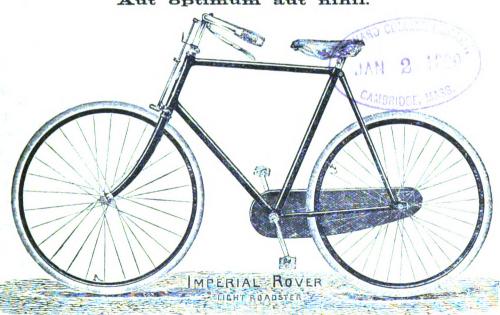


Published under Official Authority, on the 1st of each month, at the Chief Offices of the Cyclists' Touring Club, 139 & 140, Fleet Street, London, E.C.

## ROVER CYCLES. IMPERIAL



The weight as above, with leather chain cover and detachable brake, 27lb.

FULLY ILLUSTRATED PRICE LIST FREE ON APPLICATION TO

J. K. STARLEY & CO. LIMITED, Meteor Cycle Works, West Orchard, COVENTRY.

PARIS-52, RUE DE DUNKERQUE.

LONDON-5, HOLBORN VIADUCT, E.C.

# Woods' Patent Galvanized Woven Wire Sadd

VIBRATION REDUCED TO A MINIMUM.

EASE AND VENTILATION PERFECT.

A PANACEA FOR SADDLE SORENESS.

BOON TO TOURISTS AND LONG . DISTANCE RIDERS.



After a prolonged trial I have decided to segon Woods' Wire Saddle in the forthcoming race from Bordeaux to Paris, as I find it most comorable and cool.—Yours truly,

March 1976, 189.
March 1976, 189.
March 1976, 189.
roads, I find it one of the best and one of the esset satdles I ever sat on, and, in my opinion, should be will to the front in 1895.—Pours truly, J. E. RIDOUT.

I am pleased to say I have given your Saddle thorough trial. It is very confortable, and I hat decided to use it on my forthcoming ride to Mosov Yours faithfully.

R. L. JEFFERSON.

The Longford Wire, Iron, and Steel Co. Limited, Warrington,



#### "MOONLIGHT" CYCLE VAPOUR LAMP.

r. Instantaneous Lighting. 2. Much more brilliant light than from Oil. 3. No Wick trimming. No Oil. No Dirt. No Smell. Price 13/-, post free.

#### MOONLIGHT" POCKET LAMP.

Invaluable for Cyclists, Photographers, &c.

Price 1/6, post free. For full particulars of these and other Lamps, see Catalogues and Press Opinions, free on

Inventors and Sole Makers :-

Moonlight Patent Lamp Co., Liverpool.

## CYCLING IN

GOOD ROADS AMONG CHARMING SCENERY.

## TEN DAYS' HOLIDAY FROM LONDON FOR EIGHT GUINEAS.

Covering Return Saloon Ticket and Hotel Expenses. First-class accommodation throughout.

The splendid Wilson Liners, Orlando and Domino sail from TILBURY alternately every Friday morning, May to October.

For full particulars apply to

W. E. BOTT & CO., 1, East India Avenue, E.O.



Our Detachable and **Portable** 

## MUDGUARDS

ARE THE BEST.

KEYS & FOX, 4, Livery St., Birmingham.



Send for

List.

and Press

Notices.

THE LATEST NOVELTY SEMMIESS KNITTED CYCLING Elastic, Durable & Healthy. OUR SEAMLESS

are a boon to Ladies and Gentlemen. The most com-fortable Garments fortable Garments yet invented for Cycling, Riding, and Boating. They are easily washed, and are durable and eco-nomical in price. Will wash without PANTALOONS AND KNICKERS.

will wash without shrinking.
Please also notice our complete
KNITTED
CYCLING SUITS.

Price List, sent Free.
Mention "C.T.C. Gazette." Co Knitted Corset 118, Mansfield Road, NOTTINGHAM.

Write to-day for Illustrated

TRADE TERMS TO C.T.C. MEMBERS

THE

**W-S-M** Popular Roadster,

With Pneumatic Tyres,

From £10 Nett.

Price List on application.



A11

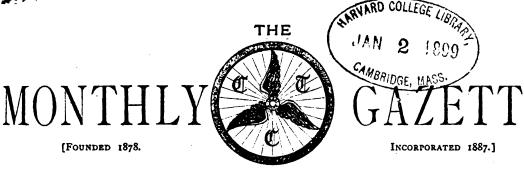
Machines Guaranteed

Best Material,

Best Workmanship.

W. M. APPLETON, Boulevard Cycle Works, Weston-super-Mare

Digitized by GOOGLE



## And + Official + Record.

No. 5. Vol. XIV. [NEW SERIES.]

MAY, 1895.

All Communications relating to the Editorial and Literary Departments of the "Gasette" to be addressed to "the Editor" and to Club Business (orders for Uniform excepted—for which see special notice upon another page) to "the Secretary," at the Chief Offices: 139 and 140, Plett Street, LONDON, E.C. Matters upon which a reply is desired must be accompanied by a stamped and addressed envelope, and Members should quote their Membership Numbers upon all eccasions. All Contributions intended for insertion in the "Gasette" must reach the Editor not later than the morning of the 20th of the month.

#### Contents.

	COMPANION TO THE ROAD BOOK 133	
OFFICIAL NOTICES 127	THE LADIES' PAGE 139	TAILORS' LIST 150
THE COUNCIL 128	PROSPECTIVE TOURS 140	CANDIDATES' LIST 15
MECHANICAL AND PRACTICAL - 129	MISCELLANBOUS PARAGRAPHS 140	ALTERATIONS AND ADDITIONS TO
WRETS AND MERTINGS - 132	COVENTRY NOTES 141	HANDBOOK 15
INSWERS TO CORRESPONDENTS 132	CORRESPONDENCE 141	REVIEWS AND NOTICES 15
<del>_</del>	· · ·	



As the outcome of further repre-FRENCH sentations made to the French Customs' Minister of Finances by the C.T.C., CHARGES. our members will in future be allowed free entry with their machines at Caen, Granville, and Bordeaux, upon production of the current year's membership ticket. The same privilege will also be accorded in Paris to all members who may book from England direct to the capital, and members who may cross the frontier out of France into Germany, Switzerland, Italy, etc., will be readmitted at any Custom House upon the French frontier, provided that, before leaving France, they see that the usual leaden seal is attached to their

machines.

These privileges, like those previously accorded, may be withdrawn at any moment if they should be subjected to abuse, and we therefore hope that members will zealously conserve the interests committed to their keeping. Calais, Boulogne, Dieppe, Havre, Caen, Cherbourg, Granville, St. Malo, Bordeaux, and Paris (Gare du Nord and Gare St. Lazare) are now absolutely free to members of the C.T.C., and although it has not as yet proved practicable to obtain

a similar privilege for the member who may enter France for the first time from over the frontier, we live in hope that even this concession may one day be made.

While the C.T.C. in its corporate AN INSULAR capacity has been agitating for the VICTORY. privileges referred to above, the Northumberland and Durham District Association has achieved success in its endeavours where the obtaining of special rates for the conveyance of cyclists and their machines on the North Eastern Railway is concerned.

The list of tours, and with special rates applying, is as follows:—

Commencing on Wednesday April 10th, tickets at reduced fares, available for a fortnight from date of issue, will be issued for the following tours.

(Passengers cannot break the journey at intermediate stations.)

TOUR No. 1c. — From Newcastle to Darlington, and return from Stockton; or from Newcastle to Stockton, and return from Darlington. Fares: First class, 7s. 2d.; third class, 4s. 5d. Charges for bicycle, 2s.; tandem, 3s.; tricycle, 4s.; sociable, 6s.

tricycle, 4s.; sociable, 6s.

TOUR No. 2c.—From Newcastle to Carlisle, and return from Hawes; or from Newcastle to Hawes, and return from Carlisle. Fares: First class, 13s. 2d.; third class, 8s. 2d. Charges for bicycle, 2s. 6d.; tandem, 3s. 9d.; tricycle, 5s.; sociable, 7s. 6d.

TOUR No. 3c.—From Newcastle to Carlisle, and return from Appleby; or from Newcastle to Appleby, an t return from Carlisle. Fares: First class, 12s. 4d.; third class, 7s. 8d. Charges for bicycle, 2s. 6d.; tandem, 3s. 9d.; tricycle, 5s.; sociable, 7s. 6d.

Tour No. 4c. - From Newcastle to Haltwhistle (37 miles), and return from Alnwick; or from Newcastle to Alnwick, and return from Haltwhistle. Fares: First class, 6s. 8d.; third class, 4s. 2d. Charges for bicycle, 1s. 6d.; tandem,

2s. 3d.; tricycle, 3s.; sociable, 4s. 6d.
Tour No. 5c.—From Newcastle to Belford (511/2 miles), and return from Brampton; or from Newcastle to Brampton, and return from Belford. Fares: First class, 9s.; third class, 5s. 7d. Charges for bicycle, 2s. 6d.; tandem, 3s. 9d.;

tricycle, 5s.; sociable, 7s. 6d.

TOUR No. 6c. - From Newcastle to Carlisle (67 miles), and return from either Berwick or Wooler; or from Newcastle to Berwick or Wooler, and return from Carlisle. Fares: First class, 11s. 4d.; third class, 7s. 1d. Charges for bicycle, 2s. 6d.; tandem, 3s. 9d.; tricycle, 5s.; sociable, 7s. 6d.

TOUR No. 7c.-From Sunderland to Darlington, and return from Stockton; or from Sunderland to Stockton, and return from Darlington. Fares: First class, 5s. 8d.; third class, 3s. 4d. Charges for bicycle, 1s. 6d.; tandem, 2s. 3d.;

tricycle, 3s.; sociable, 4s. 6d.

Tour No. 8c.—From Sunderland to Stokesley, and return from Northallerton; or from Sunderland to Northallerton, and return from Stokesley. Fares: First class, 8s.; third class, 4s. 7d. Charges for bicycle, 2s.; tandem, 3s.; tricycle, 4s.; sociable, 6s.

TOUR No. 9c.-From Sunderland to Carlisle, and return from Hawes; or from Sunderland to Hawes, and return from Carlisle. Fares: First class, 13s. 9d.; third class, 8s. 4d. Charges for bicycle, 3s.; tandem, 4s. 6d.; tricycle,

6s.; sociable, 9s.
Tour No. 10c.—From York to Ripon, and return from Richmond; or from York to Richmond, and return from Ripon. Fares: First class, 7s.; third class, 4s. 5d. Charges

for bicycle, 2s.; tandem, 3s.; tricycle, 4s.; sociable, 6s.

TOUR No. 11c.—From York to Askrigg, and return from Ripon; or from York to Ripon, and return from Askrigg. Fares: First class, 8s.; third class, 5s. Charges for bicycle,

2s.; tandem, 3s.; tricycle, 4s.; sociable, 6s.

Tour No. 12c.—From York to Pickering, and return from Thirsk; or from York to Thirsk, and return from Pickering. Fares: First class, 5s.; third class, 3s. Charges for bicycle, 1s. 6d.; tandem, 2s. 3d.; tricycle, 3s.; sociable,

TOUR No. 13c.-From York to Harrogate, and return from Thirsk; or from York to Thirsk, and return from Harrogate. Fares: First class, 4s.; third class, 2s. 5d. Charges for bicycle, 1s.; tandem, 1s. 6d.; tricycle, 2s.;

sociable, 3s.

The fares quoted are a material reduction of those usually payable, and in many cases the charge for the conveyance of machines is sensibly abated. This being so it must inevitably follow that cyclists will be tempted to go farther afield, and to explore regions which have hitherto been inaccessible to them save at extended holiday periods.

The victory has been won by sheer pertinacity, and the Association deserves to be congratulated upon the

success that has attended its efforts.

The Easter holidays were unfortu-BRAKELESS nately rendered memorable by the numerous accidents-many of them MACHINES. fatal-attending the use, or abuse, of the cycle. With few exceptions these mishaps were attributable to the fact that the machines were unprovided with brakes, and they accordingly became unmanageable. This is a very serious matter, and it cannot fail to have a deterrent effect upon the general public, who were looking with a friendly eye

upon this means of locomotion, and who in many cases were prospective recruits. The fault is primarily that of the idiots who put lightness and speed before comfort and safety-a section to whose opinions the fatuous manufacturer of the present day invariably defers, to his lasting discredit and ultimate loss.

A few of our contemporaries have recognised the evil. The Cyclist, in its issue of the 24th ult., had an admirable article thereon, and the News of the Wheel has more than once laid it down that "the man who rides a brakeless machine over unknown roads is a fool"; but the impression these accidents—these avoidable accidents—leaves behind them is deep-felt and lasting, and it behoves every lover of the pastime to make it clear to all with whom he may come into contact that they form no part of the legitimate risks attaching to the use of the cycle.

A body known -at any rate to the A Word of promoter—as the Road and Path WARNING. Cycling Association, was some five years since projected for the purpose

of taking the interests of the wheelman into its care, and superseding both the N.C.U. and the C.T.C., but for some reason it failed to materialise. The scheme is now apparently revived by the prime mover, Mr. R. Banner Oakley, who advances sundry and various reasons why—in his opinion—cyclists should invest with him either 2s. 6d. or 5s. as an entrance fee, and either 5s. or one guinea as a subscription, the amount being apparently determined by the measure of self-conceit possessed by the applicant. Such a scheme is, unless we greatly mistake, foredoomed to failure, and it would hardly be necessary to expose its absurdities were it not for the fact that the promoter strongly recom-mends the members of his association to join the C.T.C., to which end—generous promoter !—he offers to pay half the annual subscription to the latter body.

