

LT.-CDR. C. M. STOCKEN, D.S.C., R.N.

Born: Bristol, 17th April, 1922. Killed: Schweizerland, 23rd, August, 1966.

- 1936-39 Royal Naval College, Dartmouth.
1939-40 *H.M.S. Vindictive*. Midshipman in *H.M.S. Warspite*, *H.M.S. Fiji* and *H.M.S. Hood*.
1941 Sub-Lieutenant in *H.M.S. Fiji* when sunk by enemy aircraft off Crete.
1942-44 *H.M.S. Osprey*; Lieutenant in *H.M.S. Sabre*; Staff of Senior Naval Officer, North Atlantic.
1945 *H.M.S. Illustrious*. Mentioned in dispatches for successful attack on heavily armed barges off Istrian coast.
1946-47 *H.M.S. Chivalrous*. *H.M.S. Whitesand Bay*; awarded Distinguished Service Cross while operating with Palestine Patrol.
1948-50 Commanding Officer *H.M.S. Offa*. Service in *H.M.S. Ulster* and *H.M.S. Wilton*.
1951-52 *H.M.S. Whirlwind*. Promoted Lieutenant-Commander. Staff of Commander-in-Chief, Portsmouth.
1953-61 Commanding Officer *H.M.S. Fleetwood*. Staff of Commander-in-Chief, Plymouth.
1961-65 *H.M.S. Rooke*, Gibraltar.
1965-66 Commanding Officer *H.M.S. Forest Moor*.



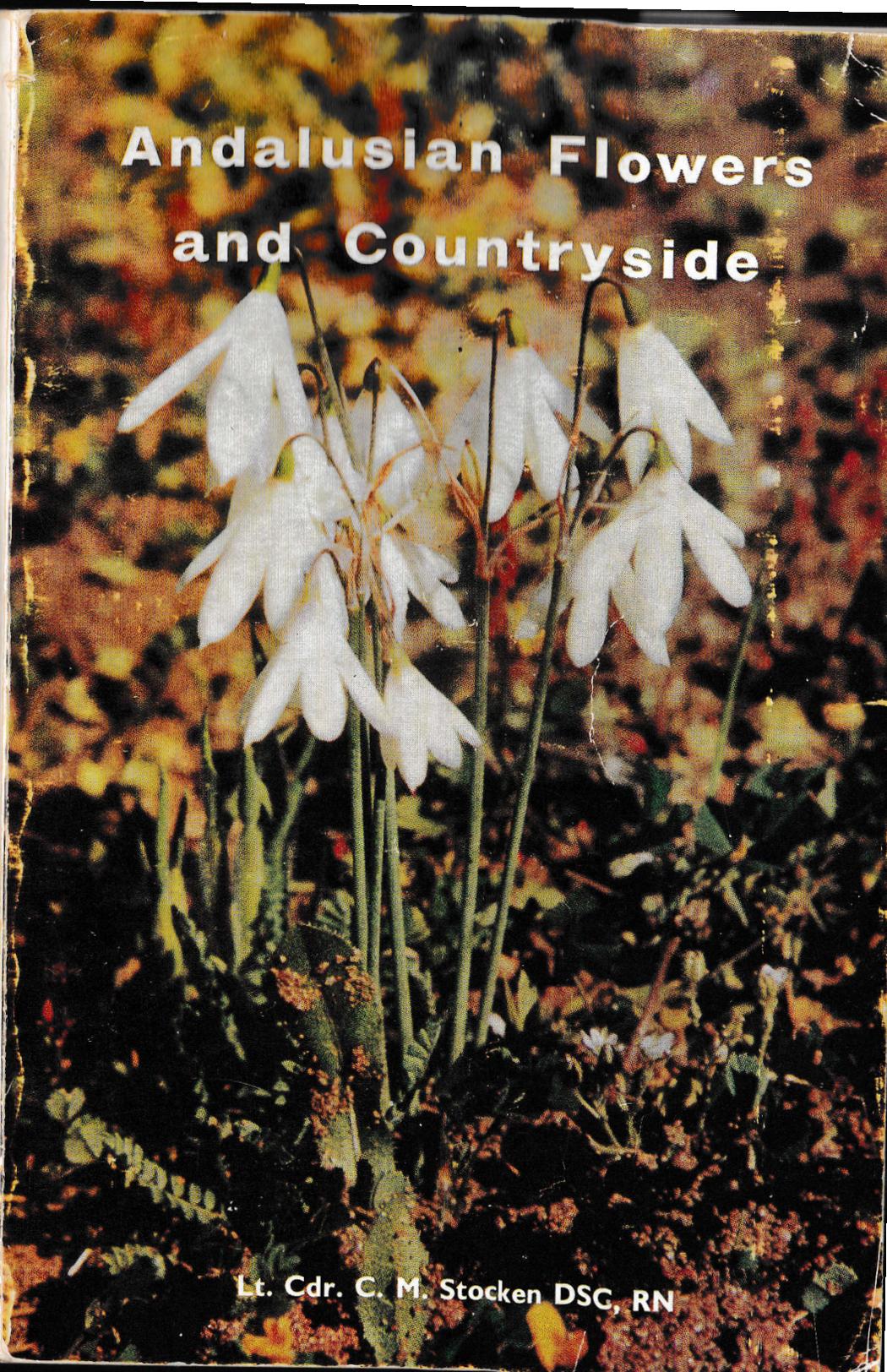
Christopher Maitland Stocken had a lifelong interest in botany and horticulture. His various postings around the world enabled him to develop this interest to the full and he made extensive collections in South Africa, Ceylon, Lebanon, Greece, Cyprus, the Alps and Pyrenees. The walls of Stocken's cabins on his homeward-bound ships were always festooned with dozens of polythene bags containing his latest haul of specimens. He supplied many living and preserved plants to botanic gardens and universities in Britain, apart from growing a wide range in the family garden at Thurlestone, S. Devon. It was Stocken's Gibraltar posting that suited him best in this context, for it provided unrivalled opportunities for exploring the rich twin floras of Morocco and southern Spain. From these travels came his fascinating articles on which this book is based.

