# **Memoir of Fleeming Jenkin**

Memoir of Fleeming Jenkin by Robert Louis Stevenson is a heartfelt biography that honors the life and achievements of the Scottish engineer and inventor Fleeming Jenkin, highlighting his intellectual contributions and close friendship with Stevenson.

# I -The memoir of Fleeming Jenkin

In 1859, Sir William Thomson (later Lord Kelvin), a prominent figure in British engineering science, recounts his first meeting with Fleeming Jenkin, a young engineer of notable talent. Jenkin had been recommended by Lewis Gordon, then involved in the pioneering field of cable making and laying, to observe Thomson's work on submarine cable testing. This marked the beginning of a lifelong acquaintance and collaboration between Thomson and Jenkin, grounded in their mutual dedication to electrical engineering, particularly in the realm of submarine telegraphy.

Jenkin's capacity for rigorous understanding and his refusal to overlook any detail were traits that Thomson admired from the outset. Their initial discussions, while focused on the technological aspects of submarine cables, expanded into a broader dialogue on physics and engineering. These conversations laid the foundation for a correspondence that would endure throughout Jenkin's life, predominantly concerning the physical properties of submarine cables and the optimization of signal transmission.

A key achievement of Jenkin, highlighted by Thomson, was his application of absolute measurement systems to the testing of cable materials—a practice initiated by German scientists like Gauss and Weber. Jenkin's contributions were significant in standardizing measurements in telegraphy, an advancement that would greatly influence not just the field itself but also the broader scientific community's approach to electrical measurements.

Jenkin's work encompassed the meticulous investigation into the resistance and insulating properties of the cables, effectively introducing the practice of quantitative analysis in electrical engineering. His findings on the specific resistance of gutta-percha, a material then commonly used for cable insulation, were among the first to be recognized and recorded in the 'Encyclopaedia Britannica'.

Thomson further notes Jenkin's contributions in a paper published in the 'Transactions of the Royal Society', describing experimental research on the transmission of electrical signals through submarine cables. Regrettably, a promised second part of this paper, which was to delve deeper into the electrostatic properties of cable insulation, was never published. Yet, Jenkin's preliminary findings on the specific inductive capacity of dielectric materials stand as pioneering efforts that presaged the later, widespread acceptance of absolute measurement methods in the scientific study of telegraphy and electrical engineering. Through these endeavors, Jenkin significantly shaped the early development of electrical measurement standards and practices, a legacy underscored by the eventual global consensus on these techniques at the Electrical Congress in Paris in the 1880s.

## **II** -Memoir of fleeming Jenkin

Henry Charles Fleeming Jenkin, born in 1833 in a coastguard building in Kent, England, experienced a mobile and varied childhood under the care of different family members due to his parents' engagements. His early life was marked by tumults, including the disparaging condition of his distressed grandmother, which

left an indelible impression on him, and the compassionate presence of his Aunt Anna Jenkin, who was a beacon of kindness despite her frail health.

Fleeming's formative years were rich with cultural and academic exposure, moving from mastering sports and participating in traditional Scottish observances to cultivating an early taste for the arts under his mother's guidance. Fleeming's educational journey took him from Jedburgh to the prestigious Edinburgh Academy, forging his path as a brilliant student amid influential peers like Tait and Clerk Maxwell. This phase of his life was illustrative of his burgeoning talents and the first signs of an insatiable curiosity that would define his later achievements.

The Jenkin family's relocation to Frankfort-on-the-Main and subsequently to Paris unraveled a broader canvas for Fleeming's growing intellect. The political upheavals of Europe in 1848, especially in Paris, acted as catalysts, molding Fleeming's political sensibilities and infusing in him a profound sense of social justice and political activism. Witnessing revolutions firsthand nurtured in him a deep sympathy for liberal causes, particularly for Italy, which he carried throughout his life. His family's subsequent flight to Italy during the height of political unrest facilitated an enriching period of learning and growth for Fleeming in Genoa, not only academically as the first Protestant student in the university there but also artistically and culturally.

Under the mentorship of his mother, Mrs. Jenkin, who herself was a vibrant figure with liberal affiliations, Fleeming developed a strong, opinionated character. Despite the family's perilous experiences during the insurrections in Genoa, these events further solidified his political convictions and his admiration for the Italian struggle for freedom and unity.