The C.T.C. knows nothing officially of Mr. R. Banner Oakley, and the use by him of its name and prestige—apparently for his own personal ends—is

unwarranted and uncalled for.

The Handbook for the current year THE NEW is going like wildfire, and the reason HANDBOOK. is not far to seek, for without it no member can hope to derive full benefit

from his connection with the Club. The new edition has been favourably received by the daily as well as the cycling press, all being unanimous in its praise. The Cycle voices the sentiments of its contemporaries

thus :-

"Very appropriately, just before Easter, the Cyclists' Touring Club has issued its Handbook and Guide for 1895. Of course it is a most complete one, and it has increased in size wonderfully—a sure sign of the growing influence of the big organisation by which it is issued. The adoption of the new hotel system has necessitated a radical change in the tabular part of the volume. The new system is simplicity itself. Under it the proprietor of any respectable hotel, no matter what its grade nor whether it be a licensed or a temperance house, is first asked what are his ordinary charges to the general public, and next what discount in the shilling he is willing to allow to members of the C.T.C., who produce their tickets. Thus it is that in the new Handbook just published the tariffs of the majority of the hotels are plainly set out in full, and one is able to see at a glance

Digitized by GOOGIC

what is saved in regard to hotel charges by membership in the C.T.C. This rearrangement of the hotel system must have entailed an immense amount of work on the Secretary and the Chief Consuls and Consuls all over the country. We think if the objects and advantages of the Touring Club were more frequently placed before cyclists, that organisation would receive a much larger accession of new members than it now does."

while the *Daily News*, dealing with it from the standpoint of a non-technical journal, said of it:—

"In the new 'British and Irish Handbook and Guide,' issued for the information of that large body the Cyclists' Touring Club, particulars are given of the new arrangements made on their behalf with hotel-keepers all over the kingdom. Hitherto, as is well known, there has been a uniform charge of half-a-crown for dinner, and so forth, to those presenting their cards of membership at the houses entered on the Club list. The difficulty was that this prevented hotels of the higher class from entering into the arrangement, the tariff charged being considerably below that usually charged by them, whereas on the other hand at places like the smaller temperance hotels the prices were in excess of those charged in the regular way of business. Under the new system any hotel may cater specially for cyclists. It suffices for them to offer a substantial reduction of not less than 12½ per cent. on the ordinary tariff. As members are not required to show their cards until after they have had their bill made out, it is assumed that the reduction will be a real one, and not a mere deduction of 121/2 per cent. previously added to ordinary charges. Of course, should any hotel-keeper resort to this stratagem with customers who present themselves on bicycles, their names will, on satisfactory proof of the fact being afforded, be struck from the list.

The book was produced under great pressure, and it may yet be improved upon, but in its present form it serves to show what increase in bulk is rendered necessary by the new hotel system, and it also shows that the system itself is practicable—a thing some of its opponents were inclined to doubt. The work has cost more than is charged for it, but we shall nevertheless be glad to receive orders for the remaining copies, so that the loss may be reduced to the minimum.

Much correspondence has of late "HOW TO appeared under this head, and many ENLARGE AND have been the prescriptions put for-STRENGTHEN ward to meet the case. We doubt, THE CLUB." however, whether any one will prove

THE CLUB." however, whether any one will prove half as efficacious as the personal effort, to which was formerly attributable a membership roll considerably in excess of the present figures. The real truth is tens of thousands of riders who have taken to cycling within the last few years are absolutely ignorant of the existence of the C.T.C. A very large proportion of these would not only prove desirable additions but they would willingly join if they were asked to do so. The difficulty is to engage their attention so as to point out that, even if they are not likely to derive direct monetary benefit from membership, the fact that the C.T.C. was instrumental in securing for cyclists many of the privileges they now accept as a matter of course, and that it stands committed to still greater achievements, forms a more than sufficient claim to their support.

Lis not easy to epitomise the history of the last years and compress it into small compass,

but an effort to this end has been made in the new prospectus-application enclosed herein. With this at his disposal no well-wisher of the C.T.C. can excuse himself for not endeavouring to secure desirable recruits, and we commend it to his kind attention accordingly.



## CHIEF CONSULAR VACANCIES. SPECIALLY IMPORTANT.

Through the resignation of the former officers, or the imminent retirement of the present ones, the following counties are in need of Chief Consuls:—

ENGLAND—
CHESHIRE.
ESSEX.
WALES—

Shropshire. Westmorland.

Brecknock.

Cardigan.

SCOTLAND—

AND—

CAITHNESS.
ORKNEY AND SHET-LAND ISLES. SELKIRK. SUTHERLAND.

IRELAND-

Armagh. Kilkenny.

Monaghan. Tipperary.

FOREIGN-

BELGIUM AND LUXEM-BOURG. Austria-Hungary.

BOURG. SPAIN. HOLLAND.

Any two members are entitled to nominate a candidate upon the form obtainable gratis of the Secretary, and the co-operation of the membership to this end is cordially invited.

#### CONSULAR VACANCIES.

The undermentioned vacancies have been notified to us by the Chief Consuls set over the various counties referred to, and members willing to act are requested to communicate with the Chief Consul of the county concerned, or with the Secretary.

DEVONSHIRE.—(Chief Consul, H. M. Rankilor, Blundell's School, Tiverton.)— Ashburton, Brixham, Bampton, Chulmleigh, Clovelly, Colyton, Combe Martin, Hatherleigh, Holsworthy, Kingsbridge, Lynton or Lynmouth, Okehampton, Princetown, Seaton, South Brent, South Molton, and Stokenham.

HERTFORDSHIRE.—(Chief Consul, H. Croydon Roberts, 28, Notting Hill Terrace, London, W.)—Abbotts Langley, Barnet, Baldock, Buntingford, Hatfield, King's Langley, and Watford.

MIDDLESEX. — (Chief Consul, H. Croydon Roberts, 28, Notting Hill Terrace, London, W.)—Edgware, Hounslow, Staines, Twickenham, and Whetstone.

SOMERSETSHIRE.—(Chief Consul, Tudor-Llewellyn, The Nut Grove, Chew Magna, near Bristol.)—Chard, Crewkerne, Dulverton, Glastonbury, Langport, Minehead, Porlock, Stoke-under-Ham, Wells, and Wincanton.

YORKSHIRE (EAST RIDING) .-- ( Chief Consul, A. E. Paulsen, 85, De Grey Street, Hull.) — Aldborough, Beeford, Brandesburton, Cottingham, Flamborough, Hedon, Hornsea, Howden, Leven, Market Weighton, North Cave, Pocklington, Sherburn, Skirlaugh, South Cave, Sproatley, and Welton.

### BRITISH ROAD BOOK—SCOTTISH SECTION. IMPORTANT.

As some difficulty is being experienced in obtaining full and satisfactory reports on roads in Sutherlandshire, will members who are willing to give the information communicate with the Editor?

ARTHUR POYSER, Springfield Terrace, Dunblane, Perthshire, N.B.

#### "RIGHTS AND PRIVILEGES."

The demand for copies of the Manifesto issued by the C.T.C. still continues. Members are again reminded that imprints upon paper or cardboard as the case may be are obtainable, post free, by all who make application therefor, and who will undertake to exhibit them in suitable positions. Free libraries, literary institutes, and club-rooms of all kinds afford excellent means of making known what are the rights and privileges of the cyclist, and what are the duties of all road users.

#### THE BRITISH HANDBOOK.

The Handbook for 1895 is now on sale. The book is admittedly a great improvement upon any of its predecessors, and every member should make it his duty to provide himself with a copy. Its contents comprise:—A full list of the hotels under contract with the Club throughout the United Kingdom, with particulars of the special tariff and discount applicable to each; a specially-drawn and valuable map; lists of officers; rules and regulations; instructions to Consuls; uniform and general information; hints as to touring, and repairing machines; a list of the Chief Consular Divisions, with the addresses of the officers set over them: railway rates; calendar; sunrises and sunsets; the phases of the moon; as well as a complete diary and riding record, etc., etc., etc.

The price is 1s., as hitherto, and, as the edition is limited, all who desire to possess a copy should make early application.

#### CONTINENTAL AND FOREIGN TOURING.

Members requiring information as to the Continent, and general hints as to the successful prosecution of a foreign tour, will do well to communicate, in the first instance, with the Chief Consul of the Foreign (General) Division (Mr. S. A. Stead, 30, St. George's Avenue, Holloway, London), when, in case the hints furnished require to be supplemented by local contributions, the Chief Consul of the country it is proposed to explore will gladly complete the needed details.

The C.T.C. Continental Road Book contains the fullest information of all the chief routes within the following areas:

- France (out of print; new edition preparing).
- II. Germany and Austria-Hungary.
- III. Belgium, Denmark, Holland, Italy, Norway, Russia, Servia, Spain, Sweden, Switzerland, and Turkey.

The price of the two last-named volumes is 3s. 6d. each (postage 3d. per volume extra).

The Continental Handbook, dealing with foreign countries in the manner that Britain is dealt with in the British Handbook, is sold by the Secretary at 1s. per copy.

#### HINTS TO THOSE WHO INTEND TOURING ON THE CONTINENT.

- 1. The C.T.C. Continental Road Book is a sine qua non for those who cycle on the Continent, and intending tourists should first get the volumes of it that they will require, and then trace their trip by the aid of a good road map.
- 2.—It is no part of a Chief Consul's duty to furnish information which is contained in the books published by the Club.
- 3.—I have a stock of Continental road maps, guides (Bædeker's, Murray's, etc.), books of Travel Talk, Dictionaries in French, German, Italian, and Spanish, including Bellow's French; Bædeker's Conversation Dictionary in English, French, German, and Italian, price 1s. 2d., post free (new). Beedeker's "Nord de la France," 1887 (new), 2s. 6d., post free, and the handy and valuable little vade mecum known as "The Continong.
- 4.—Temporary tickets of membership in the Touring Club de France (available for three months), and the Handbook of that body, can be had from the Secretary of the C.T.C. at the reduced price of 2s. 6d. and 1s. respectively.
- 5.—Our Foreign Handbook contains a vocabulary for cyclists that I compiled in English, French, German, and Italian, giving terms and phrases not found in any dictionary.
- 6.-Members living near London should, if possible, call on me by appointment, as I can answer questions faster verbally than by letter, and they can see the maps, guides, etc., that I have for sale. I am usually at home before 12.30 and after 5 p.m.

S. A. STEAD, Chief Consul Foreign General Division. 30, St. George's Avenue, Holloway, London.



The usual monthly meeting was held at the "Westminster" Temperance Hotel, Chester, on Saturday, 20th April, at 2.15 p.m.

#### PRESENT:

R.C. W. Cosens, Sussex (Chairman).
R.C. E. W. Burke, Ireland.
R.C. J. L. Denson, Cheshire.
R.C. W. Dickinson, Lancashire.
R.C. W. Dickinson, Lancashire.
R.C. F. L. Dodds, Yorkshire.
C.C. J. T. Lightwood, Lytham.
R.C. T. J. Scott, Lancashire.
C.C. T. W. Stainthorie, Redcar.
R.C. C. Wigan, Middlesex.
C.C. W. R. Wilson, Wrexham.
C.C. D. J. Wintle, Newihain-on-Severn.

R. R. Suirton S.

E. R. SHIPTON, Secretary.

#### RESOLUTIONS, ETc.

- 68. "That Dr. William Norris Marshall, of Newent, be appointed Representative Councillor of the County of Gloucester.
- That the resignation of Mr. G. T. Bruce, M.A., as Chief Consul of the Counties of Inverness, Nairn, Elgin, and Banf, be accepted with regret."
- 70. "That Mr. Charles G. H. Greaves, M.A., of the Royal Academy, Inverness, be appointed Chief Consul of the Counties of Inverness, Nairn, Elgin, and Banff."

71.—"That the Hotel Tariffs' Committee be re-appointed to consider the working of the new Hotel scheme, and, without disturbing the existing arrangements as far as the current season is concerned, suggest any amendments that may appear advisable in the future."

72.— "That the said Committee do consist of Messrs. James Lennox, Dumfries; E. W. Burke, Abbeyleix; George Bartram, Sunderland; T. W. Stainthorpe, Redcar; J. T. Lightwood, Lytham; Rev. E. B. Cooper, Amersham; Dr. F. Powell, Redhill; Messrs. H. Croydon Roberts, Charles Wigan, and E. R. Shipton, London, and H. M. Rankilor, Tiverton. Mr. George Bartram, to act as Chairman."

73.—"That the re-modelled Prospectus-Application form accompanying the present Agenda be adopted for general circulation.

#### REPORTS OF COMMITTEES.

#### FINANCE.

(a) The Chairman reported that as the arrangement under which the firm of T. B. Browne, Limited, were procuring advertisements for the Gazette was proving less and less satisfactory, the same had been terminated, and for the time being, at any rate, the work was being discharged by the Secretary.

#### MAP AND ROAD BOOK (ENGLAND AND WALES).

(b) The Chairman reported that no meeting of the Committee had been held, but that the work in connection with Vol. II. was progressing satisfactorily, and that the Committee hoped to be able shortly to make a more definite announcement as to the probable date of appearance of the work.

#### MAP AND ROAD BOOK (IRELAND).

- (d) The Chairman reported that his Committee were obeying the injunctions of the Council as expressed in Resolution 63 of the last meeting, but that the Editor had threatened to take up an altogether impracticable position. The matter was gone into at considerable length, and after much discussion it was resolved—
- 76.—" That the matter in dispute between the Editor of the Irish Road Book and his Committee be referred to the Honorary Consulting Solicitor, who shall be empowered to take such action as he and the Secretary may think desirable to protect the Club's interests."