Cdr. Stocken's keenness on mountain climbing enabled him to find plants beyond the reach of most botanists and as a member of the Alpine Club, he had scaled many of the major peaks in Europe. He learnt to ski early in life and after notable traverses in the Alps, Sierra

Nevada and High Atlas, Stocken developed a reputation for being one of the most active and experienced of British ski-mountaineers. He was a natural leader, having courage and infectious optimism and it was typical of him that when, on a pre-expedition training scheme in Norway, a volunteer was needed to simulate an avalanche victim and be buried under six feet of snow, Chris Stocken was the man.

His tragic death from a falling boulder whilst leading the Royal Naval Expedition to East Greenland, came when he was doing the activities that he liked most. His loss to botany and horticulture is widely felt but his writings and plant introductions perpetuate his valuable work. The Danish Government have provided a splendid memorial to him by naming a mountain *Stockenbjoerg* (66°36'N 37°10'W) in the area of eastern Greenland where he was killed. He leaves a widow and three children.

Andalusian Flowers and Countryside



Lt. Cdr. C. M. Stocken DSC, RN

FRONT COVER: The Andalusian Snowflake, *Leucojum trichophyllum*, is a spring bulbous plant of the extreme western end of the Mediterranean. It extends into north and west Morocco and to southern Portugal but the bulk of its distribution is Andalucía. It is a characteristic plant of sandy maritime soils. Greenhouse cultivation is necessary in climates with anything but the briefest frosts.

(From a transparency by Lt.-Cdr. C. M. Stocken, D.S.C., R.N.)

**ANDALUSIAN FLOWERS
AND COUNTRYSIDE**

BY

LT.-CDR. C. M. STOCKEN

D.S.C., R.N.

STOCKEN
THURLESTONE, DEVON

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Andalusian Flowers and Countryside contains 128 plates
of which 14 are in colour.

MAPS

There are 17 pages of maps which cover all the major areas dealt with by Lt. Cdr. Stocken. Only those features actually named in the relevant portion of the text are identified on any particular map. However, the presence of other features is shown but without a name. They can be identified, either by turning to another map in the book, or by using any of the usual tourist maps. In order to locate on a map any town or feature that is mentioned in the text, readers will find the reference in bold type in the index. This is composed of a page number followed by a conventional letter and number grid reference in brackets.

EDITOR'S PREFACE

As the reader will readily ascertain, *Andalusian Flowers and Countryside* is written for those plantsmen who already have a fair working knowledge of the plants of the Mediterranean countries. At the time of going to press no comprehensive illustrated book for the ready identification of the flowers of Andalucía exists. However, it is hoped that the book *Southern Spanish Flowers*, which is currently being prepared by the writer of this preface, will help to fill the gap in due course. For detailed background reading on the plants of southern Spain and Morocco (which is also briefly covered by Lt. Cdr. Stocken), the reader is referred to the bibliography at the end of this book (Appendix III).

Andalucía is composed of eight provinces: Almería, Cádiz, Córdoba, Granada, Huelva, Jaén, Málaga and Sevilla. It may seem strange that the Sierra de Cazorla, in the province of Jaén, are not dealt with in this book, for this range of mountains is one of the richest botanical areas in Andalucía. However, when planning his book, Lt. Cdr. Stocken decided to include only those areas which were close to the main tourist routes. The Sierra de Cazorla, whatever their botanical merits, are a long way from the usual holiday attractions of southern Spain. Readers who are prepared to devote the several days necessary to do these mountains justice, are recommended to read the article entitled "The Flora of the Sierra de Cazorla, south-east Spain" by Professor V. H. Heywood. The first part of this account appeared in 1961 in the botanical journal *Feddes Reppertorium.*, on pages 27-72 of volume 64. Access to this publication can be obtained through the assistance of a local library.