Fleeming's years in Italy were transformative. He vigorously pursued his passions, excelling in physical sciences and the arts, inheriting his mother's zeal for political and intellectual engagement. His education and experiences in Italy, underscored by his mother's guidance, laid the groundwork for his later contributions to engineering and his unfettered support for liberal causes.

This segment of Fleeming Jenkin's life is not just a story of personal growth amid socio-political turbulence but also a testament to the extraordinary influence of his mother, shaping him into a polymathic personality with a lifelong commitment to truth, justice, and innovation.

# **III -Memoir of fleeming Jenkin**

In "Memoir of Fleeming Jenkin" (Chapters 38-51), we delve into Fleeming Jenkin's life from 1851 to 1858, focusing on his professional growth, personal affairs, and intellectual pursuits. Following the death of his Aunt Anna in 1851, Jenkin's family moved from Genoa to Manchester, where Fleeming encountered a significant change, entering an apprenticeship at Fairbairn's works. Despite the harsh contrast between Manchester's industrial scene and Genoa's vibrant culture, Fleeming's insatiable curiosity and commitment to mastering his craft flourished. His hands-on experience in engineering blended with his deep appreciation for arts, showcasing his belief in the unity of fine arts and craftsmanship.

During his apprenticeship, Fleeming not only gained practical skills but also interacted with diverse social circles, including working-class communities and intellectuals, which shaped his perspectives on social issues and fueled his passion for technical education. An incident during a strike at Fairbairn's works left a profound impression on him, highlighting the complexities of labor relations.

Fleeming's intellectual curiosity led him to engage with various subjects, from Greek architectural proportions to marine telegraphy. His work ethic and pursuit of knowledge were evident in his efforts to learn navigation, his explorations into Leonardo's drawings, and his investigations into Greek architecture with Dr. Bell, demonstrating his multifaceted interests and the intertwining of art and science in his worldview.

A significant chapter of Fleeming's life unfolded with his engagement to Anne Austin, marking a turning point in his personal and professional journey. Anne, raised in an intellectually stimulating environment by her parents, Alfred and Eliza Barron Austin, represented an ideal match for Fleeming, embodying the qualities he admired and aspired to possess. Their courtship and eventual marriage were characterized by mutual respect, shared intellectual pursuits, and a profound commitment to personal growth and societal contribution.

Fleeming's professional life was equally transformative. His engagement in marine telegraphy with Messrs. Liddell & Gordon presented new challenges and opportunities, catalyzing his development as an engineer and inventor. Amidst these professional endeavors, Fleeming's correspondence with Anne offered insights into his thoughts, aspirations, and the joy he found in both his work and their relationship.

This period in Fleeming Jenkin's life encapsulates his transition from a young apprentice to a seasoned engineer and a devoted partner, highlighting the evolution of his intellectual, professional, and emotional landscapes. Through trials, learning opportunities, and personal connections, Jenkin emerges as a figure of relentless pursuit, embodying the synthesis of technical mastery and humanistic values.

## **IV** -Memoir of fleeming Jenkin

In this chapter, the narrative captures a particularly tense moment in the engineering endeavors of Fleeming Jenkin, highlighting the challenges faced during undersea cable operations. Jenkin's team embarks on a precarious task of recovering and testing a damaged cable off the coast, which had been deteriorating and was at risk of breaking due to external wear. The operation commences with a blend of hope and trepidation as they attempt to dredge the cable from the deeper waters, a move fraught with the risk of the cable not withstanding the strain due to its compromised state.

As the cable is retrieved, signs of a break nearby emerge, inciting a moment of frustration for Jenkin. However, upon testing, it's discovered that the break is towards shore, leaving the segment extending seaward intact - a silver lining in an otherwise grim situation. Despite the successful recovery of the cable segment, communication from Spartivento ceases, leading to concerns about the condition of Jenkin's men and the operational integrity of the undersea lines.

Determined to restore connectivity, Jenkin decides to lay a new section of cable from their current location to shore, hoping to ascertain and rectify the issue at Spartivento. The operation is conducted under serene night skies, juxtaposed against the underlying urgency and complexity of their task. The team successfully lays down the cable to Fort Genois, subsequently focusing on recovering fragments of the damaged cables and preparing for their departure to Spartivento.