#### RIGHTS AND PRIVILEGES.

(e) The Chairman reported that as the result of a further appeal to the French Minister of Finances the ports of Caen, Granville, and Bordeaux have now been thrown open to members of the C.T.C.; and that the arrangement whereby the machines of members are now admitted at all the chief French ports free of duty has also been extended to through bookings from England to Paris. It has further been arranged that members who may pass out of France over the frontier may return into France without being called upon to make any deposit.

He further reported that Danger Boards were continuing to be erected in various parts of the kingdom, and that steps had already been taken whereby four of the hills in the Sidmouth district (upon one of which a fatal accident occurred at Easter) would be efficiently safeguarded in future.

One or two cases of trivial assault, of which members have been the victims, had been advised upon.

No further information was forthcoming with regard to the opening of Hyde Park, though the First Commissioner was generally credited with a desire to amend the existing regulations at the earliest possible opportunity.

78.—"That further consideration of the Report of the Map and Road Book (Englandand Wales) Committee, as circulated with the Agenda of the last Council Meeting, be postponed until the Committee appointed by Resolutions 60 and 61 of the said Meeting has presented its report."

81.—"That the sum of £6 14s. 9d. be granted to the Northumberland and Durham District Association, in order that it may have the same fund this year as it had last for working expenses, namely, £10."

A prospectus from the Road and Path Cycling Association (wherein it was said that members joining that body must also become members of the C.T.C.—one half of their subscriptions being paid by the promoters) was considered, and the Secretary was directed to make clear the fact that the C.T.C. has no connection whatever with the Road and Path Cycling Association, and knows nothing of the arrangement above referred to.

The Secretary reported that the Northumberland and Durham District Association had achieved success in their endeavours to obtain special rates for the conveyance of Cyclists and their machines to certain towns on the North Eastern System.

macaines to certain towns on the North Eastern System.

An application from a Patent Agent that the Club would give permission to a firm of Cycle Manufacturers to register a trade mark which embodied wings arranged somewhat upon the pattern of those in the C.T.C. badge, was considered, but having regard to the great expense incurred and the trouble experienced by the Club in protecting its interests in this particular line, the permission sought was refused.

Comments upon the Agenda were received from the following absent Councillors:—Rev. J. A. Bain, Westport; Rev. W. H. Fea, Yorkshire; Dr. F. Powell, Redhill; Messrs. J. R. Balfour, Beith; G. Bartram, Sunderland; W. Kendall Burnett, Aberdeen; A. Butterfield, Grantham; J. J. S. Heslop, Durham; L. Kershaw, Halfax: F. Lewis, Kent; A. E. Paulsen, Hull; A. M. Porteous, Coldstream; E. M. Poole, Yorkshire; H. Croydon Roberts, London; H. C. Staples, Kent; G. Watson, Grouped Counties of England; and J. A. Williamson, Tynemouth.

The next Council Meeting will be held at Oxford, on Saturday, the 11th May, 1895.



By C. W. Brown.

#### [All rights reserved.]

Having dealt with the hubs, crank-bracket, and head of the modern safety, I have only to deal with the pedals, before concluding my remarks so far as the bearings are concerned. At one time pedals were very inferior, but four or five years ago ball-bearings were generally adopted to them, and thus the old-fashioned pedal with simply a parallel bearing, or else one of the cone variety subsequently fitted, dropped suddenly into disuse. Ball pedals, of a sort, became universally employed, and here the improvement ended, so far at least as the larger manufacturers are concerned. The average pedal as fitted to-day is without exception the most wretched example of the how-not-to-do-it school of cycling engineers which can be found. It displays almost all the errors which a bearing in its position can possibly have, for notwithstanding that it must necessarily be more exposed to dust and dirt than any other bearing on the machine, it is mostly entirely unprotected, and it is only lately that any real attempt has been made to construct it upon approximately dust proof principles.

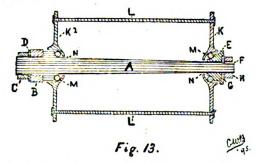


Fig. 13 shows the pattern of rat-trap pedal most frequently met with. It is also constructed on much the same lines with rubber bars, and a little consideration will show that it is a lamentable display of the ignorance prevailing in certain cycle factories. A is the pin upon which the pedal revolves, and it is turned at the end nearest to the crank into a cone to form portion of the ball-race at that end. This cone also forms a shoulder which presses against the crank B, through a siot in which the pin is continued, being held by the nut C. A washer D is generally placed between this nut and the crank end. The pin is usually tapered towards the end furthest from the crank, and upon this thin end screws



the adjusting cone E, forming a portion of the ball-race on The pin is usually provided with a flat F, for a short distance from the end to receive a D-washer G, partially countersunk in the cone E. This prevents the latter turning when the locking nut H is screwed up tight. K and K1 are the side plates, which are shaped in the centre to form the other portions of the ball-races, and carry at their ends the blades LL, which are rivetted to them as shown, and sometimes soldered as well. MM are the balls. The adjustment is effected in the following manner: The nut H is loosened, and the cone E, which is generally provided with a milled edge, but sometimes with a flat to receive a spanner, is turned to the right, thus screwing it on the pin A, so pressing the balls on that side against the plate K, which upon this pressure being applied pushes the plate K1 on the other side nearer the crank, thus tightening the balls between it and the coned portion of the pin A. there is still some shake left in the bearing, the locking nut H must be screwed up, and the pedal may then be said to be adjusted. I say "said" advisedly, for as it is obvious that there is no rigid connection between the side-plates K and K1 other than the thin blades LL, which are at all times very liable to be bent by the foot of the rider, and are, moreover, at a considerable distance from the centres of the side plates, it is plain that a really good adjustment is utterly impossible, more especially after the pedal has been in use for some little time, for then the pressure of the foot will have loosened the rivetting of the blades LL at the four corners, and consequently there will be no guarantee that the side-plates K and K1 will be perfectly parallel with each other. In addition to this disadvantage in the most popular pattern of pedal-with the trade-of the day, it will be seen that the absence of any central connection leaves two additional openings to allow of dust and dirt entering the I have marked these openings NN. dismiss this pedal from further consideration as being perfectly worthless from the point of view of the practical I wish it could as easily be done away with cyclist. altogether!

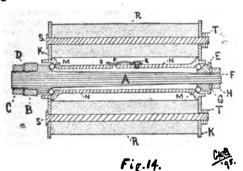


Fig. 14 shows a pedal of very similar general construction to the pattern I have just described, but vastly improved, although still very far from perfect. It is now being used by many firms. A is the pedal-pin constructed exactly the same as that shown in Fig. 13. B is the crank, and C and D the nut and washer holding the pin thereto. E is the adjusting cone, held by the D-washer G, sliding on the flat F and locked by the nut H. The great difference between the pedal last described and the one now under notice is that instead of the side-plates KK forming the second portions of the ball-races in which the balls MM revolve, they are fitted on to a rigid central tube NN, which is turned at each end to form the races, and is in most cases—though not always—provided with a lubricating hole O, covered by a spring P, held in position by a small screw Q. I have shown this pedal fitted with rubber bars RR, held by the

headed bolts SS passing through the side-plates KK, and fastened by the nuts TT. The bolts SS should always be square, for if round the rubber bars will tend to turn on them under the rider's foot, and this is one of the most frequent causes of the inability of some cyclists to keep their feet on rubber pedals. The method of adjustment of this covered-in pedal is the same as that of the pattern shown in Fig. 13. It will, however, be seen that instead of there being two openings to each ball-race there is only one, and that as the bearing is rigid, accurate adjustment, which will not be affected by any give between the plates KK, can be obtained.

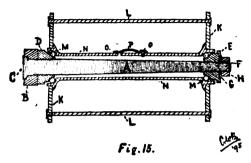


Fig. 15 shows a rat-trap pedal of substantially the same design, so far as the frame is concerned, as the one just described. It is known as the "Trigwell," and its principal object is to allow of a narrower tread by reason of the nut and washer by which the ordinary pedal is fixed to the crank being dispensed with. A is the pin, headed at the crank-end as shown at C, the head being counter-sunk in the crank-end B. The pin is, however, provided with a thread at the end nearest to the crank upon which a hardened cone D can screw. This cone, while acting as a portion of the ball-race on that side, is also provided with an hexagonal flange in the form of an ordinary nut, by which it can be screwed tightly against the crank end B, thus securely fixing the pin to the crank. The small or outer end of the pin is also provided with a thread, upon which the adjusting cone E screws, being held by the usual D-washer G, sliding on the flat F, and secured by the nut H. MM are the balls, and NN the central tube provided with the lubricating hole O, and the spring and screw P and Q. KK are the side-plates, and LL the rivetted blades. The pedal, when it is attached to the crank, is adjusted in the same manner as the patterns explained in Figs. 13 and 14. It is a capital pedal for narrowing the tread, but is not any more dust-proof than that shown in Fig. 14. To attach it to the crank, the locking nut H, the washer G, and the adjusting cone E must be removed. The balls must then be taken out, and the body of the pedal slid off the pin. The cone D can then be screwed off, and the pin passed through the round hole in the crank end B. The cone D must then be replaced, and screwed as tightly as possible against the crank, so that the head C of the pin may be properly pulled home in the recess in the crank end. The pedal body must then be replaced upon the pin, and the balls put back into the races. The tyro will find that the best way of doing this is to lay the machine down sideways - always supposing that the crank be not a detachable one, in which case it may be removed, and the pedal fitted with less trouble. machine should be placed with the pedal downwards, and the right number of balls can then be easily put into the ball-race nearest to the crank. The body of the pedal should then be pulled upwards until the balls are held in their proper position, and it must be kept pressed against the cone D while the machine is turned over on the other side. When this has been done, the balls in the outer ball-race may be inserted, and the adjusting cone E screwed on the

pin. The washer G and the locking nut H should then be put on, and the pedal properly adjusted. Another method of replacing the balls is to coat the portions of the races contained in the pedal itself plentifully with vaseline, into which the balls may be stuck. The vaseline will hold them in place while the pedal is put on the pin, and the plan saves the bother of turning the machine over, but I much prefer to dispense with the use of vaseline in putting a bearing together whenever possible. With a little practice, any bearing can be replaced quite easily without its aid.

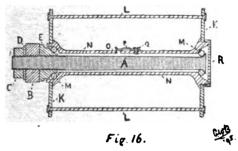
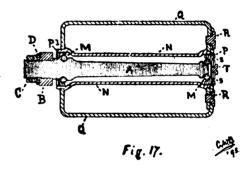


Fig. 16 shows one of the few attempts which have been made to construct a dust-proof pedal. This pedal is, I believe, made by a German firm, and a similar pattern is, I think, constructed by the Shark Manufacturing Co., of Croydon. A is the pin which is but slightly tapered and is provided at the end furthest from the crank with a shoulder or cone, forming the central part of the ball-race at that end. The end of the pin nearest to the crank is provided with a some-what long thread, upon which a cone E is screwed. This cone is provided with either a milled or hexagonal edge, and forms the central portion of the ball-race at the crank end of the pedal. MM are the balls and NN the tubular body of the bearing, to which the side-plates KK are fixed, which side-plates are connected towards their ends by either the rat-trap blades LL as shown, or by bars to carry ordinary pedal rubbers. The body NN is provided with the usual lubricating hole O and the spring and screw P and Q, and also, at the outer end, with a screw cap R, which is only removed if the pedal be taken to pieces for any reason. It will thus be seen that the pin does not pass completely through the pedal and that the bearing at the outer end is entirely closed in and thus protected from dust. The method of adjustment is as follows:—The nut C, which holds the pin to the crank, is loosened and the cone E can then be turned upon the pin, although to ensure that the latter does not revolve with the cone, it should be provided with a flat fitting into a correspondingly-shaped hole in the crank end B. This, however, has not, so far as I am aware, been done. When most of the shake in the bearing has been taken up, the nut C is again tightened and the pin thus secured to the crank, the pressure also fixing the cone E. The pedal is by no means a bad one, but I certainly think that the hole in the crank should be D-shaped in order to

prevent the possibility of the pin turning during adjustment.

Fig. 17 represents a pedal of the "Lanchester" pattern, which is to my mind the best which has yet been brought out, although I think that a more modern method of fixing it to the crank, so that the nut and washer could be dispensed with, should be adopted. A is the pin, which is of rather peculiar shape. It is grooved at the end nearest to the crank to form the central portion of the ball-race, and also provided with the usual shoulder by which it is held truly against the crank-end B by the nut C and washer D. The pin tapers slightly towards its outer end and terminates short of the actual length of the pedal body, the extremity being turned into the form of a cone, as shown in the illustration.

lubricating hole, as such is not required. This tubular centre is entirely different from that of any other pedal in that it is provided with an internal thread at each end and receives small hardened collars P and P1, after the manner of the "Humber" pattern crank-bracket or the "Centaur" hub. These collars form the outer portions of the ball-races, the balls MM revolving between them and the pin A. The collar P1 is spanner-tight, i.e., practically a fixture, and the adjustment is effected by the collar P. The side-plates and the blades are formed of one piece of steel QQ, passing completely round the central portion of the bearing NN, and fixed at each end of the latter. This piece, however, overlaps at the outer side of the pedal, and the central hole in this overlapping piece or flap is provided with a thread, into which the adjusting collar P screws, as well as into the central tube NN. The tendency of this overlapping piece is to spring very slightly outwards, but it can be compressed tightly against the fixed end of the pedal



frame by the two screws RR, and when this is done the collar P is securely locked. SS are two dead-end holes in the collar P, formed to receive the pins of a clawspanner by which the collar is turned, and T is simply a small screw used to close a central hole in the collar b, by which the pedal can be lubricated. It will be seen that this pedal is entirely dust-proof at the outer end, while the space by which dirt and dust can enter at the other is far less than in the pattern shown in Fig. 16. Moreover, bath lubrication is possible, and I have found that the "Lanchester" pedal will run further with less attention than any other pattern I have tried. The method of adjustment is simple, and has the advantage over that of the type of pedal shown in Fig. 16 in that it can be accomplished without loosening the pin upon the crank. The screws RR are first slackened, which allows the flap of the pedal frame to spring slightly outwards. The collar P can then be turned to the right sufficiently to very nearly take up all the shake in the bearing, but not quite all, as when the flap is pressed home once more it tends to push the collar slightly inwards. When the collar has been turned enough the screws RR are tightened, thus locking it in the position required. To oil the pedal the screw? must be removed, and oil poured into the central tube of the bearing. The screw must then be replaced and properly tightened in order that it may keep out dust and dirt. This type of pedal very seldom requires lubrication.

