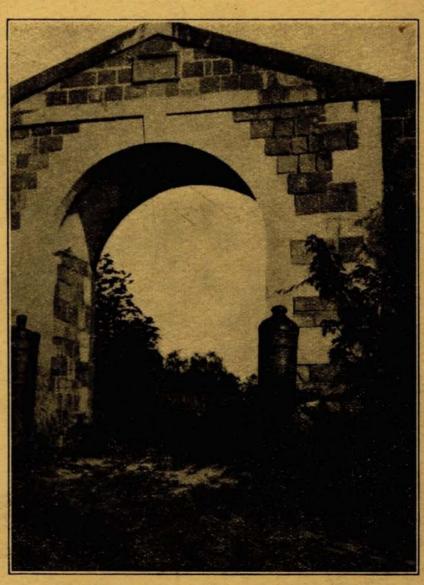
# THE GIBRALTAR OF THE WEST INDIES

A Chapter from British Imperial History

Brimstane

RING

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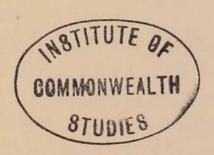


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## THE GIBRALTAR OF THE WEST INDIES

A Chapter from British Imperial History

G. H. KING, I.S.O.



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### THE GIBRALTAR OF THE WEST INDIES

#### GUIDE TO BRIMSTONE HILL

AT the entrance to the first gate on the northern side at a height of 450 feet above sea level is the caretaker's house where the visitor stops and pays the necessary fee of 6d.

Behind the house, and to the right, is the Barrier Redan—a small outwork whose guns covered the

road up to the Hill.

To the right going upward stands the Magazine Bastion, which forms a part of the longest piece of masonry on the Hill, extending over the greater portion of the lower works, joining up with the Orillon Bastion on the south and covering a distance of nearly half a mile.

Proceeding up the Hill the first turning is through the gate of the Magazine Bastion with the date 1793, to the right of which is the flank that was breached in the siege of 1782. Following the curve of the road one looks up to the Prince of Wales' Bastion, with the ruins of the Resident Surgeon's Quarters and Fort Adjutant's Quarters just below.

An opening just here gives a fine view of the

South-Eastern Ravine and country beyond with Nevis in the distance.

Continuing upward the gateway of the Prince of Wales' Bastion, which bears the date 1793, is passed through, and the next turn brings you past the ruins of the Canteen and Commissariat to the Parade Ground.

A height of 650 feet has now been reached and the motor car must be left at the foot of the Citadel steps, which take you by a gradual incline some seventy feet higher to the top of the Citadel. From here an extensive view is obtained with the islands of St. Eustatius and Saba on the west, St. Martin and St. Bartholomew on the north and Nevis south-east.

After a look round the Citadel, one of the casemates of which is fitted with seats and tables for refreshments, one descends to the Parade Ground, and ascent can then be made to the old Monkey Hill Fort just opposite. To the left of the Parade Ground in the distance are the ruins of the Barracks 4 and 5, one of which was brought to Basseterre and used for many years as a Customs House.

The Commanding Officer's Quarters, of which hardly a vestige is now remaining, was at the left of the parade ground and the Regimental Officers'

Quarters to the right.

Just beyond the Hundred Steps (115 in number) are the ruins of the Artillery Officers' Mess, and on the way down the steps are to be seen the arches of the lower floor of the Regimental Officers' Quarters, and the Green Tank, the principal reservoir on the Hill, with an estimated capacity of 100,000 gallons.



S

BRIMSTONE HILL, ST. KITTS, B.W.I. "The Gibraltar of the West Indies"