Transitioning from the detailed accounts of these meticulous operations, the narrative shifts focus onto Jenkin's personal journey, indicating a departure from the habit of journal keeping and diary letters – practices that he gradually outgrows. Nevertheless, the account provides glimpses into his professional correspondence, offering insights into the challenges of laying the Norderney cable. These snippets not only showcase the technical and physical adversities Jenkin faces but also illuminate his resolute spirit and unwavering commitment to overcoming the manifold obstacles encountered in the realm of undersea telecommunication.

## **VI** -Memoir of fleeming Jenkin

In the chapter of "Memoir of Fleeming Jenkin," the narrative captures the adventurous essence of maritime exploration and telegraph cable laying operations in the late 19th century. The setting is vividly described

aboard a ship enveloped in a daunting, wet fog, with the crew anxiously navigating through uncertainty. The sudden clearance of fog, revealing their guide ship, the WM. CORY, and the small welcoming boat, the GULNARE, amidst a grand procession, marks a dramatic turn from anxiety to relief and progress. This transition from the groping search in the fog to the structured efforts in laying the cable underlines the unpredictable nature of their work, highlighted by moments of camaraderie, such as the anticipation of receiving letters and the expression of admiration for the Americans.

The narrative then shifts to personal reflections, beginning with an eager anticipation of departure from Plymouth, where the smell of the sea and the sight of the HOOPER readying for voyage stir a deep, adventurous spirit within the author. An intimate depiction of the pre-departure preparations paints a vibrant picture of maritime life, from the bustling arrangements, the peculiar atmosphere of a ship being coaled, to the social fabric woven through champagne lunches and polite exchanges among the crew and guests. The mention of a yacht cruise to the Eddystone lighthouse and the sensation of regaining "sea-legs" amplifies the theme of embracing the sea's call.

Furthermore, the chapter intricately recounts the journey off Madeira, illustrating the scientific endeavor of sounding the ocean's depths alongside the serene beauty of dawn breaking over the islands. The author's acknowledgment of his limitations in conducting "real work" due to the sea's effects on him introduces a humble perspective on the challenges faced at sea. The subsequent detailed account of life aboard the HOOPER, with its menagerie of animals and the comedic struggle between the cook and impertinent goats, injects a light-heartedness into the narrative, showcasing the communal and lively aspect of seafaring life, despite the serious undertone of their mission.

The chapter masterfully intertwines detailed accounts of technical endeavors with vivid descriptions of maritime life, personal reflections, and a keen observation of human and animal interactions aboard the ship. It establishes a narrative that is as much about the scientific and exploratory ambitions of the era as it is about the human experience of adventure, camaraderie, and the inevitable confrontation with the elements.

## I -Memoir of fleeming Jenkin

The Jenkin family, rooted in Kent, England since the reign of Henry VIII, show a complex genealogy intertwining with Welsh and York heritage, and traversing various social and financial landscapes through centuries. William Jenkin's repeated tenures as Mayor of Folkestone, and the eventual acquisition of Stowting Court, a manor with a history of changing ownership, highlight the family's established societal standing and wealth. Despite a vibrant past filled with civic duty and accumulation of land, the Jenkins experienced fluctuations in fortune, particularly emphasized through the life of Fleeming Jenkin's father, who, nurtured by a wealthy but ill-fated inheritance scheme, grew in a bubble of false security and societal prestige that burst upon his aunt's death.

This narrative unfolds a rich tapestry of familial lineage, displaying cycles of prosperity and adversity, and the shaping of individual destinies within the broader historical and social contexts. The detailed genealogies not only serve to underline the transitory nature of wealth and status but also to illuminate the characteristics inherited and nurtured within the Jenkin lineage, such as civic leadership, martial valor, and, notably, an inclination for imprudent albeit genuine marriages that defy socio-economic stratification, suggesting a familial ethos valuing personal connection above financial prudence or social mobility.

The pivot to the paternal legacy of Fleeming Jenkin, with the backdrop of failed inheritances and the burden of debts, encapsulate a period of transition, setting the stage for Fleeming's narrative. It sketches a paternal figure, Captain Charles Jenkin, carved from the family's longstanding virtues of loyalty, devotion, and simple piety but marred by financial ruin brought upon by misplaced trust and familial deceits. Similarly, it introduces his mother, Henrietta, as a woman of resilience, creativity, and a commanding presence, substrates

that would define Fleeming's upbringing and future pursuits.