[To be continued.]

MORE SIGNS OF THE TIMES.—The Daily Graphic in its issue of the 27th ult. contained a most interesting and capably written article "Half a Century on Cycles." The author is evidently a journalist who knows his subject, and this being so, it is hardly to be wondered at that he says more than one good word for the C.T.C. As may be supposed, the treatise is largely historical, and as a consequence, those who take an interest in the literature of the wheel should secure a copy, even thus late in the day.







## EDINBURGH SECTION.—OPENING RUN OF THE SEASON.

Date: Destination. Meeting Place.

May 4th.......Romanno......Morningside Station,
4.0 p.m.

June 1st .......Haddington ....Abbey-hill, 4.0 p.m.

New members and others cordially invited.

ARTHUR E. POYSER, Hon. Sec., Springfield Terrace, Dunblane, Perthshire.

#### COUNTY OF NOTTS.

The first meeting this year of the Notts members and friends will be held on Thursday, May 9th, at the "Saracen's Head" Hotel, Southwell. Tea at five o'clock. Members and friends from other counties will be cordially welcomed as on former occasions. Those members and others who intend to be present at tea are requested to let me know by the previous Saturday in order that the needful arrangements may be made. The Nottingham members will fall in near the "Clarendon" Hotel, Nottingham, at 2.30 p.m. on the day named. The Retford members are requested to meet in the Square near "Scott's" Hotel, Retford, at two o'clock. The Worksop members who intend to be present are requested to communicate with the Consul, Mr. T. Chatterton, 37, Potter Street, Worksop.

The Chief Consul and party will leave the "Clarendon" Hotel, Nottingham, at 2.30, and will ride to Southwell by way of Trent Bridge, Radcliffe, and Gunthorpe, and will commence the return journey from the "Saracen's" Head, Southwell, at eight o'clock. Immediately after tea a business meeting will be held, after which the Rev. F. A. Wodehouse, B.A., will read a paper on "Some aspects of cycling."

#### AGENDA.

To adopt the minutes of the last meeting.
To receive the Chief Consul's report.
To decide place and date of the next meeting.
To consider any other business that may be brought before the meeting.

Any members having resolutions to propose are requested to give notice to the Chief Consul.

It is intended to hold another meeting on a Saturday. Date and place will be arranged at the Southwell meeting.

JOSEPH W. WRIGHT, Chief Consul. Street. Nottingham.

9, College Street, Nottingham.

#### COUNTY OF WILTS.

The Spring Local Consuls' meeting will be held in Swindon, on Saturday, 11th May, at the "Goddard Arms" Hotel, at 3.0 p.m.

Local Consuls are requested to invite the captains or hon. secs. of the leading cycling clubs in their districts to attend the meeting. The places for the annual meets will be decided upon, and the clubs in the county invited to attend, as proposed at the last Consuls' meeting: by this means we hope to gain some fresh members.

AGENDA.

Check Local Consuls' niembers' list 1894 with 1895. Settle places for annual meets—North and South Wilts. General C.T.C. business.

F. W. MARILLIER, Chief Consul. The Ferns, Clifton Street, Swindon.

#### · COUNTY OF YORK (WEST RIDING).

The Chief Consul sends us the following:—Report of meeting held at Boston Spa, April 15th, 1895, Mr. L. Kershaw (Chief Consul) in the chair. There was a fair gathering of members, and it was decided to form a local branch of the C.T.C. with the object of bringing the members into more social relationship, and for this purpose it was arranged to hold perambulating meetings during the riding season, the first of such meetings being fixed for Ilkley on Saturday, 18th May, at 3.30, at the headquarters, Crescent Hotel. It was also carried that each member of the Club use his personal effort to influence other cyclists to join the C.T.C. The question of renewal of subscriptions was raised, when it was decided to recommend the Council to extend the time for such renewal to the end of February, Mr. Poole, R.C., undertaking to bring the same before the Council. It was also decided to present to Mr. Poole, in acknowledgment of his long and valued services to the C.T.C., an illuminated address, the presentation to be made at the meeting of the Club at Ilkley on the 18th May, by Mr. L. Kershaw (Chief Consul), and Mr. Hoyle, of Oulton. Members desirous of contributing to forward contributions to Mr. D. Chapman, 10, Haley Hill, Halifax, or to the Chief Consul, Mr. L. Kershaw.



No. 2778.—A C.T.C. Repairer is supposed to charge reasonably, but he is tied by no scale, nor do we see how he could be. He is not under an obligation to allow members a discount.

No. 46r.—The disappearance of the Ball tyre which you bemoan is, without doubt, attributable to the universal law, "the survival of the fittest."

L. B. Wood.—The "W. and A." Safe tyre has already received an excellent gratuitous advertisement in these columns, and with every desire to oblige we cannot extend it.

WHO WAS THE SENDER?—A postcard bearing the Kingstown stamp reached us on the 21st ult., absolutely blank as far as the back was concerned.

No. 694.—Those members who cannot afford or do not care to invest in the badge may buy the leather case sold as a substitute. The alternative you suggest would be an infringement of the Club patent, and it is in consequence not to be encouraged.

No. 164.—A gear case is an indispensable part of a high grade safety. The Carter detachable or fixed is the best on the market, because it provides an oil bath for the chain, but the Presto and the Dover are in our opinion preferable to the Grose because of their readier detachability.

No. 3479.—Powdered plumbago is a good lubricant between wood surfaces, but oil will prove far before it in a cycle bearing.

No. 1424.—You surmise correctly. We look upon both your proposals as impracticable, and—for your sake—refrain from making them public. Try again!

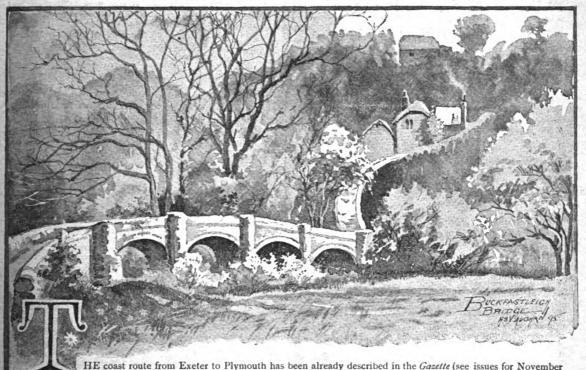
H. M., Huddersfield.—We believe you have been exceptionally unfortunate, and this being so, we hesitate to "pillory" the makers of the machine by publishing your experiences. As far as we know or have heard they are unique.

No. 1640,—All the subjects touched upon in your letter have been dealt with in recent issues.

No. 4053.—The Bamboo bicycle has not, in our opinion, been proved to be in any sense the equal of the steel-built machine, and we advise that you let others experiment with it.

## Companion to the Road Book.

EXETER TO PLYMOUTH (Inland Route). Route 343.



and January last); the inland route being the best as regards gradients and surfaces, also merits some description, more especially as some of the scenery through which it passes is very attractive. Its length is scarcely more than forty-three miles, and this forms a comfortable distance for a "one-day" trip in this

part of the world, allowing two or three spare hours for exploring the beauties of such spots as Buckfastleigh or Chudleigh. Tourists who are merely making the trip to Plymouth and back should make a point of going by one route and returning by the other, as they will thereby make acquaintance with almost every kind of scenery in South Devon, and with nearly all its chief towns. There is good hotel accommodation on this route.

Diverging from the coast route at Alphington church, the hamlet of Kennford is reached a mile beyond. This is a quaint little cluster of "cob" and thatch houses, with an ancient inn that appears to do a healthy trade by reason of being the last place of refreshment—and almost the only house of any kind—for some five miles or so. In a district so near Exeter this scantiness of population might be a matter of surprise were it not for an explanation which suggests itself in the great barrier of the Haldon Hills, which shuts off the Exe valley from that of the Teign. Presumably no one found it worth while, in the early days of the settlement of the county, to establish themselves on the lonely summit or slopes of Haldon in order to cater for the wants of the few travellers upon the road; still less would it be worth while now, when the railway takes all the traffic far away to the south and to the north, and almost the only

wayfarers are the carriers, in their quaint little black carts, and the cyclists, who are few and far between.

In this connection it is interesting to note that, judging by the Ordnance Survey Maps, there appears to have been an alder main road—now disused as such—which, at the end of Alphington village keeps to the right at the fork, and runs through Shillingford instead of Kennford. It then passes the park of Haldon House on the east side of Haldon, and that of Whiteway on the west side, thereafter rejoining the present road at Chudleigh: it is slightly more direct, but

steeper and rougher.

Our road, as it ascends the hill after leaving Kennford, is sufficiently steep to satisfy most people: from the village to the cross-roads on the summit is about two miles, and this stretch affords a good "coast" on the reverse journey, for there is only one awkward bend on the way; the surface is fair on the whole, and the road free from traffic as a rule.

The descent on the Chudleigh side is not quite so good, as the surface is loose in many places. My observations, made last summer, differ slightly from those in the Road Book, it will be noticed, but no doubt the road has improved somewhat in the last few years.

Arrived at the summit we pass the old disused racecourse, and may rest awhile on the rugged heath that covers this part of Haldon. From the cross-roads a road would lead us, either way, along the ridge of Great Haldon at an

Digitized by GOOGLE

average height of 800 feet, affording on the way some of the most delightful views in all Devonshire. But such an exploration should be made on foot, and if any wheelman touring in these parts be sufficiently a lover of wild flowers, wild birds, lovely scenery, and quaint villages, to care to forsake his machine, and spend a day or two tramping on Haldon, I can promise him a very delightful time. And so did—to the tourists of his time—the author of the "Ingoldsby Legends," in that sprightly verse of his which smacked just a trifle at times of the rhyming advertiser:—

"Devote one fine day
To a visit to Haldon—it's not far away.
And the view and the air will your trouble repay:
Indeed, if you're hipped, out of spirits, or ill,
Better by far than potion or pill
Is a summer day's run upon Haldon Hill."

Mr. Barham's prescription is, I fear, at the time of writing, a bitterly grim dose of irony for most people. With the thermometer standing at something below zero every night, and small rations of water served out to us by the

water companies as if we were shipwrecked mariners on a raft, wouldn't we just take that Haldon potion if we could!

Eastward from Haldon the views extend over the fertile valley of the Exe, a grand panorama of woods and meadows and hamlets, with the cathedral city in the distance, and broad esti the estuary dotted with vessels. Westward, as follow the road down to Chudleigh, a superb view opens out over Dartmoor, range after range peaks rugged and tors rising one behind the other to the sky-line. In the middle distance are

green and rounded hills that mark the ravine of the Teign to which we are descending. This view, as far as the road is concerned, is least obscured when seen from a point about half a mile from the crest of Haldon, and to my thinking is most beautiful about an hour before sunset.

All the vicinity of Chudleigh is thickly timbered, and some of the choicest sylvan scenery in the county is to be found here, so that it is a wonder that more visitors are not induced to stay in the place; most of them spend an hour or two at the Rock and Glen, and then pass on to other places. Certainly the town itself is not interesting; and having been burnt down in 1807 its houses have that mean and dreary appearance which is characteristic of the architecture of the first half of this century—indeed, one might say of the whole of this century, for in spite of the recent grand revival of English architecture and the noble buildings with which it has already furnished most of our great towns and cities, we still appear utterly unable to produce one single building of the cottage type that is good for the eye to look upon. Throughout the west of England, as the cosy and beautiful thatched dwellings disappear one by one, after serving their purpose for two, three, or even four hundred years, it is grievous to see them replaced in every instance by grim-looking square boxes of thin slate, shoddy mortar, and shoddier brick or refuse stone. And if by chance the jerry-builder—wishing to display his superior tastes, or having been persuaded to invest in a certain line of goods by the agent of a town firm of "High Art Dealers" (!)—if such a man introduces any attempt at "decoration" into his building (usually it is some hideous German design in tiles, or a glaring terra-cotta frieze at a shilling or two a yard, or perhaps a top-heavy urn of stucco in an utterly incongruous position) the effect is only ten times worse than before. Shall we never have an English labourer's cottage designed by an architect who is worthy of the name?

Chudleigh church is not handsome, but it contains a very fine oak screen. The tower dates from the thirteenth century. Passing this building (left) on our way through the town, we come presently to the vicinity of the "lion" of the place—the famous Rock: a road on the left leads to a gate, from which there is a footpath. The Rock is a huge mass of limestone, thickly draped with foliage of every variety;

the view from the top is fine. gorge below, down which a little stream dashes, in a series of cascades, to join the Teign, is one of the prettiest things in Devon. In the Rock are caves or fissures, one of which is called the Pixies' Hole. In these caves relics of the pre-historic cave-dwellers have been found. Ugbrooke Park, Lord Clifford's seat, close by, is worth a visit (the drive is open to the public on Mondays).