At the time of Lt. Cdr. Stocken's death in East Greenland in September 1966, the manuscript of his book existed only as a rough first draft. Although I was involved in the early stages of planning *Andalusian Flowers and Countryside*, it was not clear, from the papers left by Lt. Cdr. Stocken, just what the final form of the book was to be. In completing the book I have included all those features which I believe it was the author's intention to have and I have also added several others which it is hoped will increase the book's value. In particular, I have hoped to achieve a book that will be fully practical in the field. Further, by including a very large number of illustrations of plants and their habitats, this book should be of value to a wide readership.

Since 1966 some of the contents of *Andalusian Flowers and Countryside* have become out of date and revision was necessary. Where it has proved possible, the nomenclature of the plants has been adjusted to match that of *Flora Europaea*. Many of the routes described by Lt. Cdr. Stocken have changed beyond all recognition, due to the explosive development of this very popular tourist area. Where this has happened, or is likely to happen shortly, the manuscript has been altered to a more suitable wording.

As far as general editing is concerned, this has been kept to the minimum. This policy was adopted in order not to alter Lt. Cdr. Stocken's distinctive style of writing, with which readers of his articles in the publications of the Royal Horticultural Society and the Alpine Garden Society, are familiar.

In conclusion, I would add that, at the time of going to press, many of the plant specimens collected by Lt. Cdr. Stocken are in the hands of specialists awaiting naming. Some have already been shown to be new to science. I would be most grateful if those who are working on his material would supply me with copies of any papers that they publish about his plants, in order that Appendix IV may be made as complete as possible. I have tested much of the manuscript of *Andalusian Flowers and Countryside* in the field in 1968 and have made some emendations as a consequence. However, in an area that is not only being physically altered at a very rapid rate, but is now the subject of considerable botanical activity, continual revision will be necessary. If any reader who has used *Andalusian Flowers and Countryside* in the field and who has noticed portions of the text that should be revised as a consequence of recent developments, I would be grateful to hear from him.

Acknowledgements:

It is with considerable difficulty that I write this section of the editor's preface, for the amount of goodwill and assistance that I have received from Lt. Cdr. Stocken's friends, colleagues and relatives has been almost overwhelming. I am particularly grateful to Mrs. D. Brinton-Lee who has provided most valuable continuity between the author's first draft of this book and the editor's later revision. My thanks also to Prof. V. H. Heywood of the University of Reading and Mrs Lorna Ferguson (*née* Bowden) at the European Herbarium of the British Museum (Natural History) who have brought much of the nomenclature in to line with that of *Flora Europaea* and who advised on various other nomenclatural problems. Chapter X required specialised knowledge and I am very grateful to Lt. Col. Geoffrey and Mrs. Marjorie Horn who, as the proprietors of the *Costa del Sol* nursery chain Exótica S.A., which is centred at Apartado Num. 13—"La Najarra," Almuñécar, Prov. Granada, have kindly brought the gardening section of this book into line with current practice. Special gratitude is due to M. T. Hill who has not only made available many of the excellent photographs of his late father (Lt. Col. G. C. Hill) but whose additional generosity has enabled some to be printed in colour. I am grateful also to the national tourist offices of Gibraltar, Spain and Morocco who have provided so many excellent photographs of their countries. To the Council of the Royal Horticultural Society, Patrick M. Syngé and Miss Elspeth Napier, my thanks for permission to use and assistance with the choice of suitable photoblocks or litho work for the art sections of this book. Likewise, I am most grateful to Roy C. Elliott who has also kindly made photoblocks available from the Alpine Garden Society publications. To Miss Margaret Berryman, Mrs. Pauline Blair and Miss Dorothy Jackson, my grateful thanks for easing the typing burden, but to Miss Christine Parsons my especial thanks for so ably compiling the comprehensive index. I would like to conclude by thanking Chandlers (Printers) Ltd. who have handled an exacting editor with great patience. To all these and others who have helped in small but valuable ways, my grateful thanks.

612 Beatty House,
Dolphin Square,
London S.W.1.

ANTHONY P. HAMILTON
March 1969

AUTHOR'S PREFACE

In 1961 I had the good fortune to be appointed to the Royal Navy Staff at Gibraltar and the next three years proved to be some of the happiest of my life. During this period I travelled very extensively through the adjacent parts of Spain up to some fifty thousand miles and, like others before me, soon fell completely under the spell of Andalucía.

A keen amateur gardener, I was at first chiefly concerned with recording and photographing the wild flowers of the region, but, as time passed by, I became increasingly interested in the history, customs and geography of the many fascinating places that I visited.