This chapter serves as a foundation, portraying the intergenerational ebb and flow of the Jenkin family's fortunes. It reflects on the broader human experiences of aspiration, resilience, and the perpetual quest for stability and recognition, setting a poignant commencement to Fleeming Jenkin's journey, who, born into a family ensnared in debts and honor, would emerge to forge a distinct path reflective of his diverse heritage.

#### **II** -The memoir of Fleeming Jenkin

The highlighted chapter from the "Memoir of Fleeming Jenkin" explores various facets of Fleeming's life, particularly focusing on his engagement with the rural lifestyle, his deep appreciation for dramatic arts, and his enthusiastic involvement in amateur theatre. Fleeming's affection for the countryside is evident in his interactions with the local populace, where he displayed a notable respect for their customs and sensibilities. This connection to rural life provided him a refreshing escape from his routine, allowing him to immerse in a different way of living that he found both entertaining and enriching.

A prominent theme in this chapter is Fleeming's profound love for the theatre, both as a spectator and participant. His knowledge and passion for dramatic literature were vast, as he was adept at analyzing plays with a professional eye and enjoying them with genuine emotion. Fleeming's critique of performances and his own creative endeavors in writing and acting were guided by a keen understanding of dramatic construction and a mimetic instinct to embody characters convincingly. His engagement with theatre was not just a pastime but an integral part of his intellectual and emotional life.

The chapter further delves into Fleeming's collaborative efforts in promoting theatre within his social circle, leading to the creation of a private theatre that became a central hobby and a source of communal joy. The narrative beautifully illustrates the dynamic of this amateur theatre group, highlighting the camaraderie and collective effort invested in staging various productions. Fleeming's meticulousness in preparing for roles and his critical yet passionate involvement showcase his multifaceted personality, blending his technical acumen with his artistic sensibilities.

Besides the personal anecdotes and reflections, the chapter encapsulates Fleeming's ability to balance his professional and leisure pursuits, portraying him as a figure deeply rooted in his traditions while being adaptable and open to exploring diverse interests. This description not only celebrates Fleeming's artistic pursuits but also reflects on the sense of community and shared enthusiasm that theatre brought into his life and the lives of those around him.

# **III -Memoir of fleeming Jenkin**

In this chapter from the Memoir of Fleeming Jenkin, the writer embarks on a series of adventures and professional endeavors across various locations tied intimately to the sea, highlighting his experiences and observations. The narrative begins in the picturesque yet barren isles of Greece, touched briefly by the allure of their landscape, the peculiar charm of their little churches, and the seafaring prowess of the inhabitants, suggesting a promising future for the Greek race. One moonlit evening, the writer sets out on a boating excursion that quickly turns challenging when their ship, the ELBA, leaves unexpectedly. This incident leads to an intensive physical effort to catch up to the ship, teaching the author the art of rowing but also bringing him to the brink of exhaustion.

Transitioning to letters from 1860, Jenkin describes his leadership of an expedition in Bona and Spartivento, dealing with technical challenges and the logistics of repairing a land line. These letters paint a vivid picture of the rugged and beautiful landscapes, his fondness for experimentation and invention, the peculiarities of

local interactions, and a deep yearning for connection with his distant loved ones. His encounters with various characters, from diligent Frenchmen to the formidable-looking French German sergeant-major and the mysterious old friar, enrich the narrative, offering glimpses into the diverse human element that underpins his technical endeavors.

Jenkin's reflections on leadership versus subservience, his appreciation for his surroundings, and the charm of mastering one's fate illustrate a man deeply engaged with his work and the world around him. Despite the technical frustrations and logistical nightmares—illustrated by the vivid account of his struggle with the cable repairs and the whimsicalities of local customs and governmental red tape—he retains an unwavering determination and an almost romantic commitment to his mission. The chapter notches both the physical and cerebral challenges faced by Jenkin, from the technical rigors of his work to the cultural and environmental adaptability demanded by his expeditions.

Throughout, the narrative moves between reflective musings on nature and culture, technical explanations, and personal anecdotes, offering a richly layered account that highlights both the personal and professional growth of the author. His account is a compelling tapestry of adventure, technical endeavor, and human connection, revealing not just the trials of an expedition leader but the profound experiences that shape one's character and outlook.