Dropping down to Chudleigh station, which is on the very bank of the Teign, our road crosses rail and river at a most picturesque spot, and then turns to

ASHBURTON

the left down the valley for Ashburton.

The railway line which disfigures this richly wooded valley and the rocky margin of the river—just as the Exe and the Taw valleys, and many others throughout the county have been spoiled—has its terminus at Ashton, higher up, and is said by the natives to "commence on a heath and end in a field"; it does not seem to do an alarming amount of business, and one would have thought that a good system of omnibuses and carriers' carts would have been just as satisfactory.

To follow the riverside road up the valley to Dunsford will be found a delightful trip if one should have a whole day to spend in and around Chudleigh. In that case a long morning should suffice for this excursion, leaving the late afternoon and summer evening for the Rock and Glen. From the bridge follow the road up to Trusham station and continue on the same side of the stream past the Elizabethan manorhouse of the Pellews at Canonteign, to Ashton station. Here cross the river and ascend the hill to the ancient church and hamlet, a primitive, out-of-the-world spot overlooking a fine view down the combe into the Teign valley. The church

stands on a little knoll above the road, and contains a fine screen that stretches right across the building, and some good bench ends. Thence down to the river again, and on up the valley to Christow—a name that seems to savour of one of Mr. Blackmore's romances—where the church contains a monument to Edward, Viscount Exmouth, surmounted by the flag which that gallant Admiral flew at the battle of Algiers. Thence past the "Teign House" Inn, an angler's haunt, the road continues to Dunsford Bridge, which it crosses about half-a-mile before the river makes its great bend in the direction of the moorland. The bridge is about a mile from the town, which in itself is of no great interest; the church tower is lofty. Above this point the scenery of the Teign becomes much more wild and romantic, but it belongs properly to Dartmoor.

Resuming our journey to Ashburton the first point of interest is the extensive region of heath that our road crosses beyond Knighton: it is known as Bovey Heathfield, and is traversed by

the River Bovey (pronounced Burvey) and by the branch line to Moreton Hampstead. This Heath is of great interest to geologists: it is, in fact, the dry bed of a miocene lake nine miles in length. The fine potter's clay found here has been turned to account, since the end of last century, by the Pottery Works, which are open to the inspection of visitors. The following account of the Heathfield is taken from the Encyclop.

taken from the Encyclop.

Baitannica:—

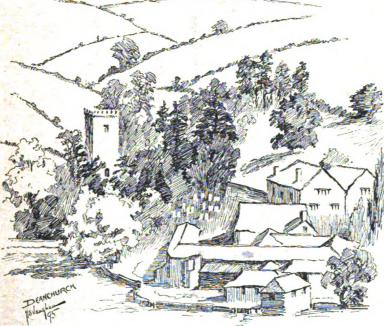
"It consists of beds of lignite clay and sand, with an aggregate thickness of more than tooft. In the lignites at least fifty species of plants have been found, all indicating a sub-tropical climate; but the greater part of the lignite-beds is formed by fragments of an enormous coniferous tree belonging to the genus sequoia, the only living species of which are to be found in California. Great lumps of inspissated resin occur occasionally. The clay which overlies the lignites is of much more modern date, and contains leaves of the dwarf birch—now an arctic plant—and of three species of willow, which all betoken a much colder climate than that of Devonshire at present. Fine potter's clay occurs above this 'head' of coarse clay and sand, and has been turned to account. The lignite called Bovey Coal burns with a disagreeable smell, and not much used."

Heathfield in the vernacular is, or was, Yeaffield, just as heifer is yeffer. While in this neighbourhood it is worth while to visit Bovey Tracey, an interesting little town, close

to a very lovely part of the moor; it lies about two miles north up the Bovey stream, and might be included in a detour from our road at Knighton, without much exertion. It was anciently held by "the Traceys with the wind in their faces," the sign of God's wrath thus alluded to in the Devon proverb having been inflicted on this Norman family for the share of one of their members in the murder of St. Thomas à Becket. So says tradition, and also that Bovey church, which is dedicated to the martyr, was founded in penance by the murderer. A mile from the town is another church, a modern and richly decorated building, dedicated to St. John: it contains a fine reredos and mosaics by Salviati. There are three ancient crosses, or what is left of them, at Bovey: their histories are painful, as displaying not merely the callous indifference with which the bucolic mind regards an ancient monument that tells a story of other days, but even the savage and vindictive zeal with which it will endeavour again and again to batter and destroy any such

relics that some cultured person in the neighbourhood is trying to protect.

After crossing the railway at Heathfield Station, our road passes an imposing entrance gate of white stone on the leftthis gives access to the domain of Stover Lodge, a seat of the Duke o f Somerset. Ascending a steep hill past a school-house we presently get some very fine views in the direction of the moor and over the more fertile country in the valleys of the Bovey and



Teign. Bickington is a quaint little hamlet with some extremely picturesque thatched houses - apparently of great age-grouped around its church. A steep "drop" brings us to a little bridge where the river Lemon comes brawling out from among kitchen garden and orchard, past the walls of one of the most beautiful mill buildings I ever remember seeing. Though retaining the obviously businesslike and severely plain appearance of a factory, its highpeaked roof, rows of dormer windows, and little turret capping the ridge, lend a foreign, somewhat Rhenish, air to its architecture. A greater variety of certain shades of colour I have never seen in the walls of any building: every tone of blue and grey, some of them delicately beautiful, is present, many of them introduced by patchings and repairs of different Mosses, lichens, and creepers have brought in yellows, browns, and greens of all shades; behind, a great tree-covered hill rises steeply, and sets off the general It is pleasant silver grey effect of the building. to note how the rows of many small paned windows

Digitized by GOOGIG

break up the wall-surface just sufficiently, without leaving it a series of gaping hollows such as one finds with the huge plate-glass windows of modern buildings. The appearance of nearly all the large commercial premises that have been erected recently in our cities, though they frequently make great pretension to be handsome and imposing, is entirely spoilt by the caverns of plate glass, across which there is nothing to lead the eye. They often give me the impression of a vast framework of bricks and glass, erected for display and advertisement only. I do not know the age of the Bickington mill, but it is an instance, for any age, of how an absolutely plain factory building may be beautiful in itself, without the remotest attempt at ornament. Yet, no doubt, the builder of the modern woollen mills at Buckfastleigh would consider his building far superior architecturally to this simple bit of work.

From Bickington the way is pleasant but uninteresting till we enter Ashburton past its Cottage Hospital, and reach the "Golden Lion" just beyond on the left. This is an old-fashioned, quiet, and "highly select" coaching inn: it is only remarkable for its lovely garden at the back, which every one should see: it is a place in which one should swing in a hammock of a summer afternoon and consume unlimited

fruit out of cabbage-leaves.

Ashburton is one of the four old Stannary towns of Devon, and the meaning of this, for the enlightenment of other than West-country folk, may be explained as follows: The whole of the mining of both Devon and Cornwall was controlled, from remote antiquity, by the Stannary Parliament, which met and legislated upon the summit of Crockern Tor, "neither yielding to," as Westcote says, "nor shrinking from any blasts, storms, and tempests, as not fearing their fury, nor hellish malice of undermining gunpowder." The great Council was composed of twenty-four Stannators each from Ashburton, Tavistock, Plympton, and Chagford, the four Stannary towns. After 1749, the Parliament, growing effeminate with the increase of civilisation, no longer met in the patriarchal fashion used by their ancestors from time immemorial, and Carrington, writing at the beginning of the century, alluded to the fact in "Dartmoor," his best work:—

"Ye legislators nursed
In lap of snodern luxury, revere
The venerable spot, where, simply clad
And breathing mountain breezes, sternly sat
The hardy mountain Council."

M' yes! "Lap of modern luxury" is right, when one reads of £20,000 being spent upon fitting up new hair-cutting rooms in our democratic House of Commons!

At the Stannary towns alone could the smelted tin be cut into cubes and stamped, and unless it bore the stamp and had paid royalty no miner dared to sell it, under a penalty of being forced to swallow a portion of the molten metal.

Tin-mining in Devonshire has now almost entirely ceased, but its history, and the innumerable traces which it has left, are of the greatest interest. Dartmoor is everywhere disfigured with ruined mine buildings. Perhaps the term "disfigured" is in most cases too strong, for the weird and crumbling shafts and walls are often strangely in character

with the scenery of these desolate, barren hills. Ashburton has a marked individuality of its own that is largely due to the grey slate with which the walls, chimney stacks, and roofs of its quaint little houses are faced. One of these houses is known as the Card House, because the slates with which it is faced were cut into the shape of diamonds, spades, clubs, and hearts. At a house in North Street, now a shop, but then a tavern called the "Mermaid," General Fairfax lay in 1646 after taking possession of the town. The fine cruciform parish church, of 14th century date, is passed on our left as we leave the place by West Street. It formerly had four chapels, and many other features of interest, which have been obliterated or have vanished in "Churchwardenism" seems to have been some fashion. rampant in Ashburton in the old days.

The town is one of the best centres from which to attack Dartmoor, especially for road excursions. From it starts one of the only two main-roads which the moor can boast, running vid New Bridge to Two Bridges-where it intersects the other main-road—and thence to Tavistock. Both these routes are described in the Road Book, and later on I may have something to say about them: they are, of course, very fatiguing and lonely, and involve an immense amount of walking, but given fine weather and no head wind a cyclist of average strength need not be afraid to tackle them. This chapter is not, however, concerned with the moor, except to point out the best scenery upon it that lies close to Ashburton. This is in the direction of the famous Buckland Drives and Holne Chase, where the Dart makes a great horse-shoe bend in the midst of the most romantic scenes. Were I writing for pedestrians I should recommend them to proceed from Ashburton to Buckfastleigh by a detour through this district, visiting Holne Bridge and the Drives, the Chase, the Lovers' Leap, and New Bridge, thence coming south to the hamlet of Holne,\* where Chas. Kingsley was born at the vicarage (ch. originally E. Eng.: screen, Perp.), and thence, after investigating the important hill-fortress of Henbury Castle above the river, make their way over the hills to Buckfastleigh. This excursion might make a delightful morning's walk for a cyclist staying in Ashburton.

Resuming our route the road passes through a picturesque valley to Buckfastleigh: notice on the way a thatched farmhouse, with a quaint gateway, that would make a capital subject for a water-colour sketch. The view seen as we approach the old bridge that crosses the Dart forms the subject of the drawing at the head of this chapter. the bridge the road is seen rising steeply among the trees: to the right, but not included in the picture, the graceful spire of Buckfastleigh Church rises from the summit of the hill, while, to the right again, the side of the hill presents a precipitous black cliff towards the river, marking the site of the marble quarries. Both up and down stream from the bridge the views are sylvan and lovely; but in the former case the chimney of the woollen factory protrudes itself from among the woods, and in the latter the black railway bridge, as baldly hideous as iron girders can make it, is a grievous evesore. Considering that granite all about these parts is to be had for nothing, and in abundance, the railway company

has gone out of its way to be a nuisance.

If you care to climb one hundred and ninety-five steps you may reach the church, the tower and chancel of which are Early English: the windows chiefly Perpendicular. The most ancient object in the interior is the Norman font, which is curiously carved. In the river valley below, not far from the present mills, stood the ancient Abbey of Buckfastleigh, one of the most famous and powerful in the west, and from which led-towards Tavistock-that curious track, the Abbots' Way, which is one of the most mysterious features of the moor. Not much is left of the old buildings that lapsed into ruin after the Dissolution, but, strange to relate, a new Monastery is rising on the old site, and a body of forty or more Benedictine monks have established themselves with refectory, dormitory, cloisters, chapel, and kitchen, to which they hope to add in time an abbey-church in the style of the vanished buildings, in which a vanished ritual will no doubt be as faithfully revived.

As to the town of Buckfastleigh, it lies, luckily, a little distance from the river, and all that can be said of it is that it is entirely unworthy of its beautiful

surroundings.

At the village of Dean Prior, a mile beyond, there are two or three very picturesque cottages that should find a place in the sketch book. Of this little place, in the troubled times of the Stuarts, Herrick was vicar, and here, although he affected, in the style of the period, to long for courtly scenes and to detest the wild country and boorish people among

T. 20

whom his lot was cast, he nevertheless managed to produce some of his most delightful and polished verse.

"More discontents I never had Since I was born, than here, Where I have been, and still am sad In this dull Devonshire."

Charles I. it was who presented him to this vicarage in 1629, and in 1647 he was driven out to make place for a Puritan parson, one John Syms, addressing to the Dean Bourn, as he went, these lines:—

"Dean Bourn, farewell; I never look to see Dean or thy warty incivility; Thy rocky bottom that doth tear thy streams And makes them frantic, even to all extremes, To my content I never should behold Were thy streams silver, or thy rocks all gold. Rocky thou art, and rocky we discover Thy men, and rocky are thy ways all over. O men, O manners! now and ever known To be a rocky generation! A people currish, churlish as the seas, And rude almost as rudest savages. With whom I did, and may re-sojourn when Rocks turn to rivers, rivers turn to men."

Yet, in spite of this defiance, back came **He**rrick to Dean when King Charles "got his own again, and here he lived quietly among his parishioners to the good old age of eighty - three, affecting to speak of them, perhaps, as "churlish," but in daily life, so it is said, acting the part of a kind and gentle friend towards them.

Of Dean Church, and the cluster of farm buildings and grove of trees among which it stands, my sketch conveys an idea as seen from the hill across which the direct road goes to South Brent. The latter place is not likely to detain the traveller long, unless it be to climb Brent Hill, hard by, for the sake of the view; the height is 1017ft., and on the summit

are some fragmentary ruins believed to be those of a thirteenth century chapel erected by the old monks of Buckfast. The church of South Brent has a low Norman tower. The town itself is of a most monotonous type: dull-looking houses of grey stone and slate with a sprinkling of small villas—a very good instance of the kind of thing referred to in my remarks about the Chudleigh buildings.

referred to in my remarks about the Chudleigh buildings.