Very little detail has been written recently about the country covered and it was only by dint of considerable research in books long out of print, that I was able to learn something about it. A number of travellers' guides like Fodor's *Guide to Spain and Portugal* are excellent value but the Iberian Peninsula is so big that the remoter parts obviously cannot be described in depth. Of the few relevant books, I would particularly select Sacheverell Sitwell's *Spain* and Gerald Brenan's *South from Granada* as giving one great insight into, and understanding of the people of southern Spain.

Botanically it cannot be said that the region has not been well covered for, from the bibliography, it will be seen that there is indeed a plethora of old works which, dare I say it, leave the poor amateur more confused than ever. Despite copious notes and the collection of over five hundred specimens of dried plants, I found identification extremely difficult. Had it not been for the generous help of several experts, whom I have listed at the end of this preface, I would have been defeated frequently. From the amateur's point of view, the recent publication of *Flowers of the Mediterranean* by O. Polunin and A. J. Huxley is a tremendous step forward. At last we have something accurate and reliable that contains numerous fine photographs and line drawings to assist in the naming of plants. If my little book is read in conjunction with this splendid offering, many of the earlier difficulties will fade away.

This book, therefore, is designed to fill a gap in present knowledge and to present, in an easy and digestible form, the kind of information needed by amateur plantsmen. It is also intended to assist those enthusiasts who are attracted by unusual places and who usually have all too little time to make the most of their stay.

When using botanical names I have followed the nomenclature of *Flora Europaea* as far as it goes to date. Where plants have not been covered by this flora I have used the Royal Horticultural Society's *Dictionary of Gardening*, when appropriate.

In compiling the monthly lists of plants for an appendix at the end of this book I have decided to arrange them in alphabetical order. This is partly due to the fact that, with the complete survey

of the European flora currently in progress, any botanical arrangement is likely to become outdated very quickly. Rather more however, an alphabetical arrangement enables both the non-technical reader and the professional speedily to locate a plant.

The age of leisure is increasingly upon us and already nearly two million British visit Spain annually. More and more of them are turning to new hobbies such as amateur botany, plant photography, archaeology and so on, which will inevitably lead people off the beaten track to the kind of places described in this book. How long the beautiful countryside of Andalucía will stay virgin, it is hard to say, but I somehow feel that much of it will remain unrequested for a long time to come.

There are several reasonable maps of Andalucía but I have found the Firestone series the best.

In conclusion, I am often asked by friends to advise them on the best time of year to visit Andalucía and usually have difficulty in answering them, since so much depends on what they go for. For a guarantee of sun any time from May onwards is best but, for the plantsman, the great floral display reaches its peak in April.

Acknowledgements:

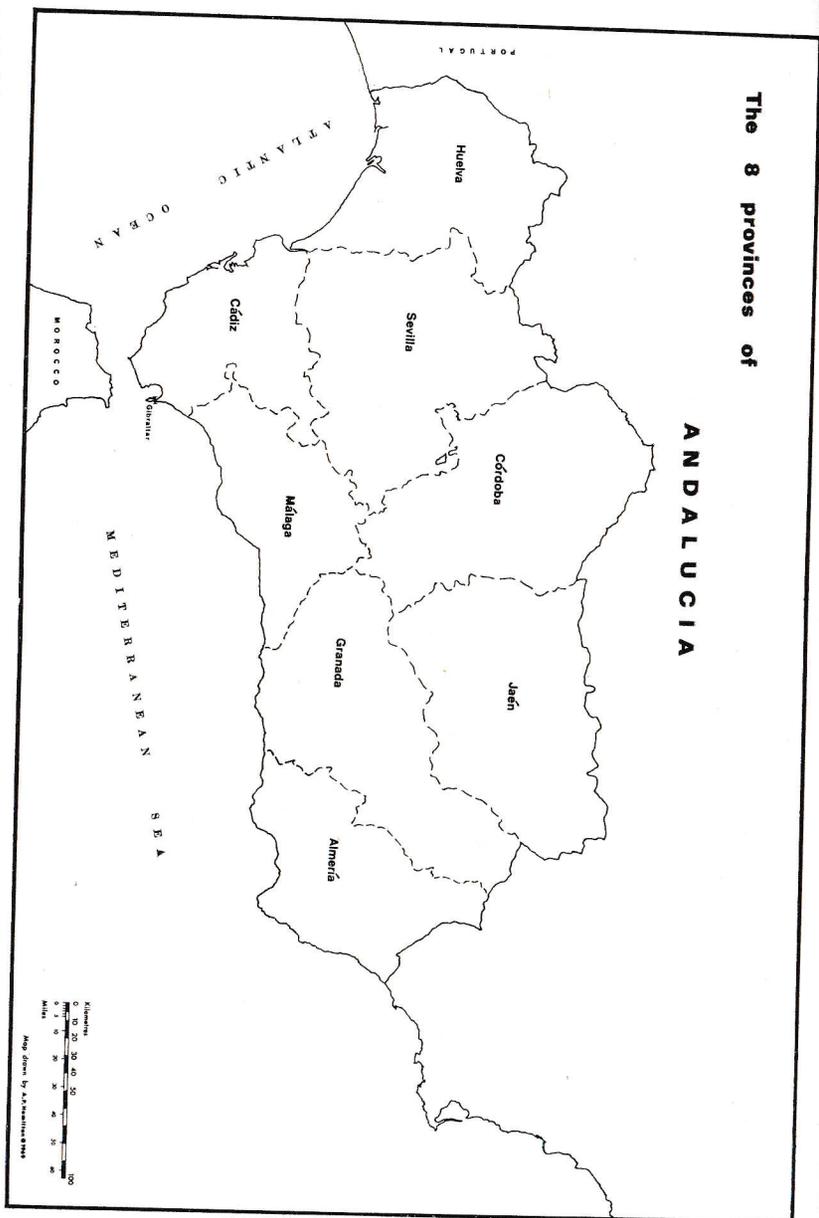
Editor's Note—In the brief and incomplete notes for his book that Lt.-Cdr. Stocken left, he lists four people for acknowledgement; three are mentioned here. First is Mrs. D. Brinton-Lee who not only has the good fortune to live at San Roque but also has a very detailed knowledge of the local plants. This knowledge, most generously shared, was of the greatest assistance in helping Stocken to avoid unrewarding areas. At Edinburgh, Miss C. W. Muirhead and her colleagues at the Royal Botanic Garden Herbarium, provided valuable help in identifying awkward pressed specimens, especially those from Morocco. For the Spanish material particularly, Prof. V. H. Heywood and the staff of the herbarium at the Hartley Botanical Laboratories, University of Liverpool, kindly assisted by naming further batches of dried plants.