# **IV.-Memoir of fleeming Jenkin**

In Chapter IV of the "Memoir of Fleeming Jenkin," spanning the years 1859-1868, we delve into the pivotal moments of Fleeming Jenkin's life, encompassing his marriage, professional challenges, and the joys and trials of his family life. Married hastily to Miss Austin at Northiam, a place significant to both their families, Fleeming returned to his work in Birkenhead just days post-wedding, showcasing the blend of personal commitment and professional dedication that marked his life. The narration then shifts to provide an insightful glance into their marriage, revealing the profound love and respect Fleeming held for his wife, which became the cornerstone of his existence. Despite his rapid re-immersion into work, which involved mundane yet essential tasks, his marriage infused an unparalleled degree of happiness and motivation into his life, setting a high bar for conjugal devotion.

Fleeming's views on life and duty were complex yet grounded in a solid sense of morality and responsibility. Not one to shy away from hard work or adversity, he navigated professional challenges with a stoic optimism, diversifying into writing and gardening, which not only connected him closer to his family but also provided personal fulfillment. His dedication towards his family is vividly portrayed through letters to his wife during her absence, revealing a man deeply in love and reflective about his life, duties, and the joy his family brought him.

The Jenkin household, rich in character and activity, became a hub of intellectual and social gatherings, reflecting both Fleeming and his wife's personality. Fleeming's professional life, while marked by innovation and collaboration with notable figures like Sir William Thomson, was equally filled with financial uncertainties and health challenges, emphasizing his resilience. His transition into a passionate amateur gardener and writer during this period signifies a pursuit of personal interests beyond his professional endeavors.

The narrative also touches upon a critical health scare for Mrs. Jenkin and subsequent health challenges for Fleeming himself, underscoring the theme of fragility and strength within their familial life. Despite these adversities, their marriage remained a source of unparalleled support and love, enriching Fleeming's life and work. The chapter succinctly captures a decade of Fleeming Jenkin's life, portraying a man of intellect and emotion, deeply committed to his family, work, and the pursuit of knowledge, all while navigating the cyclical nature of joy and hardship.

## **V** -Memoir of fleeming Jenkin

In this chapter of the "Memoir of Fleeming Jenkin," Jenkin recounts a particularly arduous journey at sea that involved struggles with illness, a difficult transfer to shore, and issues with a telegraph cable short by sixty yards making it incapable of reaching the shore. Despite these challenges, Jenkin and his crew managed to make a significant advancement by connecting the cable to the telegraph station, enabling the first messages to be sent to London and Lowestoft on October 3rd. The importance of this accomplishment is highlighted by the personal note Jenkin adds about the messages sent, including the first one by Miss Clara Volkman to Mrs. Reuter, using a unique method facilitated by Mr. Varley. Although the success was substantial, Jenkin describes his inability to fully enjoy the moment due to his weakened state caused by pain and fever.

Furthermore, Jenkin introduces the 1869 cruise on the GREAT EASTERN, expressing regret that he can't provide more details for the sake of the ship, which by then had already become legendary. He lists the key members of the staff for the mission, indicating their significance to future stories related to the GREAT EASTERN. The list includes notable figures such as Theophilus Smith, Leslie C. Hill, Lord Sackville Cecil, and Sir James Anderson among others, with Captain Halpin leading the ship. This sets the stage for anticipated adventures and technical feats aboard the vessel, hinting at the detailed and possibly groundbreaking telegraphy work that lies ahead. Jenkin's portrayal of these events and people provides a compelling glimpse into the early days of undersea telegraphy and the challenges they overcame.

## I -The memoir of Fleeming Jenkin

In the chapter detailing the life and character of Fleeming Jenkin, the narrative delves into his boundless energy, curious intellect, and deep devotion to his family and friends. Jenkin's life in Edinburgh is framed within the close-knit ties of three generations residing in proximity, suggesting not only a harmonious familial relationship but also a mutual respect and admiration amongst the elders, including Mr. Austin and Captain Jenkin. These familial bonds extend beyond mere obligation, embodying Jenkin's belief in the paramount importance of family duties and the joy derived from fulfilling them.

Jenkin's role as an engaged and nurturing father is highlighted through anecdotes that reveal his approach to parenting. He leans heavily into the educational and developmental aspects of his sons' lives, offering support and encouragement in their endeavors while maintaining a lighthearted and participatory stance. Whether it's overseeing their academic learning with innovative methods, indulging in shared hobbies, or imparting the value of hard work and thoroughness, Jenkin's influence is portrayed as both broad and profound.