Passing an old-fashioned whitewashed hostelry, the "Carew Arms," which stands in a well-wooded bit of country, we soon reach Kingsbridge Road Station. This was, until last yezr, when the railway was completed down the Avon valley, the nearest station to the old town of Kingsbridge on the Salcombe Estuary, and from this point passengers had to go by coach (see account of Kingsbridge in Gazette for January of this year). The railway bridges and viaducts about here are worth notice: they are built of the pink moorland

granite, and when the sunlight glitters upon the spar in the stone the effect is quite beautiful—here is an instance of what may be done by using the local material. At a place called Bittaford Bridge, more than a mile beyond, the line is carried on to the moor over a small ravine by a very imposing bit of this granite bridging.

In Ivybridge itself there is only one attraction, that being the old single-arched bridge from which the place takes its name, and which spans the "continual cataract" of the Erme. A century ago there was but a single house here, and those that have grown up since, around the paper-mills and foundry, are as dreary to look at as might be expected. High up on the moor above the town is the railway station, and the great viaduct that also spans the ravine of the Erme. If you have time and inclination for a short moorland scramble while at Ivybridge, follow the course of the river up to Harford Bridge, the last bridge that spans it before it becomes purely a wild mountain torrent. Harford Church—there is almost nothing of a hamlet—is a humble little Perpendicular building, that is yet vastly more interesting than the modern church down below at Ivybridge. It is hallowed by generations of worshippers, the rough, and in

bygone times halfsavage moormen; and in its loneliness up here on the moor it has a half-pathetic air. Humble as the church is, it yet contains the altar-tomb of one who held the proud position of "First Commoner of the Realm," that Mr. Speaker Williams, who died in 1566. The inscription is as follows:-

"Here lyeth the corps of Thoms Willms Esquire Twice reader he in Court appointed was Whose sacred minde to vertu did aspire Of Parliament he Speaker hence did passe

The comen peace he studied to preserve And trew religion ever to mayntegne
In place of Justyce where as he dyd serve And now in heaven with mightie Jove doth raigne."

A Parker

There is also a brass, dated 1639, to John Prideaux and his family, erected by his fourth son, afterwards Bishop of Worcester. So it will be seen that even Harsord has made its mark in the world.

There is little of interest on the road between Ivybridge and Plympton: the only hamlet is on the Yealm at Leigh Mills, and it is as forlorn in appearance as it well could be an iron school-house, two small public houses, and a mill are its chief features. Before reaching Ridgway a pretty view over the bank on the left shows us Plympton in a green and pleasant valley, and at this old Stannary and borough town one ought at least to stay long enough to see something of those buildings which are associated with the memory of Sir Joshua Reynolds. These are the seventeenth century school building of which his father was headmaster, and in which he himself was educated, and the Jacobean Guildhall, in

which he afterwards sat as mayor of his native town. It was this latter honour of which he was more proud than of all that he received from public and royal sources, and so on one occasion he was incautious or blunt enough to tell the King, luckily adding, by an afterthought, "except that con-ferred upon me by Your Majesty." It was a drawing of the quaint colonnade on the pillars of which the school-house is supported that assisted in inducing Reynolds's father to allow the boy to study art, and he was accordingly soon afterwards apprenticed to a fellow Devonian, Thomas Hudson, the portrait painter, who was then making an excellent living in

It was in 1778 that Reynolds was made Mayor of Plympton, and later on he painted his own portrait and presented it to the Corporation to be hung in the Town Hall. worthies, or, let us hope, their successors, after Sir Joshua's death, discovered that Reynolds was famous as a mere painter throughout a world that had never heard of Plympton, and that the old portrait in the Guildhall was positively valuable as a painting, and not because it pourtrayed the features of one of their mayors. Prospects of corporation banquets and of a tidy sum with which to tinker up the local drains, roads, or lights, no doubt floated before their practical eyes, so they converted the portrait into cash, and what might have been its chief glory departed from Plympton. It is now to be found in Silverton House, a seat of the Egremonts, near Exeter.

Plympton really consists of two towns, Plympton Earl, shown in my sketch, and Plympton St. Mary, nearer to the river, the fine church of which is passed after our road has lest Ridgway. This church is the better of the two. It has two north and two south aisles, and a very handsome Decorated east window. The tower (Perp.), 108 feet high, is one of the finest of its class in the county. Above the south porch is a parvise chamber. There are several good monuments to the Strodes of Newnham, one of whom was one of the "Five Members" that Charles I. went down to the House to seize. An altar-tomb to Richard Strode bears date 1464; and a mural monument commemorates Sir William Strode and his wives, 1632.

Close to this church are a few vestiges of an Augustinian Priory founded by Bishop Warelwast, nephew of the Norman Conqueror. The chief remains are the refectory and kitchen, and an interesting cellar with a good Norman doorway: the orchard adjacent to the site of the cloisters is locally said to be the oldest in England. In Plympton Erle a fragment of the old Norman castle remains: less than 300 years ago the Plym river was navigable to the walls of this castle. The

earthwork is of Keltic date.

When at Plympton we are within easy reach of one of the most popular resorts of Plymouth folk. This is Bickleigh Vale, a few miles to the north up the Plym. From Marsh Mills Station a track leads up to Bickleigh, whence Shaugh Bridge, the meeting place of the Meavy and the Plym, may be easily reached. Bickleigh Vale is very much spoiled by the railway. In the tongue of land formed by the confluence of the streams is the Dewerstone (Keltic dwr=water), a huge granite crag, that, from time immemorial revered as one of the grandest features of this part of the moor, has of late years fallen a prey to commercial greed, and has suffered much from quarrying operations. Here it was that Carrington, the schoolmaster poet, loved to muse, and here he wrote those tenderly beautiful lines :-

> "How oft, as noon Unnoticed faded into eve, my feet Have lingered near thy bridge, romantic Shaugh; While as the sister waters rush'd beneath Tumultuous, haply glanced the setting beam Upon the crest of Dewerstone. The hawk Rested upon the aged cliff;—around
> A holy silence reigned;—the mountain's breast
> Lay hush'd as midnight; not a vagrant gale
> Sigh'd through the woods of Plym, and on the soul
> Fell deep the impressive calm. The sun-tinged cloud Sailed slowly through the heaven; but earth had nought Of motion, save the river burrying on To seek the distant billow."

Noble lines, and utiered in praise of one of the noblest and fairest scenes in Devonshire.

This trip on to the edge of the moor will by most tourists be made from Plymouth by railway. I have merely given it here as being close to Plympton. Although the railway has spoilt Bickleigh Vale, it has luckily not interfered much with the confluence or the Dewerstone.

The journey by our road into Plymouth is not likely to afford any pleasure to the cyclist, though the scenery by the side of the estuary is pleasant enough. I have, however, already dealt (see Gazette for January, 1895) with the execrable roads on this side of Plymouth, and I need not revile them again.

In the same month's issue I alluded to Plymouth Hoe and the superb view therefrom, as well as some of the associations and links with heroic deeds of past times that make

that view one of the most inspiriting in all Britain.

A short account of the buildings and other "sights" of the Three Towns may be found useful. The term, "The Three Towns," is used to signify Plymouth, Stonehouse, and Devonport, which cover all the ground east to west between the Plym Estuary and the Hamoaze. Plymouth itself started in life as a fishing village named Sutton, before the Norman Conquest, of which the little harbour of Sutton Pool—whereto the brownsailed smacks may be seen making their way across the Sound—is a survival. The smoky but quaint Barbican should be visited to make acquaintance with this part of the town.

In 1670 the citadel was built on the bluff above Sutton Pool (the walk round the ramparts affords most interesting views), and by the early years of the next century a beginning had been made of what is now the great home of our navy in western waters,—the dockyard of Devonport, formerly known as Plymouth Dock. The town of Devonport is the offspring of the yard, and is concerned almost solely with naval and military matters; it is separated by Stonehouse Pool and Lake from the latter town, and has several pleasant features of its own, including a pretty park and a sort of small edition of the Hoe in Mount Wise, whence there are fine views. The dockyard occupies all the western shore, and is, of course, to the visitor the principal attraction (admission between 10 a.m. and 4 p.m., when parties are taken round by the police in charge). In the case of the average Englishman, who knows scarcely more of the navy to whose protection he owes the regularity of his food supply and the security of his income, than he does of the Chinese language, this system of seeing the yard—in the wake of a civil but bored constable who has to do a certain distance in a given time-is an unfortunate one, though it is difficult to see It is unfortunate because the how it can be altered. occasional visitor who has some slight knowledge of what he has come to see is hurried along without time to examine many things into which he is eager to inquire further, while in the minds of far too many of the ordinary type the result is an absurd jumble such as occurred at Portsmouth a year or two ago, when an excursionist inquired of the policeman, "whether the 'Victory' still carried the same engines that she had on board at Trafalgar!"

In no other country save England is this deplorable ignorance of naval and military affairs ever found, and it is this ignorance, profound and obstinate, of the duties and lives of our soldiers and sailors, that has led to the develop-ment of the "Little England" spirit.

Devonport is readily reached by tram-car from Union Street, Plymouth. Stonehouse, passed on the way, is only worth visiting for the sake of the Royal William Victualling Yard, which is open to visitors in the same way as the Dock-yard. There is a pretty walk by the shore from the Battery at the point round Firestone Bay to Mill Bay Pool, opposite Drake's Island.

The principal buildings of Plymouth are all grouped together and make a very imposing block: they are St. Andrew's, the old mother-church, the Guildhall and

Digitized by GOOGLE

Municipal Buildings, Post Office, and Athenseum. St. Andrew's is a spacious Perpendicular church, with a fine reredos and wagon roof. There are several good monuments, and here has rested for 230 years the great heart of Blake. The Guildhall (modern) is really the finest building in Plymouth. The great Hall is adorned with many rich and beautiful windows setting forth pictorially events in the history of Plymouth, and between the windows are statues of kings and queens. In the Municipal Buildings are some interesting relics, including a portrait of Drake, painted in 1594, and bearing the following quaint lines in memory of his benefaction to the town in constructing the Plymouth Leat, by which the waters of the Meavy are conveyed hither from Dartmoor:—

"Who with fresh streams refreshed this towne that first,
Though kist with waters, yet did pine with thirst."

The Athenæum contains the museum of the Devon and Cornwall Nat. Hist. Society. The Cottonian Library (Cornwall St.) contains the Cotton Collections, open to the public on Mondays. There is a Roman Catholic Cathedral (by Hanson) in Cecil Street; the style is E. English.



By Miss F. J. Erskine.

Easter holiday makers were not altogether to be envied this year. True, there was a glorious sun overhead, but the cutting wind must have made many a C.T.C. member bless the all-wool doctrine so strongly advocated by the authorities. It is very much to be feared that of the many who are now taking to cycling few are wise enough in guarding against chills. It is in no spirit of "fussiness" and "Molly-coddling" I am saying this. It is so very easy to catch cold, but by no means the same thing to get rid of it. Especially -now that influenza has been so much about-riders should be particularly careful to avoid chills, unless they wish their whole riding season spoilt. It is a good if a hackneyed saying about leaving off winter things before "May be out." Especially is the danger of being unsuitably clad present when dressmakers and non-cycling writers "go with the tide" and advise at random. A writer in Hearth and Home advises an alpaca costume, which I grant might look nice, and be cool, yet be unsuitable for cycling. Every one knows there is no exercise which at first makes one hotter than cycling, and wool-all-wool-and nothing else should be worn. After the rider becomes proficient and gets into training so as to ride with judgment, then she can risk a light dress for exceptionally hot weather, but it should be an extra, and the tweed or frieze worn for touring.

I have mentioned the bicycling dress invented by Lady Isabel Margesson before in the Ladies' Page, but it was only a few days ago I had an exhaustive inspection of the costume itself. There was an excellent picture in the Queen of March 18th, I think, which gives a very good idea of it, and those desiring pictures should send to the Ladies' Tailoring Co., 6, Egerton Mansions, S.W. It is built on the lines of a safety riding habit, and has an underskirt attached by straps of tweed to each leg, so that riding up or blowing up is impossible. Then an apronpiece buttons over on each side in such a manner as to allow complete freedom of movement, the effect being extremely good. There is nothing to catch. The fitting being done

on a bicycle, the proper allowance is made for the drawing up by the peak of the saddle, and the well-cut coat body covers the saddle in the same way in which an up-to-date riding habit body does on horseback. It is perfectly simple and plain in wearing, but by no means easy to describe. The buttons are few, and nattily placed, so that they do their work, but do not obtrude their presence. The effect, when walking, is of a quiet ordinary morning tailor-made dress. When on the machine, it is free from the objectionable fulness and tendency to ride up of an ordinary dress, so much a point amongst those who affect the so-called Rational dress. For those who favour this style, Mr. Goodman, the C.T.C. ladies' tailor, has invented a very neat garment. It is meant to obviate the unpleasantness which some feel of walking about in a town in knickerbockers, plus coat tails, when off the machine. The jacket is a neat little coatee of the Eton type. There is an underlining with a false waistcoat, and an all-round apron skirt fastening down the front with buttons, covering the knickerbockers and gaiters completely. When mounted the buttons are undone, and the skirt is turned up, fastening with hooks round the basque of the Eton jacket, and leaving the limbs free in case of head wind, danger of entanglement, and other bugbears. I cannot honestly say I admire it, but for those who desire a convertible Rational costume, it may supply a want. One thing is certain, that "unmitigated Rational dress" is acting as a strong deterrent to many. On all sides I hear the same thing, so it is a great comfort to me to know I am not, as a correspondent kindly suggests, "the last departing shadow of Mrs. Grundy." It was a pleasure to me to read the friendly letter in last month's Gazette from Mr. Richards. I regret as much as he does we cannot think alike on this subject. In theory, I have no doubt, some large portion of the dresses of the present day are most irrational, and there he has right on his side. But we cannot cure one folly by adding another as a sort of counterirritant, and I think any one of common sense seeing the terrible figures which are, to the utmost of their power, discrediting cycling, will agree with me when I say—"This is not reason, but folly."