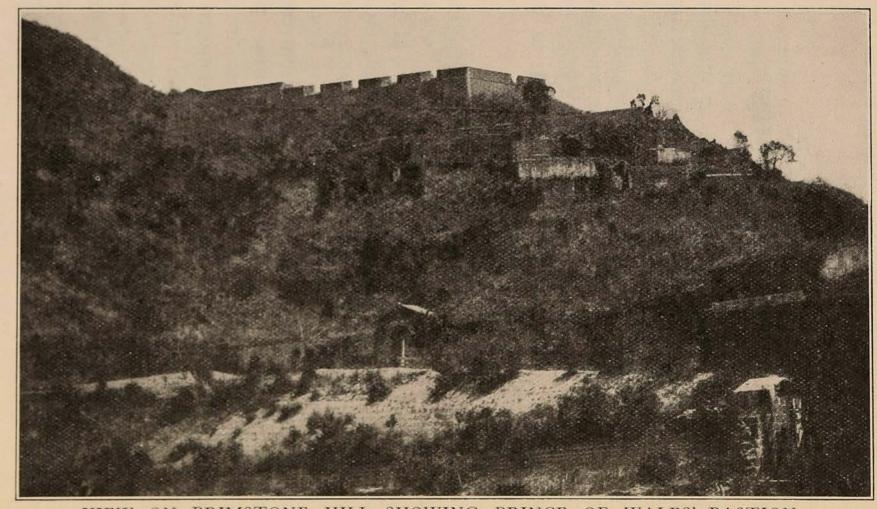
It is interesting to note the clever and complete system of water catchment on the Citadel and at the Green Tank. Looking upward from here a fine view is had of the Citadel and Prince of Wales' Bastion. The road now leads to the Ordnance Store House and Cemetery. The last is situated in the orillon of the Bastion of that name which connects up with the Magazine Bastion already described. The turning to the right brings one back to the road up the Hill where the waiting car can now be taken.



### THE GIBRALTAR OF THE WEST INDIES

THE year 1781 found England at war with France, Spain and Holland, and at the same time endeavouring to subdue the rebellion of the American Colonies. The latter were in no small degree assisted in their resistance to the Mother Country by the facilities afforded them of obtaining war supplies through the Dutch island of St. Eustatius, which, lying to the north-west of St. Kitts, is separated from it by a narrow channel of about six miles across.

During the earlier years of war in Europe, Holland had observed a "strict neutrality" which enabled her to profit by the disagreements of her neighbours. St. Eustatius was a free port, and under the neutral flag of Holland became the mart of the West Indies. There the merchants of France, Spain, Holland and America found a convenient entrepôt for their merchandise; huge warehouses, the crumbling walls of which still lie along its dreary shore, were built, and "St. Eustatius sprang for a day into the prosperity of Tyre and Sidon." Then there began a trade in contraband of war, and some of the merchants of St. Kitts did not scruple to engage in it. When, therefore, upon the declaration of war with Holland, Admiral Rodney received orders to seize St. Eustatius, he found there nearly



VIEW ON BRIMSTONE HILL SHOWING PRINCE OF WALES' BASTION

two hundred vessels of various nationalities, and war supplies and merchandise to the value of several million pounds. The seizure was made on February 13th, 1781, the garrison being surprised and the island surrendered without resistance. Rodney thereupon declared St. Eustatius and all it contained, irrespective of ownership, forfeit to the King of England. Those English merchants who claimed to be honest traders were informed that everything found in Dutch waters was Dutch and as Dutch should be treated. Reserving the war material for the use of the navy, Rodney set up everything else at auction, and selling the goods in many instances for less than a third of their value, realised a sum of three millions sterling.

The merchants of St. Kitts, by their deputy, John Glanville, informed Rodney that they would take all available means of obtaining reparation for the confiscation of their goods. They subsequently brought suits against him whereby he was compelled to refund the greater part of their losses. Rodney perhaps displayed a little too much zeal in thus trouncing those whom he regarded as his country's enemies and whom he described as "disaffected British factors, who, from base and lucrative motives, were the great support of the American rebellion, traitors to their King and patricides to their country." It is probable that more than pecuniary gain influenced these persons, and that sympathy with the revolted colonists was at the bottom of their conduct both in this and in other matters of a

<sup>&</sup>lt;sup>1</sup> Letter to Lord Germain.

questionable nature. There was in fact a section of the community known as the Gallo-American party who made no secret of their republican tendencies.

Late in 1781, Rodney returned to England, and during his absence St. Eustatius was retaken by the French Marquis de Bouillé, who, landing a party at the back of the island, surprised the garrison. About the same time the French Admiral Count de Grasse had planned an attack upon Barbados, but adverse winds driving him to leeward he altered his purpose and decided to make for that ancient bone of contention between the "two nations"—St. Kitts. This decision brought about a succession of events the importance of which to the British Empire is not easy to estimate.

On January 11th, 1782, Count de Grasse with twenty-nine ships and eight thousand men, under command of the Marquis de Bouillé, arrived at St. Kitts, and the latter immediately proceeded to lay siege to the fortress of Brimstone Hill. Since the planting of guns on this hill by Sir Timothy Thornhill in 1690, it had been fortified with about fifty pieces of cannon, but the massive fortifications which, in conjunction with the natural defensive qualities of the situation, gave rise to a belief in its impregnability, were not completed till eleven years after the time of de Bouillé's descent upon the island. The fortress was then in no position to withstand so formidable an attack. The islanders, outraged at Rodney's action at St. Eustatius, had

<sup>&</sup>lt;sup>1</sup> The term "two nations," meaning the French and English, was a common one in the days of the island's joint occupancy.