The narrative further explores Jenkin's adventurous spirit and his willingness to involve his family in manifold pursuits, from outdoor activities in the Highlands to introducing them to the challenges and rewards of managing a steam launch. Through these experiences, his sons learn not just practical skills but also resilience, teamwork, and the richness of engaging deeply with the world around them. Jenkin's commitment to his family's holistic development—balancing intellectual, physical, and social growth—is evident in these shared adventures.

Moreover, Jenkin's capacity for forming meaningful connections extends beyond his immediate family to the wider community and the natural environment of Scotland and beyond, demonstrating his versatile interests and the joy he derives from life's diverse experiences. Whether it's mastering a new language, partaking in local customs, or braving the elements at sea, Jenkin's zest for life and learning infuses the narrative, painting a picture of a man deeply immersed in the world, eager to explore and understand it in all its facets.

This chapter paints Jenkin as a multifaceted individual whose life is marked by a tireless pursuit of knowledge, the importance of family, and a deep engagement with the world around him. His story exemplifies how a life well-lived can be one filled with curiosity, compassion, and the courage to embrace

the unknown.

#### **II** -Memoir of fleeming Jenkin

The chapter recounts several voyages of Fleeming Jenkin, focusing on his experiences with submarine telegraphy and cable-laying expeditions in various locations, including the Mediterranean and near Alexandria. The narrative highlights both the technical challenges and the adventurous aspects of these early engineering feats.

On July 2, Jenkin reports 28 miles of cable safely stored in the hold of the ship ELBA, noting the ship's depth and the remaining cable weight. By July 5, they have successfully recovered the majority of the six-wire cable, despite some loss and challenges, marking the venture as a success.

The narrative then shifts to the 1859 cruise among the Greek Islands and Alexandria, providing vivid descriptions of the landscapes, cultures, and experiences encountered. Jenkin describes leisurely days filled with sightings of nature, historical ruins, and the blending of eastern and western cultures, particularly noting the striking visuals and environments of the islands and coastal towns. He recounts a memorable arrival in Canea, a town that impresses with its blend of natural beauty and cultural richness.

Jenkin's adventures also take him to Candia, where he marvels at the robust nature and historical remnants. A significant part of his journey involves the practical challenges of cable-laying, including selecting landing sites for the cables and managing unexpected technical difficulties. The narrative covers an incident near Alexandria where the ship runs aground twice due to misjudgment and adverse conditions, endangering the mission and the crew. Despite these obstacles, they manage to resolve the situation without significant damage.

Throughout the chapter, Jenkin's dual role as an engineer and an observer of the cultures and landscapes he encounters is evident. His accounts blend technical detail with reflective observations on the places and people he encounters, showcasing the multifaceted challenges and rewards of early telecommunication ventures.

## **III** -The memoir of Fleeming Jenkin

Fleeming Jenkin, described as an uncompromising taskmaster, demanded the utmost effort and quality in any endeavor, whether from himself or others, including his own wife. This strict approach was initially challenging, especially for those coming from the more lenient environment of a girls' school, but ultimately was found to be exhilarating and beneficial, leading to warm relationships and respect from many around him.

Jenkin's dedication was not limited by the nature of his pursuits. Whether it was a pastime like Greek tailoring or a community service like sanitary engineering to improve public health, Jenkin approached all tasks with equal zeal. His work in sanitary engineering, detailed in a letter by Colonel Fergusson, aimed to protect against construction pitfalls and the malpractices of plumbers, primarily for the affluent initially, with aspirations to benefit the impoverished. Despite its limited success in extending to poorer communities, the initiative thrived in other aspects, leading to the creation of numerous Sanitary Associations that proved to be incredibly beneficial wherever implemented.

This work, spurred by the tragic loss of a family of children which deeply affected Jenkin, was approached with a jovial spirit, contrasting the underlying sadness. Jenkin's ability to imbue his projects with joy, regardless of their inspiration, is highlighted as a unique trait. His optimism was so boundless that he

believed all good endeavors would be universally embraced if made accessible, a belief that sometimes led to disappointment.

Jenkin's worldview was notably positive, refusing to acknowledge the existence of purely malicious intentions in people. His discussions on human nature shined a light on his refusal to believe in inherent badness, attributing negative actions more to weakness and a lack of imagination in understanding others. However, a conversation with a friend forces him to grudgingly acknowledge the presence of genuinely bad individuals, albeit reluctantly. This conversation illustrates Jenkin's inherently optimistic perspective on human nature and his discomfort with the idea that some individuals fundamentally embody malice or malevolence.