Mariners,
Thurleston,
Nr. Kingsbridge,
S. Devon.

C. M. STOCKEN
July 1966

The 8 provinces of

ANDALUCIA



Andalucía is the area of Spain that lies south of the Sierra Morena and west of Cabo de Gata. It is essentially the "tourists' Spain" with bull-fighting, fiestas, flamenco dancing, sherry and the Alhambra. The eight provinces together cover 97,000 square kilometres and several of the natural features of Andalucía have much in common with the geography of Africa. Thus the brightly coloured badlands are similar to areas of eastern Morocco and the black soils of the gently rolling *campiña* are the same as the clay *tierras* of the Ghazal. Besides the common geology of much of Andalucía and north Africa, there are close similarities between their fauna and flora. These were brought about by the land connections that existed across the Straits of Gibraltar prior to, and just after, the Quaternary glaciation.

CHAPTER I

GIBRALTAR

Access—Climate—History—Circuit of the Rock—Flora—The Upper Rock—Geology—Gibraltarians.

The first sight of this great leviathan of nature is a thrilling one for, essentially, it is a limestone mountain that rises dramatically and steeply out of the sea to nearly 1,500 feet. For a thousand years or more men have fought and died for its possession and left their marks.

Gibraltar, usually dubbed "the Rock," may be reached with little difficulty by sea, land or air; the choice depending, naturally, on the means and time available. The sea route, short but restful, has much to commend it, there being several shipping lines whose liners call regularly and a car ferry service runs from Southampton to the port of Algeciras across the bay. Parts of the overland route are somewhat tedious but it can be great fun if there is time for meanderings through such delightful spots as Andorra or Portugal. One can drive down by the direct route in less than three days but this is clearly no holiday. Rail travel is comfortable and it is possible to reach Gibraltar, and the main cities of Andalucía, in thirty-six hours from London by way of Paris, Irun and Madrid; the rail terminal being Algeciras.

However, for those who wish to put to good use every minute of their time, the air service is ideal and splendid value for money; one can also land at Málaga some eighty miles up the coast. Although Spanish road and rail services are moderately efficient, they are somewhat sparse and liable to sudden curtailment. Thus, it is almost essential to have one's own transport if this fascinating country is to be seen properly. This problem is easily resolved by hiring a car from one of several garages in Gibraltar or on the *Costa del Sol*.

The abrupt transition in a few hours from a chilly England, under gloomy skies, to the searing Andalusian sunlight is always memorable. Also, few approaches can be more spectacular than running in over the dark blue Mediterranean to land on the airstrip a bare half mile from the vertical fifteen-hundred-foot north face of the Rock. At one time I entertained high hopes of climbing it and, in company with a friend, did indeed succeed in scaling the first three hundred feet which, from appearances, is the most difficult section of the climb. Thereafter we had to desist when officialdom reluctantly stepped in and withdrew permission because of the likelihood of electrical discharge from the adjacent transmitting aeriels.

Several brochures are available that give useful information on Gibraltar. There are hotels to suit all pockets but nevertheless, it is prudent to book beforehand since they are popular. First impressions are important and what better than to leave the airport in one of the local *gharris* and savour the sights and smells at a slower tempo.