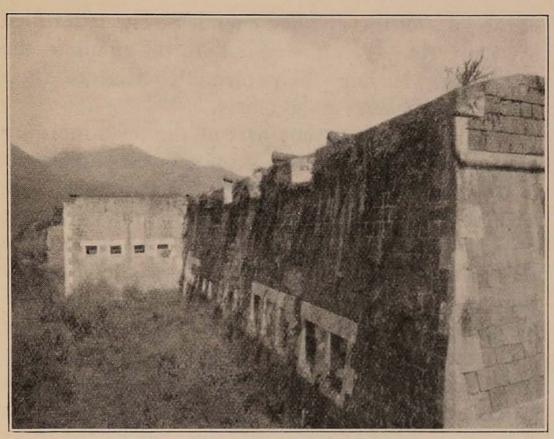
refused to supply slaves for taking guns and stores which had been sent from England up to the Hill, and one Farrel of the commissariat at Guinea Bay was even said to have been in league with de Grasse and to have invited him to attack the island. Eight brass sixteen-pounders with 6,000 shot and two fifteen-inch brass mortars with 1,500 shells, instead of being mounted on the Hill were found by the enemy at the foot of it, and were used by them in the siege of the fortress. The garrison, consisting of six hundred men of the Royal Scots and East Yorkshire Regiments, under Brigadier-General Fraser, was reinforced by three hundred and fifty of the island militia led by Governor Shirley, and these, with a few armed blacks and sailors brought the number of the defenders to about one thousand men. They were unprovided with entrenching tools, and some of the batteries were in an incomplete condition. To them were opposed eight thousand seasoned troops of France, led by a commander of valour and ability.

Recognising the strength of the position, though unaware of the extent of the defenders' unpreparedness, de Bouillé commenced the work of opening trenches and placing batteries with the view of making his attack as vigorous and effectual as possible. He was at first handicapped to some extent by the stranding of one of his ships carrying

<sup>&</sup>lt;sup>1</sup> It may be remarked that the home government had never been generous in the matter of defence of the colony. Upon an application on one occasion for a few guns the petitioners were told that they could have all they could pay for, and again, when asking for a frigate or two for the protection of their shipping, the answer was made that in peace time ships were not needed and in war they could not be spared.

heavy artillery, but the guns were eventually recovered and brought into service. With those at his immediate disposal he commenced the attack, to which the defenders briskly replied, and for the moment their hopes of repelling the invaders rose high. Their means, however, of preventing the extension of the enemy's lines was quite inadequate, and day by day fresh batteries were opened and increasing fire poured in upon them. Within a fortnight of the opening of the first trenches the enemy had over thirty guns and mortars playing on the fortress from different directions, and their effect soon began to be felt.

In the meantime Sir Samuel Hood (afterwards Lord Hood), with twenty-two ships, had arrived at Antigua from Barbados. He there took on board General Prescott with six hundred men, and on January 23rd sailed for St. Kitts. In consequence of a collision between two of his ships, Hood was prevented from carrying out his original plan, which was to attack de Grasse at daybreak as he lay at anchor at Basseterre, and it was not till I p.m. of the 24th that the British squadron appeared round Nevis Point. At 3 o'clock de Grasse weighed anchor and put to sea. Now occurred to the British Admiral the idea of getting between the enemy and the shore, and in carrying it out he performed one of the most interesting manœuvres of naval history. He tacked about sunset and stood to the south in order to draw de Grasse farther from the land and more to leeward. Keeping well to windward during the night and manœuvring as if to attack the next morning, mid-