## V -Memoir of fleeming Jenkin

The chapter from "Memoir of Fleeming Jenkin" spans the years 1869 to 1885, highlighting Fleeming's life in Edinburgh, his family, hobbies, involvement in the arts, and his character traits. Settling in Edinburgh, described as a "metropolitan small town," Fleeming entered a society infused with a blend of academic and leisurely pursuits. Particularly noted for its educational advantages, Edinburgh attracted a well-cultured crowd, though not devoid of a certain hardiness and propensity for dispute. Fleeming, despite his contributions to the intellectual community, somewhat held himself apart from the city's most popular recreational activities, such as golf and archery, the latter being a prestigious leisure pursuit among the elite.

Fleeming's family life and personal interests are depicted with warmth; his engagements in drama, notably in private theatricals, reveal a man of diverse interests beyond his professional realm. His commitment to sanitary associations and technological curiosities like the phonograph underscores his active participation in societal betterment and scientific exploration.

The narrative reflects on Fleeming's character, showcasing his complexity, from his mature intellectual capacity that bloomed late, to his moral and religious considerations, his admiration for heroism, and his refined taste in literature. These facets of his personality coalesced to form a man who was admired and deeply loved by those close to him, despite not necessarily being widely popular. His conversational skills, coupled with his growing popularity and the affectionate correspondences shared with individuals such as M. Trelat, paint the picture of a man whose life's fabric was rich with intellectual pursuits, family commitments, and a circle of meaningful, albeit select, friendships.

This part of Fleeming's life underscores the balance between his public achievements and his private passions, capturing the essence of a life lived with depth, across the spheres of professional success, family devotion, and personal endeavors. Fleeming's legacy, as hinted through anecdotes and reflections, seems to extend beyond his contributions to engineering and academia, touching upon the realms of personal integrity, social responsibility, and the pursuit of knowledge for the betterment of society.

# VI -The memoir of Fleeming Jenkin

The provided text seems to be an excerpt from a memoir detailing a significant and poignant period in the life of Fleeming Jenkin, covering the years 1875-1885. This excerpt focuses on a series of personal losses and trials that Jenkin and his family faced, alongside the development of his invention, telpherage, and its impacts on his imaginations and aspirations.

The narrative begins with Fleeming reading the biographies of engineers, finding them depressing due to their focus on struggles rather than happiness. He dreams of literature that would depict a steady growth to triumphant happiness instead of tragedy. This sets the tone for the chapter, which, despite its recounting of

multiple deaths and illnesses within Jenkin's family, also captures moments of profound affection, resilience, and love that pierce through the sorrow.

The memoir details the decline and eventual death of Fleeming's parents, starting with his mother's premonitory stroke and descent into illness that left her deaf, aphasic, and gradually diminishing. His father, referred to as the Captain, assumes the dual roles of caregiver and communicator for his wife, embodying unwavering love and respect towards her. This period showcases not only the Captain's deep affection for his wife but also his ability to maintain his courtesy and spirit, even as his own physical strength wanes.

The golden wedding anniversary of Fleeming's parents is described as a bittersweet celebration, marked by pride and the poignancy of enduring love in the face of mental decline. It's a rare moment of joy and nostalgia before the narrative delves back into the somber tone of impending loss.

Subsequently, the memoir narrates the deaths of Uncle John Jenkin and Mr. and Mrs. Austin, presenting them as dignified closures to life well-lived, albeit tinged with sorrow for those left behind. Fleeming's reflections during these times reveal a man grappling with the inevitability of loss, seeking solace in the hope and trust beyond mere grief.

As Captain Jenkin's health takes a turn for the worse, his character and spirit in facing his final days are detailed with admiration. His light-heartedness, even in the face of death, and his enduring love for his wife, who had become nearly a child in her dependence, highlight a gracious acceptance of life's cycle. The Captain's death quickly followed by Mrs. Jenkin's underscores the depth of their bond and the narrative of enduring partnership that Fleeming holds dear.