The climate is a delightful one with none of our English uncertainties about it; here the seasons are clear cut and largely predictable. Reflect how marvellous it can be to be able to plan every weekend from mid-April to October knowing that almost every one of them will be fine.

The rains come with a vengeance during October and, by the end of January, most has fallen; the amount gradually tapering off until May when only two or three inches are received. There was a period of fifteen consecutive years, not so long ago, when no rain whatsoever was recorded during July and August. Temperatures too are very agreeable, rarely dropping below 40°F (5°C), although

this seems cold when the wind is in the northerly sector. In summer they seldom exceed 85°F (30°C) and there is always a breeze. During levanter conditions, that is when an easterly wind is blowing, conditions are extremely humid and enervating and it is best to escape into Spain until a weather change.

If one wishes to see everything on Gibraltar, at least two days are required and even this is barely sufficient. A study of the Rock's turbulent history in the library and a visit to the museum will be well repaid and enable the visitor to appreciate the full significance of some of the more startling events in an incredible saga.

Chief of these, I would place the three year defence of the Rock by Sir George Eliott against the combined Franco-Spanish forces from 1779 to 1782, especially the heroism and sheer audacity of the Great Sortie of 1781 when the defenders swept out one night to spike the besiegers' guns and destroy their earthworks.

Gibraltar is first recorded in history when in A.D. 711 the Arab conquerors of North Africa (the Moors) crossed over the mainland of Europe under the command of Tarik-ibn-Zeyad and, after their capture of Algeciras, seized the Rock for its strategic value. It then became known as Gibel Tarik, or mount Tarik, and remained in Moorish hands for some seven and a half centuries. After numerous attempts, it was finally recaptured on the 20th August, 1462, the feast of St. Bernard, who became the Patron Saint of Gibraltar. During the war of Spanish Succession, Vice-Admiral Sir George Rooke appeared in the bay on the 21st July, 1704, at the head of an Anglo-Dutch fleet and, after three days, the defenders surrendered. In 1713 Gibraltar was ceded to England by the Treaty of Utrecht but the Spaniards never gave up hope of recapturing it and there were several sieges culminating in the start of the Great Siege in 1779. A study of the old prints and a visit to the Upper Galleries and St. George's Hall is most instructive. Here a series of tunnels was driven through the cliffs on the north side, so enabling a powerful raking fire to be opened up on the flanks of the besiegers below.

Since those days and particularly during the last world war, the system of galleries has been gradually extended until the Rock is now a veritable honeycomb, capable of absorbing almost all its inhabitants in an emergency. During these operations a number of natural caves were discovered, the best known being St. Michael's Cave in the Upper Rock, which has been imaginatively floodlit and made accessible to visitors. Beneath this cavern lie another series discovered only recently, but only the military authorities can give permission to visit them.

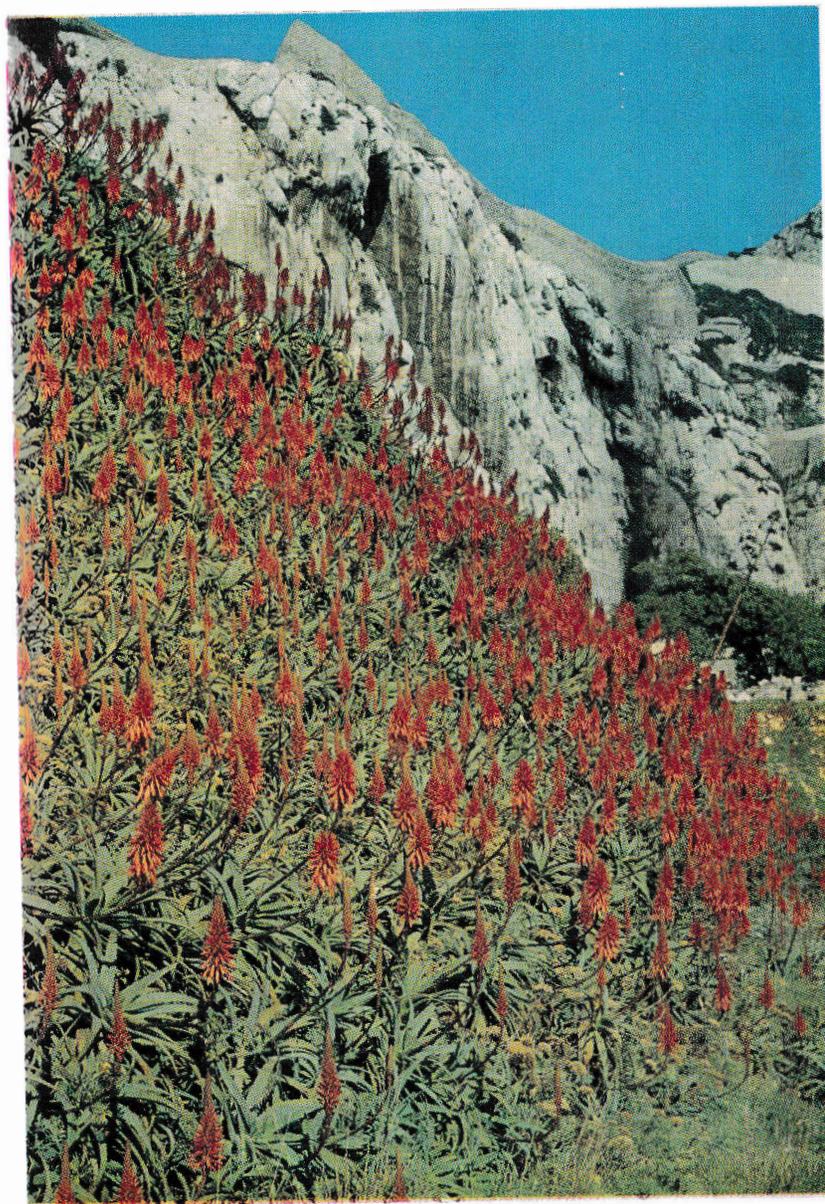
Gibraltar has always faced a water shortage, not that there is insufficient rainfall, but it all comes at once and the problem has been one of storing it before it all runs into the sea. Over the last hundred years various catchments have been built, the largest covering much of the eastern face of the Rock and these have almost allowed the demand to be met, the shortfall being made up by chartered tanker.

