.triestepublishing.com](http://www.triestepublishing.com)

**JOSEPH SAMPSON GAMGEE**

**ON THE ADVANTAGES OF THE  
STARCHED APPARATUS IN THE  
TREATMENT OF FRACTURES  
AND DISEASES OF JOINTS**



ON THE ADVANTAGES  
OF THE  
**STARCHED APPARATUS**  
IN THE TREATMENT OF  
FRACTURES AND DISEASES OF JOINTS.  
BEING THE FIRST PART OF AN ESSAY TO WHICH THE COUNCIL OF  
UNIVERSITY COLLEGE HAVE AWARDED THE  
LISTON CLINICAL MEDAL.

BY  
JOSEPH SAMPSON GAMGEE.



"On ne porte dignement le titre de médecin qu'à condition de travailler toujours."—VELPEAU, *Leçons de Clinique*.

LONDON:  
H. K. LEWIS, PRINTER AND PUBLISHER,  
15, GOWER STREET, NORTH.

1853.

42

LONDON :  
PRINTED BY R. K. LEWIS, 15, GOWER STREET, NORTH.

M101  
919  
1853

TO THE MEMORY OF

ROBERT LISTON, ESQ.,

IN TESTIMONY OF PROFOUND ADMIRATION FOR HIS GREAT SURGICAL  
GENIUS, AND OF BORROW FOR HIS IRREPARABLE LOSS.





ON THE ADVANTAGES  
OF  
THE STARCHED APPARATUS.

---

INTRODUCTION.

THE starched apparatus is made up of pads to protect the bony prominences from pressure, bandages, and pasteboard splints smeared with starch. So soon as the latter is dry, an exceedingly firm yet light casing for a limb is formed.

It is applicable to all fractures, whether simple, comminuted, or compound; and is of great service in the treatment of sprained and diseased joints, as a means of setting them perfectly at rest; and in a variety of other surgical affections hereafter to be noticed.

Its peculiar features are extreme firmness and lightness; whereby a patient with a broken thigh or scrofulous knee-joint is enabled to walk about on crutches with perfect ease, and is relieved of all the discomfort and injury to health incidental to long confinement to bed. Another of its peculiarities is, that it is so constructed as to admit of being cut open for the examination of the parts inclosed, and thereby obviates the great objection urged against other immovable apparatuses: that while the limb is hidden from view for the treatment of an injury, much mischief may go on without the surgeon being able to take cognizance of it.

It was while studying surgery in the hospital of Santa Maria Nuova, in Florence, during the winter 1851-52, that I had the opportunity of learning the uses of the starched apparatus from its inventor, Baron Seutin, then passing through that capital on his return from Russia. For this opportunity I am indebted to Professor Regnoli, who was pleased to invite the Baron to his clinique, and thereby give

his students the opportunity of hearing his doctrinal expositions, and seeing his practice. Professor Regnoli's assistant, Dr. Palamidessi, zealously adopted the use of Seutin's apparatus after his departure; and, in a subsequent visit to the Siena hospital, I learned from its resident medical officer, Dr. Consari, that he and other surgeons had for several years followed Seutin's practice in the hospitals of the Tuscan Maremma, with unparalleled success. Thus I had ample means for the formation of a judgment, the correctness of which was confirmed by a study of the writings of those who have defended and opposed this practice; and by an opportunity afforded me last autumn of witnessing, in the theatre of University College Hospital, the application of Seutin's apparatus by one of his most zealous followers, Dr. Crocq.

The result of these observations was a determination on my part to extend to English practice a system productive of such auspicious results in the hands of foreign surgeons. A perusal of these pages will prove to what extent, and with what probability of doing good, I have availed myself of the opportunities offered by my position as house-surgeon in University College Hospital, in carrying that resolve into execution.

It gives me much pleasure to acknowledge myself deeply grateful to Mr. Erichsen for having assented to my proposal for experimenting with the starched apparatus, as soon as I made it known to him. To Mr. Quain likewise, I am indebted for similar opportunities of practice; in availing myself of which, I have been very materially assisted by my able and kind friend Mr. Thomas Hillier.

I owe to Mr. Clover the having in my absence condescended to revise the proofs of these sheets, a favour which, is, however, one of the smallest amongst the many he has conferred upon me during the five years he has been Resident Medical Officer in University College Hospital.

*Palazzo Corsi, Florence,  
5th August 1853.*

## CHAPTER I.

GENERAL CONSIDERATIONS AS TO THE MANNER OF APPLYING,  
AND THE PRINCIPLE OF ACTION OF, THE STARCHED  
APPARATUS.

THE requisite materials for making this apparatus are: 1stly, cotton-wool; or soft tow, and lint, or linen rag, to make pads for the protection of the bony eminences; 2ndly, common bandages; 3rdly, pasteboard for making splints; 4thly, starch, made according to the fashion of laundresses. A few words as to the preparation of the splints. The pasteboard should be thick and porous, so as readily to soften on immersion in water, and be easily moulded to the shape of the limb. If only thin pasteboard be at hand, the splints may be made of sufficient strength by smearing their surfaces with starch after they have been soaked in water, and then putting them together in two or three thicknesses.

The stout millboard, usually employed by bookbinders, is not so easy to manipulate as is pasteboard less compressed and of more porous texture; but it is equally efficient. A point of great practical importance to be noticed is, that in making the splints, they should not be cut, but torn; this is facilitated by first bending strips of pasteboard of the required width over the edge of a table. The advantage of the tearing is great: for, whereas the sharp edge produced by the cutting-pliers or knife would have a great tendency to dig into the soft parts and cause much pain, there is no danger of such an unpleasant occurrence when the splints are torn, the ragged edges being then bevelled off, and more easily mouldable to the exact shape of the limb, without the risk of injuring any part of it.

In the pursuit of this part of the subject, the preceptive