WESTERN FACE OF CITADEL

day found Hood in a position to carry out his plan. "At noon, when the hillsides of Nevis were covered with expectant and interested sightseers, the English fleet rapidly formed its line on the starboard tack and headed for Basseterre." Then de Grasse saw the design, but too late to frustrate it. Giving chase, he got within gunshot about half-past two o'clock and opened fire upon the British rear. The leading British ships had now reached a position off White House Bay and were anchoring in line to the northward and leeward of Guana Point. Those behind, while receiving and returning the French fire, "stood on unswervingly, shortened sail, and came to anchor one by one in a line ahead under the roar

of the guns of their baffled enemies. The latter filed by, delivering their fire and bore off again to the southward, leaving their former berths to their

weaker but clever antagonists."1

During the night and part of the next morning Hood altered the position of some of his ships so as to bring his line into the form of two sides of a triangle running from east to north-west. His first ship was anchored so close to the shoal just outside of White House Bay that no vessel could get to windward of her, the port side of the line was protected by the shore, and on the starboard side the enemy would be subjected to a fire directed from two sides of a triangle, at the apex of which was Hood's flagship the Barfleur. The British squadron now consisted of only twenty ships, one having gone aground at Nevis Point, and the Nymphe in consequence of the before-mentioned collision having been obliged to go to Antigua for repairs. The French fleet had been increased to thirty-three, but the English, by using springs on their anchors, were enabled to swing round after each discharge and thus use two broadsides to the enemy's one.

At 8 a.m. de Grasse came up in line to attack the English from van to rear. The engagement that now took place must have fallen in spectacular effect little short of the display of the afternoon before. Sailing as close as possible to the wind on the starboard tack, de Grasse's long line tried to push its head close up to the first of the British van. As the leading French ship came abreast of the third in the

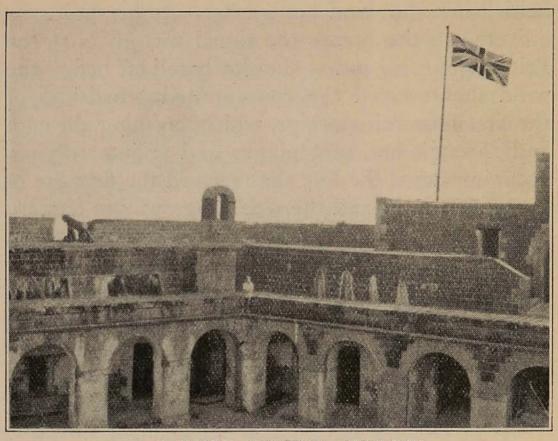
<sup>&</sup>lt;sup>1</sup> Mahan's Influence of Sea Power upon History.

British line the wind headed her. As her headsails quivered in the breeze the signal was given to the British gunners, and as she slowly fell off before the wind she received the concentrated broadsides of the first four British ships, which, crashing through and through her, sent planks and splinters flying. Running down the line she received the first fire of every ship in it, and then, drifting away to leeward a helpless cripple, made the best of her way to St. Eustatius for repairs. Following in the track of their leader the whole French fleet passed along the British line, delivering their fire, and receiving two broadsides for one. The action lasted two hours, and then de Grasse drew off to the southward to rest awhile and consider a more effective plan of attack.

At 3 o'clock he renewed the engagement, directing his efforts against the centre and rear, but met with the same reception—double broadsides from two sides of a triangle. When sunset put an end to the fight, de Grasse's flagship, the great three-decker Ville de Paris, had received eighty-four shots in her hull, and several of the French ships were much damaged, while the English had suffered comparatively little. Next day over one thousand wounded Frenchmen were sent ashore at St. Eustatius. Hood had lost 73 killed and 244

<sup>&</sup>lt;sup>1</sup> A gift from the City of Paris to Louis XV and said to have cost £176,000.

<sup>&</sup>lt;sup>2</sup> A French account gives the names of seven officers killed and five wounded, and briefly states: "In the three combats fought on January 25th and 26th between the naval army of the King and that of the English, M. de Grasse had occasion to congratulate himself on the good conduct of his officers and crew."



A CORNER OF THE CITADEL
With Casements below

wounded. After this, de Grasse found it unwise to fight at such disadvantage and contented himself with keeping Hood in check, while de Bouillé pushed on the siege of Brimstone Hill.

The investment of the fortress was by this time complete. The first French trenches had been opened on the 16th and by the 28th it was almost encircled and communication with the garrison cut off.

On the 28th General Prescott, with his 600 men, and General Skene with the 69th Regiment were landed at Frigate Bay. The battery there was stormed and the French driven out with some loss, the English losing about forty in killed and wounded.

The situation was now unique and interesting. Generals Fraser and Shirley with one thousand men at Brimstone Hill were besieged by de Bouillé with eight thousand, the rear of the latter was menaced by Prescott's six hundred, he in turn was protected by Hood's squadron of twenty, which was kept in check by de Grasse's fleet of thirty-three ships. On the 29th de Bouillé with 4,000 men advanced against Prescott, but finding him strongly posted upon Sir Timothy's Hill,1 he thought it unadvisable to attack him, and returned to the siege. Hood had proposed landing a party of marines at Basseterre, but as these, with those already ashore at Frigate Bay would only amount to 2,400 men, Prescott considered a position there would be untenable against the superior force of the enemy. General Fraser had, with a gallantry not justified by his circumstances, declared himself capable of defending Brimstone Hill without assistance, and as communication with him was by this time impossible, Prescott's party was re-embarked on the evening of the 26th.