When I began writing against Rational dress some months ago I stood alone. Now every paper has its quota of letters taking my view of the case. A very notable instance is in the Lady Cyclist, of which the first number was most strongly for the advanced dress. I commend the sensible letter in the last issue of this magazine, signed "A Rector's Wife," to all who are anxious for the good of the sport. It must not be forgotten that cycling for ladies is now seriously on its trial before the jury of the world. We have a good case if we do not by senseless folly in dress and manner influence the verdict adversely ourselves. Every one riding should do her utmost by quietness and tact to gain recruits. One of my critics sneers at this idea. "I ride for my own pleasure," she writes, "not for what I can gain by it." It is riders of this kind who are utterly selfish, and care nothing for the good of the sport, nor how many people they deter from joining our ranks. This movement now is giving a great impetus to trade of all kinds, and all thoughtful persons will hail with delight any symptom of improvement. I need not say-like her-I ride for my own pleasure, and have nothing to do either with the cycle or any other trade, but I hope and trust my interest goes a little beyond the one

solitary selfish person.

Our interest as members of the C.T.C. is to popularise cycling all we possibly can—not to advocate any passing fancy which may tend to bring our sport into disfavour; and here, by the way, I should like to urge all lady members not to rest satisfied until they possess good and reliable brakes to their machines.

Why it is I do not know, but ever since cycles have been invented the difficulty has been experienced of getting a good brake fitted. We all remember our struggles with the tyre brakes of the single-driving rear-steering tricycles, which

were so well adapted for ladies. Then when we revolted in favour of the balance-geared front-steerer, for a time we had an adequate band brake fitted. To be sure, it was often badly done. The band was apt to catch the drum, and make a hideous noise when any resin was applied, but as a good deal of stress was laid on the point by customers, in time a really decent and adequate brake was obtained. But now, in spite of all improvements, we seem to have gone back from the powerful brake and the most comfortable vertical action, to the bad brake and the forward thrust of old days. I am told that machines this year are being built more vertically, in which case we shall not be obliged to lift our knees up to our chins as of late. But the question of brakes is a really most important one. Some say they are extra weight and unnecessary. This is the most absurd statement possible. Except on the racing path, every machine should have a brake, and especially if built for a lady, whether riding in ordinary or Rational dress. It is said it is so easy to back pedal. That is true, but it's a certain strain, especially on a steep hill. Another suggests if the hill be too steep for back pedalling one should get off and walk. This sort of thing in a hilly country would be almost as entertaining as a trip pushing a perambulator. It is most wise to walk up a steep hill, in fact it is mostly a case of Hobson's choice, but walking down a hill is a little bit 'oo much of a good thing. Some years ago, when discussing an ideal tricycle in the pages of the now defunct *Tricyclist*, Faed, a well-known cycling writer, suggested a screw brake somewhat on the plan of a Swiss char brake. I have never seen the principle adopted, and as the tyre brake is certainly bad for pneumatic tyres, perhaps some maker will see his way to trying this plan.

I saw a capital dodge the other day, which may be well known to other riders but was new to me, to prevent puncture by tacks, etc. A piece of cat-gut was tied securely on the fork of the back wheel, so as to just clear the tyre by about the sixteenth part of an inch, and so scrape off any thing which adhered to the wheel. I do not know it it would collect mud, and thus check speed, but the

idea struck me as a very good one.

The question as to whether ladies should discard corsets when riding has, I think, been answered fully in the negative. They are a great help, when properly made, and of course not worn tightly laced. I do not recommend, after a careful trial, those with brace shoulder straps attached. In theory they are very taking, but in practice they cut terribly—never mind how carefully they are padded; also, an upright position can be attained much better, when it is natural, and by the use of light dumb-bells every morning. Most people who stoop do it from carelessness, but cycling in the open air should render the rider upright more than any other exercise.

Home Chat contains a most interesting article from the pen of Miss Davidson, whose advice on the subject of ordinary dress (we differ only on Rational dress) is well worth following. A nicely-turned-out, quietly-dressed rider—such as she advocates—will do more to popularise cycling than any number of "rationally" dressed exponents. It is quite possible to cycle in moderation as a lady, and here we have it well set forth in black and white by a lady.

A DISTINCTION WITH A DIFFERENCE.—A few days days ago a Midland member wrote to complain that the production of his ticket at the King's Head Hotel, Coventry, resulted in no abatement of the usual charges. We pointed out to the gentleman that this house was not—and had never been—under contract with the C.T.C., and a day or so later we read in a Northern contemporary that two of its staff (who were, of course, provided with the Handbook and knew which hotel to patronise) saved no less than 7s. in a single night at the "Queen's"—an equally desirable hostelry.



Any member who is desirous of securing a companion for a journey is invited to insert under this heading a short detailed account of his requirements, gratis. It is advisable to ensumerate the counties, or leading centres, through which the Tour is to extend, and to stake whether the rider is a Bicyclist or a Tricyclist. Communications should be addressed to the Editor, and in case they are to be re-directed, must be enclosed in a second franked envelope, or they will not be forwarded.

Rector's wife wishes to join a party for tour at home or abroad any time. Safety rider. Strict economy essential. Would be glad also to meet with any ladies in neighbourhood for weekly runs, etc.—Mrs. S. J. le Maistre, Everingham Rectory, York, No. 8072.

Clergyman, going to take summer chaplaincy in June in the Engadine, would like to hear of a companion willing to ride part of the way there and back. Good linguist. Away from Enghand a month. Pneumatic safety.—Address Rev. A. E. G. Peters, Gillingham, Dorset.

A Liverpool member (Frenchman), over thirty, wishes the companionship of two or more members for evenings and week end rides.— Address EMILE, c/o the Editor.

North country accountant (36), would like a companion for a fortnight's bicycle tour any time after June 15th, through Kent, Sussex, Hampshire, Dorsetshire, and Devon. Pace and expenses moderate. Object of tour enjoyment and not distance.—No. 3283.

One or two companions desired for a fortnight's tour in the South of Ireland, including Killarney, starting early in June. Distance up to seventy miles in one day, solourning as inclinations tend in picturesque or interesting districts. — G. V. Powell, Lyndhurst, Olton, near Birmingham.

Wanted by two ladies the companionship of one or two more ladies (bicyclists) from May 27th to June 8th, starting from Northampton to London, visiting Bournemouth, Isle of Wight, Brighton, &c. Moderate pace and expenses.—Address, F. M. Rice, Brier Hill, Northampton.

ANYWHERE.—Companion wanted for fortnight's hicycle tour commencing Whitsuntide. One interested in music preferred. Age 17 to 23. Object, enjoyment and comfort, not distance and speed. Route, almost anywhere—Scotland, Lake District, or N.E. coast.—No. 199, c/o the Editor.

NORMANDY.—Member, aged 26, desires suitable companion on a fortnight's tour in June, through Normandy and on to Fontainebleau, spending a few days in Paris. No prudish person wanted. Has toured in France before.—No. 1437, c/o the Editor.

Advertiser residing in Hampstead seeks a companion to ride with on Saturdays and Sundays, and on other evenings.—No. 6670, c/o Editor.

I propose starting towards the end of May for three or four weeks in the Pyrenees without cycles. By G.S.N. steamer to Bordeaux, train to Larnus, thence by diligence through Route Thermale, stopping car rowte at the centres of interest. I should be glad of a companion, is similar circumstances and standing to myself. My age is forty-one, and I speak French. Hotel charges are high, the second-class bouses being uncomfortable. I am of the so-called leisured class with no business interests. I may mention that in the Pyrenees during the summer the prevailing winds are from the snow.—Wm. K. H., c/o the Editor.

THE LONDON COUNTY COUNCIL AND CYCLISTS.—The following "Special Notice to Cyclists" by the Parks Sub-Department of the London County Council has been posted in the various metropolitan parks:—" The attention of the Council having been called to irregular and furious riding on the part of cyclists visiting the parks, notice is hereby given that cyclists must in future keep to the left side of the road and ride at a pace not exceeding eight miles per hour. In the event of any neglect of these directions stringent measures will be at once taken to prosecute offenders. The Council trusts that cyclists themselves will see the necessity of conforming to the regulations."—The Times.



BY G. DOUGLAS LEECHMAN.

Last month I referred to the saving of friction likely to accrue from making the inner ball races of our cycle bearings as small as possible. Of course the axle must be left large enough to provide ample strength, and not only so, but it must be quite free from any suspicion of bending, or the cones will be thrown out of line, and the ball races be tight in one place and loose in another. The shape of the cups and cones, or rather the parts of them with which the balls come into actual contact, is also very important. strain on all the bearings, except the head, is much more vertical than horizontal, I think the balls should roll as nearly horizontally as possible, and to obtain this the cones must be at a small angle with the axle. The steeper the cones the greater power they have of wedging in between the cups under the weight and pressure, and so jamming the bearing. Whatever may be the best form for the groove in the cups I think it is a mistake to make the surfaces of the cones hollow or otherwise departing from the plane. If they be hollowed the adjustment will be more rapid as it proceeds, until it becomes practically impossible to hit the happy medium between tight and loose; and the relative positions of the parts of the bearing, which may (or may not) have been all that could be desired in the first instance, are upset after the bearing has worn and been screwed up. A bearing may run charmingly when the wheel or other part is spun in the air, but that does not guarantee that it will not bind horribly when actually at work. The head bearing works under different conditions. Instead of a series of complete revolutions, the parts oscillate through a short arc, and the strain is at an angle to the length of the bearing, the pressure coming mostly on the back at the top, and the front at the bottom. Each end of the bearing, should therefore be constructed with a view to providing the best formation at these two points. Square-cornered cups at the ends of the socket tube and plane-surfaced cones on the inner tube, very much as in a common type of cone-adjusting hub bearing, would seem to be well adapted to the purpose. One is liable to fall into the error of treating the head as if it were vertical, whereas its sloping position sets up a considerable shearing strain on the bearing parts.

Notwithstanding the careful attention that has been paid to that vital point the fork crown, we are evidently not free from danger from its failure, and the question becomes pressing as to whether some radical alteration is not required in this part of the modern safety. One has only to consider the frame apart from the wheels to appreciate the unmechanical nature of the present provision for carrying the front wheel. It consists of a long projection from an otherwise well-tied frame. In the old high bicycle the fork was straight and vertical, but in the rear-driver it is curved and sloped; the sloping especially adds to the strain on the root or crown of the fork. The best alteration would be to stay the free end of the fork to the bottom bracket, or in default of this to the saddle-pillar-lug. In either case the stay must be cut to allow for the deflection of the wheel in steering. Mr. Bowley exhibited a machine at the National Show having a stay running downward and forward from the saddle-pillar-lug towards a point an inch or two above the front wheel axle; it terminated at the lower backbone, but a fork rose to meet it from the lower part of the usual fork, and the crown of this additional fork was connected to the

lower backbone at the termination of the stay by a dovetailed arc slide which was introduced to allow for steering. The curved lower part of the main fork, together with the additional fork and the stay-rod tube, made up a fairly direct connection between the saddle-pillar-lug and the front wheel axle. The machine was very light and had been ridden some hundreds of miles; the steering was stated to be not materially interfered with, though it was proposed to fit ball bearings to the slide in future. The additional weight of the apparatus was, if I remember rightly, about half a pound, but if the arrangement is more mechanical than the present one, as it appears to be, the balance of weight should eventually come out in the other direction, while the strength should be very materially increased, as it needs to be. Were it not necessary to provide against possible collisions, a wire tie might replace the stay tube, as the weight of the rider is under ordinary circumstances more than sufficient to overcome the road resistance which would otherwise throw a compression strain on it. In passing over an obstacle the reaction throws a severe shearing strain on the top of the fork, tending to break it forward, and this of course is added to the tendency to spread in the same direction under the weight. I hope others may experiment in improving this weak part of the machine, which is otherwise so well qualified to bear the name of safety-side-slipping perhaps excepted.



We shall at any time be glad to give prominence to letters from members on subjects of interest to the generality. Correspondents are requested to write on one side of the paper only, to forward their letters to the Editor, and to give their names, addresses, and membership numbers for his private information. We do not hold ourselves responsible for the views or opinions expressed.

"Ignore all selfish ends and interests of thine own— He lives for little good who lives for self alone."

#### To the Editor of the C.T.C. Gazette.

#### BAND BRAKES.

Sir,—I am not a member of your Club, but it has lately been my good fortune to read several letters in your Gazette respecting the new Quadrant 8B tricycle, which I am entitled to compare with the old 8A, having ridden both.

The new one is greatly the superior in every way, anyhow for this district, and a man of my age (45). The roads out of Trieste in all directions, except south along the coast, are very bad, in fact the worst I have seen in Europe. In many places they are for miles more like farm roads than high roads, and impassable for a bicycle. With the exception above mentioned, you cannot get out of the town without also mounting a long hill of ten or more kilometres without a foot of flat or descent, and to come down this hill is almost as trying as to go up, from the state of the road, the corners in places being also very dangerous, with steep precipices on one side.

