

THE STORY OF THE ATLANTIC CABLE

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649713370

The Story of the Atlantic Cable by Charles Bright

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

CHARLES BRIGHT

**THE STORY OF THE
ATLANTIC CABLE**

UNIV. OF
CALIFORNIA

THE STORY OF
THE ATLANTIC CABLE.

TO NEW
AMSTERDAM



H.M.S. Agassiz completing the first Atlantic Cable, 1866. Frostyfield.

UNIV. OF
CALIFORNIA
THE STORY OF THE
ATLANTIC CABLE

BY

CHARLES BRIGHT, F.R.S.E.,
A.M.Inst.C.E., M.I.E.E.

AUTHOR OF "SUBMARINE TELEGRAPHS," "SCIENCE AND
ENGINEERING DURING THE VICTORIAN ERA," "THE
EVOLUTION OF THE ELECTRIC TELEGRAPH, 1837-1897,"
"THE LIFE-STORY OF SIR CHARLES TILSTON BRIGHT,"



LONDON : GEORGE NEWNES, LTD.
SOUTHAMPTON STREET, STRAND

1903

PREFATORY NOTE

THE jubilee of Submarine Telegraphy having lately been achieved, and that connected with the Atlantic Cable being somewhat close at hand, it has been thought a suitable moment for the appearance of this little volume.

In these days when the substitution of submarine cables by wireless telegraphy systems is a subject of common talk, it may be well to pause for a moment and contemplate the period of time covered by the gradual evolution of old and existing methods which at length achieved the result we now enjoy—a practical commercial telegraphic system between all the nations of the world, and notably between the United Kingdom and America.

By a somewhat curious coincidence the engineer of the first Atlantic cable accomplished his achievement at practically the same youthful age (twenty-six) as Mr Marconi when first transmitting signals across the Atlantic without any intervening wires.

C. B.

21 OLD QUEEN STREET,
WESTMINSTER, S. W., Oct. 1903.

452883

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial reporting and compliance with regulatory requirements.

2. The second part of the document outlines the various methods and tools used to collect, store, and analyze data. It highlights the significance of using reliable and secure systems to ensure the integrity and confidentiality of the information.

3. The third part of the document focuses on the role of data in decision-making and strategic planning. It explains how analyzing historical and real-time data can provide valuable insights into trends, risks, and opportunities, enabling organizations to make informed choices.

4. The fourth part of the document addresses the challenges and risks associated with data management, such as data quality issues, security breaches, and privacy concerns. It offers practical recommendations and best practices to mitigate these risks and ensure the effective use of data.

5. The fifth part of the document discusses the importance of data governance and the establishment of clear policies and procedures. It stresses the need for a strong governance framework to oversee data collection, storage, and sharing, ensuring compliance with applicable laws and regulations.

6. The sixth part of the document explores the role of data in innovation and the development of new products and services. It highlights how data-driven insights can drive creative thinking and the identification of new market opportunities.

7. The seventh part of the document discusses the importance of data literacy and the need for ongoing training and education. It emphasizes that all employees should have a basic understanding of data and its applications to maximize the organization's data capabilities.

8. The eighth part of the document concludes by summarizing the key points and reiterating the importance of a data-driven approach in today's competitive business environment. It encourages organizations to embrace data as a strategic asset and to continuously invest in their data management capabilities.

CONTENTS.

PART I.

CHAP.	PAGE
INTRODUCTORY	9

PART II.

THE PIONEER LINE.

I. EVOLUTION OF ATLANTIC TELEGRAPHY IN AMERICA AND ENGLAND	23
II. THE MANUFACTURE OF THE LINE	42
III. THE FIRST START	58
IV. PREPARATIONS FOR ANOTHER ATTEMPT	70
V. THE TRIAL TRIP	81
VI. THE STORM	86
VII. THE RENEWED EFFORT	102
VIII. "FINE CORONAT OPUS"	111
IX. THE CELEBRATION	128
X. WORKING THE LINE	140
XI. THE INQUEST	151

PART III.

INTERMEDIATE KNOWLEDGE AND ADVANCEMENT.

XII. OTHER PROPOSED ROUTES	157
XIII. EXPERIENCE, INVESTIGATION AND PROGRESS	165

PART IV.

COMMERCIAL SUCCESS.

XIV. THE 1865 CABLE AND EXPEDITION	178
XV. SECOND AND SUCCESSFUL ATTEMPT	184
XVI. RECOVERY AND COMPLETION OF THE 1865 CABLE	196
XVII. JUBILATIONS	205
XVIII. SUBSEQUENT ATLANTIC LINES	209
XIX. ATLANTIC CABLE SYSTEMS OF TO-DAY	218

LIST OF ILLUSTRATIONS.

FIG.	PAGE	FIG.	PAGE
		25. Experimental Manœuvres	
Frontispiece.		In the Bay of Biscay . . .	84
1. Newfoundland Telegraph Station . . .	25	26. H. M. S. <i>Agamemnon</i> in a Storm . . .	92
2. The Brooke "Sonder" . . .	29	27. The <i>Agamemnon</i> storm: Coals Adrift . . .	99
3. Specimen of the Ocean Bed . . .	31	28. In Collision with a Whale whilst Cable-laying . . .	118
4. John Watkins Brett, Charles Tilston Bright, Cyrus West Field—Projectors . . .	34	29. Landing the American End . . .	150
5. Manufacture of the Core . . .	45	30. Newfoundland Telegraph Station . . .	182
6. Servicing the Core with Hemp-Yarn . . .	46	31. Facsimile of the first public news message received through the Atlantic Cable . . .	145
7. Applying the Iron Sheathing . . .	47	32. The North Atlantic Telegraph Project . . .	158
8. The Deep Sea Cable . . .	48	33. The North Atlantic Exploring Expedition . . .	168
9. The Shore-End Cable . . .	48	34. The 1865-6 Cable . . .	176
10. Coiling the Finished Cable into the Factory Tanks . . .	50	35. The <i>Great Eastern</i> at Sea . . .	178
11. U. S. N. S. <i>Niagara</i> . . .	61	36. Cable and Machinery aboard SS. <i>Great Eastern</i> . . .	180
12. The Paying-out Machine . . .	53	37. The Picking-up Machine . . .	187
13. Coiling the Cable on Board . . .	55	38. Buoys, Grappels, Mushrooms—and Man . . .	189
14. Landing the Irish End of the Cable . . .	59	39. "Foul in Tank" whilst Paying-out . . .	199
15. Equipments of the Cable aboard H. M. S. <i>Agamemnon</i> and U. S. N. S. <i>Niagara</i> in Keyham Basin . . .	71	40. SS. <i>Great Eastern</i> completing the Second Atlantic Cable . . .	194
16. The Self Releasing Brake . . .	73	41. Diagram illustrative of the final tactics adopted for picking up the 1865 Cable . . .	199
17. The Principle of the Brake . . .	74	42. SS. <i>Great Eastern</i> with 1865 Cable at bows . . .	200
18. Bright's Paying-out Gear . . .	76	43. Anglo-American Atlantic Cable (1894): Main Type . . .	214
19. The Reflecting Magnet . . .	78	44. Shore End of the 1894 "Anglo" Cable . . .	214
20. Reflecting Galvanometer and Speaker . . .	79	45. Atlantic Cable Systems, 1905 . . .	217
21. Principle of the Reflecting Instrument . . .	80		
22. Deck of H. M. S. <i>Agamemnon</i> with Paying-out Apparatus . . .	81		
23. Stowage of the Cable Coils on the <i>Niagara</i> . . .	82		
24. The Loading of the <i>Agamemnon</i> . . .	82		