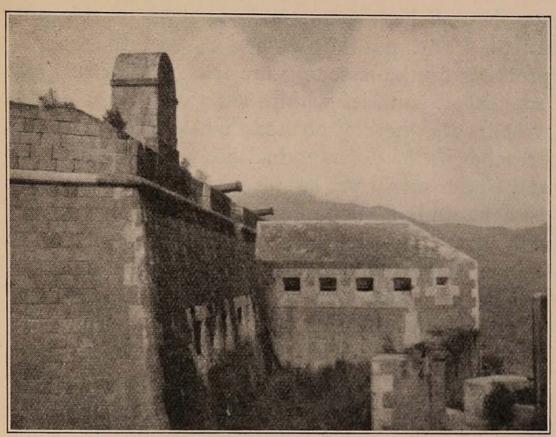
Several attempts had been made to communicate with the fortress. Captain Curgenven and Lieutenant Hare with thirty men in two boats tried to steal in at night, but being observed, a heavy musketry fire was opened upon them which obliged them to retire. A single man in a canoe also made an attempt, but was fired upon whenever he approached the shore. Lieutenant Fahie of the Russel, a native of St. Kitts,

<sup>&</sup>lt;sup>1</sup> So called from Sir Timothy Thornhill, who defeated the French there, June 21st, 1690.

who afterwards became an admiral, succeeded in getting ashore, and tried to get in, but failed, and returned to his ship after two days.

On February 8th, Fraser made signals of distress. The cannon of de Bouillé had damaged the fortifications, the garrison was sadly reduced, and the enemy's approaches were daily drawing nearer.

This made Hood more than ever anxious to get a message to the English commander. De Bouillé was having the forts and magazines at Basseterre destroyed, which could only be interpreted as a sign of his ignorance of the effects of his bombardment, and that he was considering the abandonment of the siege. He had not contemplated such resistance and delay of his plans. The capture of St. Kitts should have been an affair of a few hours. His Spanish allies were awaiting him at Cuba to make a descent on Jamaica, and by the pertinacity of a handful of British perched on a limestone rock, the plans were being endangered that were to drive the British flag from the western seas; for at any moment Rodney might arrive. His junction with Hood would place the rival fleets upon an equal footing, and de Grasse, already roughly handled by the smaller squadron, must either destroy the greater, or be himself destroyed. If the fortress could hold out ten days longer, the whole condition of affairs might be changed. His appreciation of the situation and its possibilities determined Hood to get word, if possible, to the defenders; and for this purpose Captain Curgenven and Captain Bourne of the Marines and Lieutenant Fahie volunteered their



SOUTHERN FACE OF CITADEL Showing Loopholes for Musketry

services. They all succeeded in getting ashore, and tried by separate routes to pass through the enemy's lines, but were all made prisoners. It is said that Lieutenant Fahie was captured among the grape bushes at Belle Tête after destroying the letter he carried and burying the fragments in the sand.

The state of the besieged had by this time become hopeless. "For the greater part of a month twenty-three pieces of heavy cannon and twenty-four mortars were kept playing upon a spot of ground not two hundred yards in diameter." Losses in killed and wounded and (unhappy to relate) desertions from the militia, had reduced the garrison to quite half their original number, most of the buildings and <sup>1</sup> Southey's Chronology.

storehouses had been wrecked, many of the guns disabled and put out of action, and the enemy, profiting by the lessening fire from the fortress had established batteries within 600 yards of the northwest front, whereby no less than four considerable breaches in the defences had been effected. Shirley and Fraser might yet have held out, even to risking an assault, but the militia, who had less of glory to gain than of property to preserve, petitioned the Commander-in-Chief to surrender. To do them justice, the militiamen who had not yielded to the temptation of disloyalty had undergone considerable sacrifices in the cause of duty, and on a later occasion General Shirley paid a glowing tribute to their loyalty.1 The "disaffected factors" and deserters were birds of passage and mixed nationality, while the planters and proprietors forming the bulk of the militia came from the gentry and nobility of England.