Huge storage tanks holding some 15 million gallons have been blasted out inside the rock near the Moorish Castle and, subject to the Town Clerk's approval, a walk round these waterworks is very well worthwhile. Actually most of the older houses have their own cistern, obligatory by law, and in my own house we enjoyed cool pure rainwater all the year round.

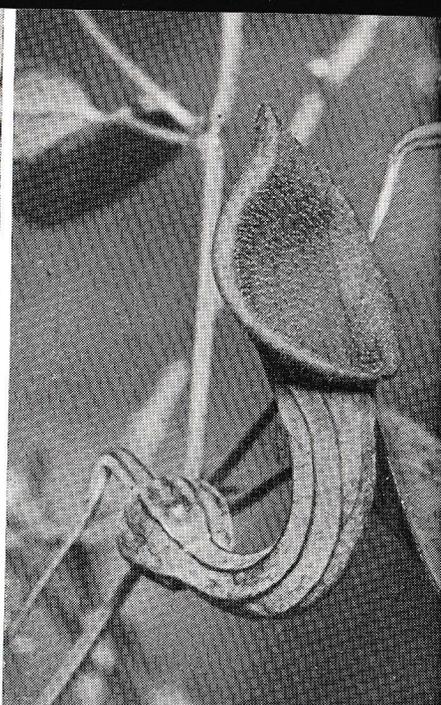
The town itself is typically Mediterranean, narrow streets and dark alleyways, long flights of steps, shuttered windows, high balconies, and hidden walled gardens. In these one can sit under a Canary palm, *Phoenix canariensis*, in the evening cool and enjoy the fragrance of the orange trees and the splashes of colour provided by *Hibiscus*, *Plumbago* or some huge clambering *Bougainvillea*. Close by the Southport gate lies an old cemetery where some of Nelson's dead lie buried and, each year, there is a short service of remembrance followed by an impressive address given by the local Flag Officer.

After Trafalgar the body of the hero himself was actually landed at the old victualling yard in Rosia Bay for pickling prior to the start of its long journey home.

Between the conspicuous Rock Hotel and the naval dockyard lie the Alameda Gardens, where there is always something colourful to be seen in the beds beside