In the wake of these family tragedies, Fleeming finds himself deeply changed, with a heightened sense of life's fragility and the closeness of death. Despite this, he immerses himself in the development of his telpherage invention, viewing it with a mix of hope for the future and the acknowledgment of its challenges. His dedication to this project and the anticipation of potential success underscore his relentless pursuit of innovation and improvement, reflective of the very essence of life he so cherished.

The chapter concludes by reintroducing the idea of Italy as a place of renewal and escape for Fleeming and his wife, a dream left hanging as Fleeming faces the realities of his responsibilities and the lingering effects of his recent losses. This notion of seeking solace and a fresh start, amidst the backdrop of professional aspirations and personal sorrows, encapsulates the chapter's themes of resilience, love, and the eternal human struggle for happiness and fulfillment.

#### I -Memoir of fleeming Jenkin

In the chapter outlining Jenkin's experiences from 1858 to 1873, we delve into the intimate and adventurous letters he penned during his telegraph voyages. Early messages to Miss Austin, his betrothed, and later correspondences to Mrs. Jenkin, couple insights into his professional endeavors with personal revelations, painting a vivid picture of his life at sea. Despite the trials of sea-sickness and relentless responsibilities, Jenkin's letters are brimming with an undying zest for his work and adventure. They reveal his robust character—fueled by indomitable courage, unwavering self-confidence, and an eagerness to confront each challenge with a blend of seriousness and jest.

Jenkin narrates the intense yet thrilling task of laying submarine telegraph cables, intricately detailing the technical challenges and the solutions ingeniously devised to overcome them. From struggling with the placement and recovery of cables beneath the sea, spanning distances as vast as from Sardinia to Africa, to the almost casual, yet deeply informed conversations about deep water cables' engineering troubles, each anecdote embodies the relentless spirit of Victorian engineering ambition. His dispatches provide an intimate glimpse into the mechanical and logistical nightmares faced, battling the elements, machinery malfunctions,

and the unpredictability of deep-sea operations, all while maintaining a light-hearted tone, underpinned by a serious undertone about the gravity of their mission.

The technological feats Jenkin describes, such as grappling for lost cables, dealing with "kinks" that jeopardize the integrity of the line, and the minutiae of the telegraph technology of the era, are juxtaposed with personal reflections and the emotional highs and lows accompanying each venture. The camaraderie aboard the ELBA, the interactions with diverse crew members, and the glimpses of pastimes and distractions that weave through the narrative, are poignant reminders of the human element that underpins even the most groundbreaking technological enterprises.

In essence, this chapter is not just a recounting of the awe-inspiring tasks of laying the telegraph cables that would revolutionize global communications but also an intimate portrait of Jenkin himself. It showcases a man who, in the face of overwhelming challenges, remained committed to his work, driven by the joy of invention and discovery, and sustained by the love and thoughts of his dear ones far ashore.

#### **II** -The memoir of Fleeming Jenkin

The memoir of Fleeming Jenkin delves into his instrumental contributions to the field of engineering, particularly in electrical and mechanical engineering, towards the end of his life. Jenkin, renowned for his work, played a pivotal role in the development and realization of an innovative system that commenced practical operations at Glynde, Sussex, four months posthumously. His publication on "Magnetism and Electricity" in 1873 under Longman's elementary series marked a significant shift in the educational approach towards electricity. This book, celebrated for incorporating quantitative methods initiated by the British Association Committee on Electrical Standards, underwent several editions, including translations into Italian and German, emphasizing its widespread recognition.

Jenkin's contributions were not confined to literature. His engineering papers, though few, left an indelible mark for their insight and practicality. Notable among these works was his comprehensive piece on "Bridges" for the "Encyclopaedia Britannica's" ninth edition, which gained further momentum as an independent publication in 1876. Another remarkable paper discussed the application of reciprocal figures in calculating strains in frameworks, presented to the Royal Society of Edinburgh in 1869. Perhaps his most groundbreaking work lay in his exploration of graphic methods to assess machinery efficiency, for which he had the honor of receiving the Keith Gold Medal in 1876-78. This piece not only continued the dialogue initiated in "Reulaux's Mechanism" but also enhanced it by integrating Reulaux's theories into a pragmatic framework for machinery evaluation.

In a different vein, Jenkin's endeavors in sanitary reform are also acknowledged, showcasing a versatile portfolio that not only highlighted his technical genius but his commitment to societal well-being. His multifaceted contributions reflect a blend of theoretical innovation and practical application, leaving an enduring legacy in the engineering domain.