The facts to be faced were that great loss had been suffered to property both on the estates and the nearby town of Sandy Point<sup>2</sup> and greater still was likely to follow, for de Bouillé had threatened to burn every plantation on the island before relinquishing the siege; that while there was any hope of a successful termination to the defence it had been gallantly maintained, and that an honourable surrender to a not yet exasperated enemy would be

<sup>1 &</sup>quot;My feelings upon this occasion I shall leave to abler language than my own to describe, but I can venture to assert that no pain or mortification could be more severe than what I suffered in the struggle that separated me from this command and the loyal inhabitants of St. Christopher."

<sup>&</sup>lt;sup>2</sup> Estimated at £160,000.

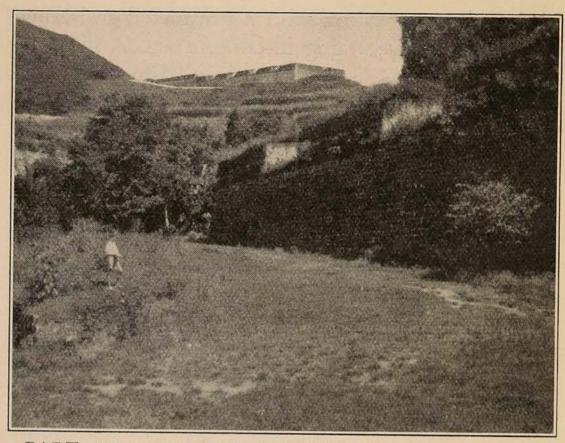
wisdom in comparison with a protracted resistance in face of overwhelming ill-circumstance. Yielding to these considerations it was decided to surrender, and on the evening of February 12th, an officer was sent with a flag of truce to the French commander. De Bouillé lost no time in negotiating: he called on General Shirley at 10 p.m., and at midnight the terms were agreed upon. These were alike favourable to the inhabitants and complimentary to the defenders. Seventeen in number, the first and last may here be quoted:

"I. The governor, the commander of the troops, the regular officers and soldiers, the officers and privates of militia shall march through the breach on the fort of Brimstone Hill with all the honours of war, with drums beating, colours flying, one mortar, two field pieces, ten rounds each, arms and baggage, and then lay down their arms at a place appointed, the officers excepted.

17. Out of respect to the courage and determined conduct of Generals Shirley and Fraser we consent that they shall not be considered as prisoners of war, but the former may return to his government of Antigua, and the latter may continue in the service of his country, being happy to testify this mark of particular esteem for these brave officers."

It is said that when on the morning of February 13th de Bouillé saw the number and condition of the

<sup>&</sup>lt;sup>1</sup> Southey's Chronology.



PART OF MAGAZINE BASTION AND PRINCE OF WALES' BASTION ABOVE

men that marched out of the fort, he was struck with surprise at the weakness of the force that had resisted him and exclaimed: "I ought to have taken this place a month ago!" There is but little doubt that had proper preparation been made, and had the guns and ammunition which were found by the French at the foot of the Hill, and were used against it, been in the hands of the garrison, Brimstone Hill would have held out till the arrival of Rodney. He arrived in the West Indies just six days after the capitulation.

Brimstone Hill having surrendered, there was no object in Hood's remaining longer at St. Kitts, especially as the French were mounting guns on the

hills eastward of Frigate Bay, from which position they would be able to fire upon his ships. His policy was to preserve his squadron uninjured and make a junction with Rodney, when the combined fleets would be strong enough to openly encounter de Grasse. The latter had anchored at Nevis, and Hood took advantage of this to slip away during the night. On the afternoon of February 14th he called his captains on board the Barfleur and gave them instructions to cut their cables at II o'clock that night. At the hour appointed the English ships noiselessly slipped away to leeward, and when morning broke "a few specks of white on the horizon made by the topsails of Hood's ships told de Grasse that the enemy who had outmanœuvred him all along had baffled him again."1

On February 19th Rodney arrived at Barbados and was joined a few days later by Hood, who brought the news that de Grasse had left Nevis² (which island had surrendered without resistance) and sailed for Martinique. Here the latter began refitting preparatory to joining a Spanish fleet at Cuba, whence a combined attack was to be made on Jamaica. How Rodney stayed at Pigeon Island, St. Lucia, and watched for the enemy to put to sea, how he pursued and came upon him off Dominica, and how the probable course of modern history was altered by the result of the great battle of April 12th, 1782, has been fully dealt with by various writers. It is, however, interesting to note that it was to the

Hannay's Rodney.
 The terms of surrender included Nevis.