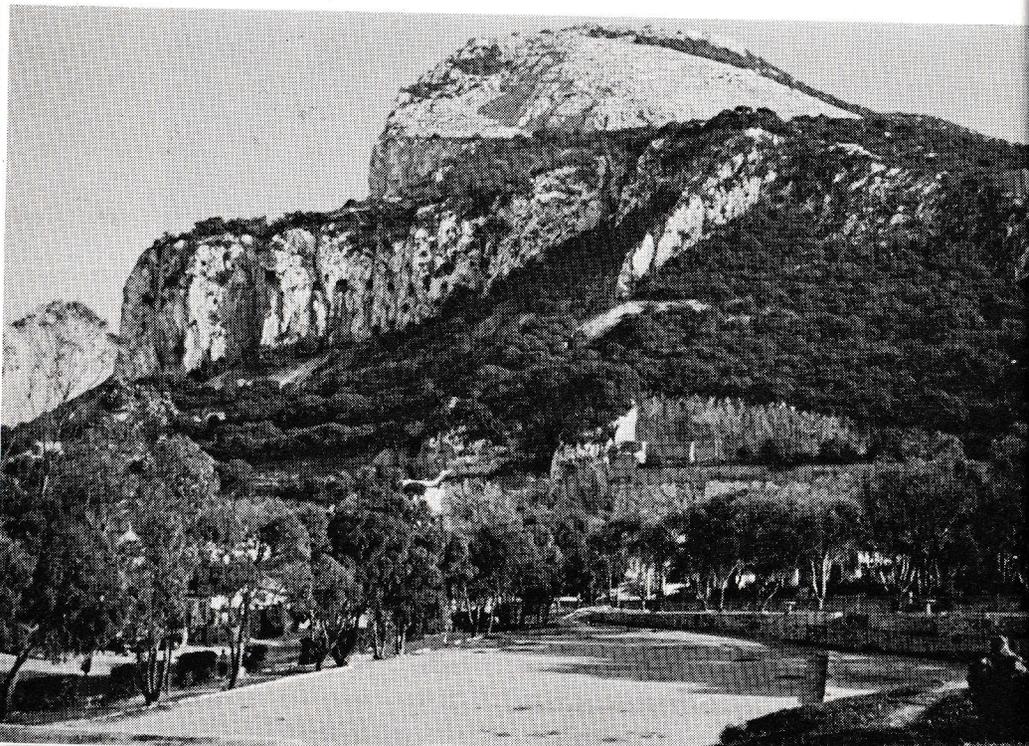
A native of southern Africa (from Rhodesia to Natal), *Aloe arborescens* has become well naturalized on Gibraltar where it is used for hedges or covering otherwise unsightly banks. The flowering season starts in the late autumn and continues for three to four months.



A frequent climber over trees and shrubs is the Pipe Vine, *Aristolochia baetica*. Several stages in the development of the extraordinary flowers can be seen (upper left) while the close-up (upper right) reveals the interesting details of the brownish-purple tubes—March. (Below) An unfamiliar view of the north end of Gibraltar, taken from near the site of the Grand Battery, shows the thickly wooded nature of the middle slopes.



The Tree Houseleek, *Aeonium arboreum*, a native of Morocco is found on cliff localities on Gibraltar (above). The flowers, a green-yellow (upper right), are at their best in January and February.



Acanthus mollis (right) is common on the west side of Gibraltar. Good displays in June follow after the clearing of scrub; e.g. for firebreaks (above).





Two climbers found over the trees of the middle and upper slopes. *Clematis cirrhosa* (above) with large hanging creamy-white flowers in January and February. A form with purple throat marks has also been reported from Gibraltar. *Lonicera implexa* (below) carries fragrant cream blossoms in April and May which are marked with red on the outside of the tubes.



Very common all over Gibraltar is the Friar's Cowl, *Arisarum vulgare* (above). The basic colour of the spathe is creamy-white with green and purple spots and stripes that lead to a dark brown-purple cowl. *Romulea clusiana* (below) is probably the most spectacular of the European species. Flowering in February it carries, on short stems, large violet-mauve goblets with a bright golden centre edged white.





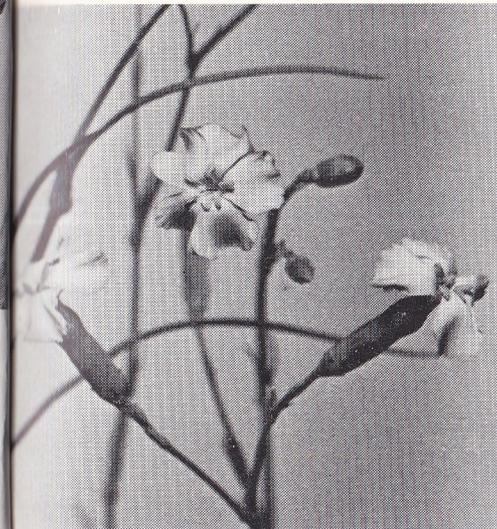
An "autumn crocus," *Colchicum lusitanum* (above), is found locally on grassy slopes around Gibraltar. The flowers are deep purplish-pink with tessellations over the tepals. Appearing in October and November, the flowers are followed later in the winter by narrow glossy leaves.



Delphinium gracile (above) a biennial (or annual) carries lilac-violet flowers with long spurs on very slender stems during the summer months. *Gladiolus communis* (left) is well represented on the upper slopes of Gibraltar. Flowering in May, its tepals are a bright pink marked with white diamond shapes, edged carmine.



Gibraltar is one of the few places in the Mediterranean where Europe's only native palm, *Chamaerops humilis*, attain its true stature. It is normally cut for cattle bedding or weaving. On the high east slopes the telephoto (above) shows trunks reaching 15 feet and the reverse view (upper right) their habit and ground flora.



The wild Carnation, *Dianthus caryophyllus* (above), is rare on Gibraltar and usually grows on inaccessible crags. In July and August it carries strongly fragrant purplish-pink flowers, nearly an inch across, on graceful stems up to two feet long.