Barfleur that the Ville de Paris struck her flag, and it was Sir Samuel Hood that forced de Grasse to surrender himself a prisoner.<sup>1</sup>

It not infrequently happens that a great event occurs and while all credit is given to it, little or no notice is taken of some all-important circumstance by means of which it was brought about. This has been the case with regard to the siege of Brimstone Hill, where the stubborn defence of Shirley and Fraser, and the daring of Hood, were deciding factors in bringing about that great victory whereby England was enabled to make an honourable peace at the close of a disastrous war.

Let us look at England's position at that time. The American Colonies had, with the assistance of France, virtually achieved their independence, and the British arms were clouded by the disasters of Yorktown and Saratoga. In Europe the Spaniards had taken Minorca and were besieging Gibraltar. In the West Indies France held in her possession the majority of the English islands. At Havana a powerful Spanish fleet was awaiting the arrival of de Grasse to make a combined attack on Jamaica. Had a junction been formed, the united fleets "would have consisted of sixty ships of the line, which, with a respondent military force, would have rendered them resistless."<sup>2</sup>

In the unprepared condition in which they were found, and with such overwhelming odds against

<sup>&</sup>lt;sup>1</sup> There is a question as to the officer to whom de Grasse actually delivered his sword.

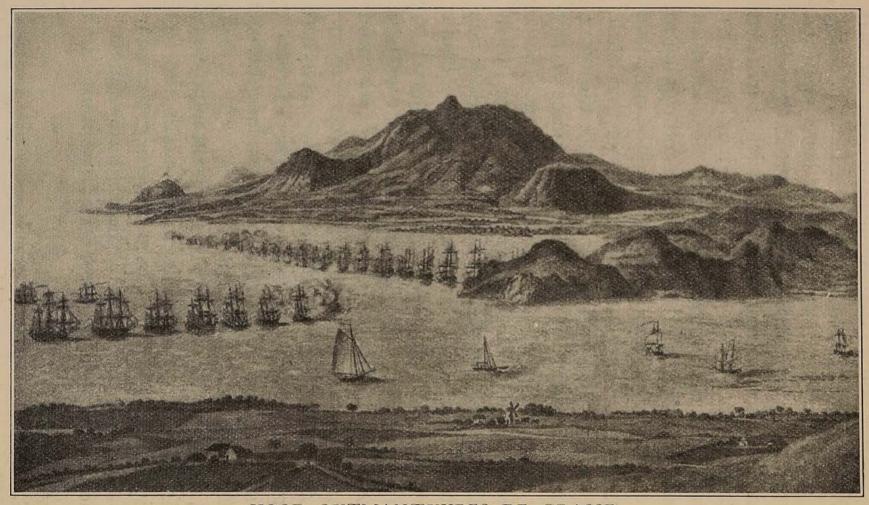
<sup>&</sup>lt;sup>2</sup> Goldsmith's History of England.

them, Shirley and Fraser might have been excused had they yielded without striking a blow. Setting aside speculations as to what might have happened in such a case, it can be safely asserted that there would have been no months' delay which so irritated de Bouillé, and which enabled Rodney to arrive before de Grasse finished refitting; no shot-riven planking to repair, no damaged spars and rigging to replace at Martinique, and consequently, no battle of April 12th. The immediate result of this battle was that England was enabled to reject the terms her enemies offered. "Spain refused peace at any other price than the surrender of Gibraltar, France proposed that England should give up all her Indian conquests save Bengal." Speaking of the wide results of this battle, Froude calls it "England's Salamis"; but for the issue of it, he declares, perhaps with some imagination—but who will say without some truth ?—" the star of England would have set forever!" A more recent writer asserts: "In the hour of her need to which her fools had brought her, Britain was saved by her heroes."2 Among these heroes we must count Rodney, Hood, and Fahie, Shirley and Fraser.

If, therefore, we allow for this fight the importance that historians claim for it, and concede the fact that it was brought about by the upsetting of calculations consequent upon the "determined conduct" of the defenders of Brimstone Hill, we must admit

<sup>1</sup> Green's History of the English People.

<sup>&</sup>lt;sup>2</sup> G. M. Trevelyan, Regius Professor of Modern History, Cambridge University.



HOOD OUTMANŒUVRES DE GRASSE "The most brilliant military effort of the whole war" (Admiral Mahan)

Reproduced from The Pocket Guide to The West Indies, by Sir Algernon Aspinall, C.M.G., C.B.E.

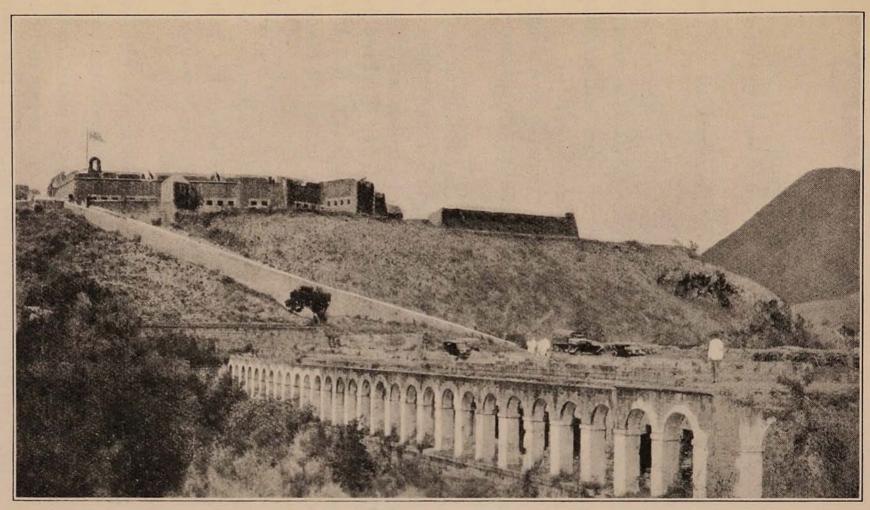
that the Gibraltar of the West Indies has played a worthy, though unrecognised part, in the history of the British Empire.

On one other occasion did the guns of Brimstone Hill do service against an enemy. On June 3rd, 1806, Rear-Admiral Willaumez with four ships attempted to cut out nine merchantmen that had taken cover under the hill, but was beaten off by a combined fire from the fortress and Charles Fort.

A French raid in 1805 by Admiral Missiessy, with twelve ships of the line, resulted in the occupation of Basseterre and a levy of £18,000 upon the inhabitants, but no attack was made on the fortress, where Major Foster with the garrison and militia "placed himself in a posture of defence." The inability of the Hill to defend the chief town of the island in circumstances of this nature may have been one of the causes that led to its abandonment as a defensive post in 1853. The local government was very much against this action, and the House of Assembly on December 15th of that year placed on record "its deep anxiety on the subject of a measure for which Her Majesty's Government alone are responsible, while this House painfully recognises that a patient endurance of any evil that may result must be the portion of this insulated and unprotected community." The dismantling of the fortress followed, some of its guns being taken away for use elsewhere and others sold as old iron. Of so little value were these to their purchasers (it is said that the first shipload sank on its way) that a number of them were left at the shipping point at Guinea Bay,

where they lay until, by an accident of fortune, means were recently found of replacing some of them upon the Citadel and Prince of Wales' Bastion.

The work of replacement and rehabilitation is now being carried on as means afford. Though the work be slow it is not without the hope that in time a gun may be found for every old emplacement, and the fortress restored to some likeness of its former self.



CITADEL AND REMAINS OF REGIMENTAL OFFICERS' QUARTERS

#### THE GEOLOGY OF THE HILL

WRITERS on the geology of Brimstone Hill are not agreed on all points concerning it.

The opinion appears, however, to be that it was extruded in comparatively recent times as a volcanic "plug," bearing on three of its sides sedimentary beds of chalk and lime on an andesiticcore.

These beds are thickest on the west and northwest sides where their presence is conspicuously noticeable.

In them and in the material that has been interstratified and sprinkled in during the process of extrusion are to be found numerous fossils which are fully described in a brochure by Dr. C. T. Trenchmann, who made a recent examination of the Hill and from whose work the following extract is taken:

- 1. I found the solid igneous rock a hard, dark grey, andesitic material of a trachytic feel. This does not include the ash which has been sprinkled in among the upturned sedimentaries.
- 2. The limestones go up to nearly 100 feet below the level of the summit on the landward side.
- 3. I regard the sedimentaries not as a mere coastal deposit, but rather as a part of a series of beds that underlie or may have underlain the main

cone of the island, probably of late Pliocene age.

- 4. Many of the fossils on close examination show material differences from the corresponding living forms of the West Indian Islands.
- 5. The extrusion of the igneous plug is later than the deposition of the sedimentaries through which it has broken its way; and stratification is very clearly shown in the sedimentary beds.



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