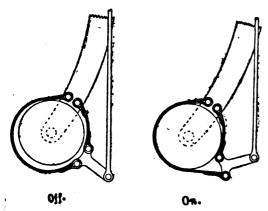
Under these circumstances my experience of the spoon brake compared with the band brake may be of some value, and I am strongly in favour of the spoon brake. Coming down the long descent into Trieste some few months ago, in spite of back-pedalling I could not hold my 8A tricycle, consequently although I went very slowly, the long-continued

strain of holding down the band brake severely sprained my right wrist, and it has not yet recovered. I can, however, easily hold my 8B with the spoon brake descending the same hill with a still unsound hand. Probably the failure of the band brake was due to oil getting on the drum, but after four years' riding of the 8A, and great care, I confess I could never keep oil off, and should even now be very glad for any hint as to how it can be done. Powdered chalk I have found useful if renewed every mile or two, but the use of resin is little short of attempted suicide.

Whether the spoon brake will wear out the tyre or not I have yet to see, but after some longish rides in this very severe country it has not yet shown any signs of doing so. As for the steering, there is no doubt that with the 8B you have to be much more careful than you need be with the old machine; the front wheel, too, has a trick of jumping off the ground in mounting a steep bit, which reminds you that a capsize backwards is possible without care, but with a little experience of the new tricycle comparison between the two is impossible.

JOHN G. HAGGARD, H.B.M.'s Consul. British Consulate, Trieste, Austria, March 7th, 1895.

Sir,—It was with great pleasure that I read in the Gazette of March a letter of Mr. Cousins on tyre and band brakes for safety bicycles, in which I quite concur. But there is another brake, not so well known, one of which I have had on my bicycle for several years, which, though somewhat similar to the band brake, is much more powerful, and has other advantages. It is quite free from the common fault of being partly on, when it is supposed to be quite off, and



Nut-Cracker Brake.

while the band brake generally, however gently applied, goes on with a jerk, and has proportionately less power the harder it is pressed, the brake to which I allude, and which I will call the "nut-cracker" brake, never goes on with a jerk, and holds proportionately tighter the harder it is pressed. (Enclosed I send you a rough sketch.) If the drum is made of the section of the letters LL any oil from the bearing is caught and retained until it can be wiped away, and does not set on the leather. Mine has never screeched.

I may describe the brake as follows:—The drum is the same as usual, but instead of the one long supple band round it, it is held by a ridged double band hinged to the fork like a pair of nut-crackers, and when closed, concentric with the drum. It is closed by a double action lever in the usual way, and I have no hesitation in saying it is the least troublesome and the most effective brake I have ever seen applied to a safety bicycle. No doubt theoretically it is not correct to

apply the brake to the front wheel. Still it is convenient, and as I can testify from riding continually on the most hill roads in Scotland, it answers its purpose there perfectly well.

No. 1787.

Sir,—As I have had some fifteen years' experience with band brakes in great variety, possibly a few remarks from me may not be intrusive.

First, with regard to tricycles. There is nothing now to be had to come up to the brakes that were fitted to the "Salvo" and similar machines about twelve years ago, with side-steering, and a long simple brake lever. There are, however, obvious objections to this method nowadays, and a grip-lever and somewhat complicated connections are unavoidable. A year or two ago I had occasion to purchase a tricycle for a friend, and being thus made responsible for his neck, I insisted on having a properly constructed brake. The Quadrant Company informed me that as a spoon brake did not injure a pneumatic tyre, and is ten times more powerful on it than on a solid tyre, they did not now fit band brakes to their best machines.

I naturally turned from people who could write such profound nonsense in disgust, and applied elsewhere.

Eventually, Messrs. Marriott & Cooper supplied me with what I wanted, and they put themselves to a surprising amount of trouble to carry out my wishes. The result is about the most luxuriously-braked machine in existence. The brake is applied by the right foot, as well as the hand, and that without removing the foot from the rest, which is fixed and covered with rubber. It is quite a treat to go down hill on this machine, being even less trouble than with the long lever of old days.

So far as my experience goes, a grip-lever only is not sufficient on really bad hills without back pedalling.

One peculiarity of band brakes lined with leather is that the co-efficient of friction decreases as the temperature rises, hence, unless they are large enough to keep cool they are generally almost useless towards the end of a long hill. Perhaps I may be pardoned for pointing out that increasing the width of the band only increases the power of the brake by reducing this tendency to get hot; if real increase in power is required, it is the diameter that must be increased.

I have an Olympia Tandem with band brakes on the two side wheels applied independently in a very direct manner by the feet; these are excellent, the mere weight of the feet and legs being sufficient for most purposes, which is an exceedingly luxurious state of affairs.

With regard to safeties, there was a tendency among certain makers, especially Humber, to fit band brakes a few years ago, but they were all far too small, and for the most part badly designed and badly made. That it is a perfectly easy matter to fit a safety with an entirely satisfactory band brake, I have myself proved by demonstration on a friend's machine; I am, however, using a Hall brake at present; it is rather a feeble thing, but is sufficient for most purposes, and appears to deal kindly with the tyre, it is, however, practically useless in wet weather, as it smothers one with mud. The Hall brake answers well for going slowly down a steep hill, but it is very inferior to a band brake for moderating the pace on a long incline.

H. A. GARRATT.

Sir,—The letters which have recently appeared in the Gazette show the need for a good brake and the increasing difficulty of securing one. Whatever may be said for the band brake, there are obvious and admitted objections to it, and there seems no probability of its general adoption.

The history of brake-spoons has been curious. When pneumatic tyres first came into use, the ordinary metal spoon was simply enlarged to suit them. The almost universal result was that the tyres were cut and gashed in all directions. Most people jumped to the conclusion that the mischief was

done by the edges of the spoon. Hence the fantastic forms that followed. But the evil still remained, and there is, I think, no reasonable doubt that the damage was done by the collected mud and grit rather than by the metal. Now, as the next stage, we have all manner of rubber brakes of curious design and cunning workmanship; and it is quite true that they do not cut the tyres to the same extent, for the simple reason that very few of them are powerful enough to do it. The old-fashioned spoon was a really powerful brake. Moreover, the pliability of the modern brake-rod prevents anything like sufficient pressure being applied.

Now I maintain that the application of rubber to rubber must be wrong in principle, because the heat generated is confined between two non-conducting surfaces, both of which it tends to soften, if not melt, and so to wear out. From recent experiments I have been making I am strongly inclined to think that very often nowadays the tyre is simply torn, and not cut at all. And it is easy to understand how this comes about. The action of a brake on a pneumatic tyre is of two kinds. First there is the mere friction on the surface, which alone is generally thought of. But beyond that there is a drawing or tearing traction on the substance of the tyre which tends to pucker up before the brake and stretch out under it.

Now if the brake is applied instantaneously, the whole force of this traction is concentrated on a small portion of the tyre. But if the application be delayed by even the fractional part of a second, the rapid revolution of the wheel under the descending brake distributes this traction-strain over a much greater portion of the periphery, and so reduces to a minimum the risk of damage. And it will generally be found that tyres are damaged by riders who suddenly apply the brake when going at full speed. In such a case under the enormous strain produced something must give way, and it might be the front forks. Modern machines are not designed to withstand such treatment. What is wanted is that a cyclist should feel his brake as a rider feels his horse's mouth.

I may say that I rode a '91 Dunlop for three seasons with an old-fashioned metal spoon, without getting so much as a scratch on the tyre, and I still use and still believe in a metal brake of suitable form.

brake of suitable form.
Bristol.

PRESTON WEIR, No. 5250.

## "THE STEEL LIGHTNING SPEEDIFIED PUNCTURE-PROOF BANDS."

Sir,—My experience with the "steel puncture-proof bands" is very similar to that of Mr. Cross, as related in the March Gasette. After riding about sixty miles, the tyre of my driving wheel gave way, and I found the valve completely torn out of the air tube. I wrote to the makers about it, who met me very fairly, and also favoured me with an identical explanation to that they have given in their letter in the April Gasette. With your permission, sir, I should like to criticise that letter.

Admitting, for the sake of argument, their first statement that the outer cover must creep before the band can do so, though this is by no means so evident as they maintain, I will pass to their very remarkable second statement, i.e., that owing to improper fitting the elastic edges of the band have been caught under the flat metal part of the valve, "and consequently the band, instead of moving with the cover, has been dragging the air-tube in its endeavour to resist the " Now, if the band were caught by the metal part of the valve, it would practically be fastened to the rim, and obviously unable to creep, and if it couldn't creep, it clearly couldn't drag the air-tube with it. It is just because it is not caught or fastened to the rim in any way that it is able to creep and drag the air-tube with it. The air-tube is fastened to the rim by the valve, and consequently when compelled to move by the creeping of the band, it gets torn away from its fastening. They go on to say "unless the band were jammed it would have crept with the cover, and thus there would have been no tearing strain upon the tube." Why would there have been no tearing strain upon the tube if the band were free to creep with the cover? This is precisely what puts the tearing strain on the tube, and if the band were efficiently jammed, and so prevented from creeping (in spite of the cover moving) there could be no friction between it and the air-tube, and consequently no dragging of the latter.

That the presence of the band causes creeping of the airtube is evident, as in neither Mr. Cross's case nor my own was there any creeping before the bands were fitted. Why it does so is not so obvious, though I fancy the little projections caused by the overlapping of the steel plates have a good deal to do with it. I may mention that my tyre—a Dunlop—was pumped very hard all the time the band was in.

It is to be hoped that other members who have had the bands fitted will relate their experiences with them, and that some means of preventing the creeping will be discovered, as it is a fatal fault in an otherwise useful invention. Some method of fastening the band to the rim seems to me the only satisfactory way of dealing with it.

Assoc, M. Inst. C.E.

#### THE WEAR AND TEAR OF LIGHT MACHINES.

Sir,—I am afraid Mr. A. F. Parbury's machine, like many others, is a very bad one, or his repair bill would not come to anything like one fourth of what he has disclosed, nor can it be termed a semi-racer, seeing it weighs 37lb. I have had my own experiences when I first discarded the high ordinary and took to a safety. The first five months of its use produced quite a chapter of bruisings. First, bottom tube broke close to steering head; secondly, crank axle broke; thirdly, fork head broke chain in two; and fourthly, hub of back wheel cracked, to say nothing of the repeated "shedding" of spokes. The repair bill came to something like £3, although the makers of this machine were reckoned as of the first water. This machine weighed 44½lb. In disgust I sold the machine, and scorning the allurements of "fashionable firms" and their absurdly high prices, I unhesitatingly obtained a new one from the "local house," with 10-inch head, tangent spokes, Ball's rims, and Dunlop tyres, weighing all on 39lb. This was in July, 1893, and during its run of 4550 miles, until the following June of last year, it only cost seven shillings and a few pence, five shillings of which went towards repairing canvas of the rear tyre, and the rest in truing the front wheel, as a result of a collision with a boy. Then I sold the machine to a friend in Swansea and had a new one similar to the old one by the same firm, excepting that it weighs 30lb. and is fitted with light roadster Palmer tyres. Up to the present time it has been run nearly 3000 miles, and so far only cost two shillings for trifling renewals. I may add that I took care to see that the front fork crown and head tube were made extra strong. better or easier-going machine I could not wish for. As for Palmer tyres they have given no trouble except once when the rear tyre suddenly displayed strange "boils" all round, when three months old; this tyre the Palmer people promptly replaced free of cost as well as paid carriage of the wheel both ways, and I have had no further trouble.

During the Easter tour, when forty miles from Nottingham, I discovered during a halt that a large nail had gone clean through the rear tyre; yet no air had escaped. Fearing further damage, I pulled out the nail, which was quite an inch and a quarter long, and broken short off at one end; even then the escape of air was scarcely perceptible. An injection of solution and binding completed the repair, and now the tyre is as hard as if nothing had happened.

My Swansea friend assures me in his letter received to-day that the old machine I sold to him has not as yet broken down, nor given any trouble beyond the usual "tyre attentions."

My advice to those who have repeated troubles with their machines is to sell them at once, and go to another firm with an undeniable reputation, and to ignore altogether the seductive words of advertisements.

C. GORHAM, No. 1136.

April 19th, 1895.

Sir,—Perhaps my experiences during the last two years may interest your correspondent Mr. Parbury. First let me say that my weight is fourteen and a-half stones, pace about nine to ten miles per hour, and the greater part of my riding is on the roads south of London, from Kent to Hants. I bought my machine just before 1893, and have ridden it over 5000 miles. Complete for the road, with gear-case, brake, mudguards, hammock, saddle, lamp, long pump and wallet, with full supply of necessaries; it weighed 38lb. I have verified this several times. The tyres were 134 Dunlop's, with Edwards' cover to driving wheel. In May, 1894, the Edwards cover burst, and I replaced it with a Ridge outer cover, and with respect to this I can fully confirm Mr. Bruce Archibald's letter. In July, 1894, I had a severe fall going down Godstone Hill, and damaged the rear wheel so much that I had to take it back to the makers for repairs. With these two exceptions, costing together a trifle over £2, I have never spent sixpence on the machine or tyres, and the original front wheel tyre looks as good as new, although I use, and much prefer, a plunger brake. I think, considering my weight, this is a good record both for machine and tyres, and my new machine by the same makers, and fitted with the same tyres, is giving equally good results. I shall be happy to supply any further particulars that may be desired. My cycling experiences date back to 1881, when I began on a B.S.A. "Delta" tricycle, and till 1892, when I finally abandoned the three-wheeler, I rode many different makes. Personally I differ entirely from No. 3134, as I found the bar-steering a great advance in comfort over the sidesteerer. Indeed, for pure comfort I do not think I have ever ridden anything better than my first bar-steerer, an old 8A Quadrant bought in 1886. I believe this machine brought up to date would be the best tricycle on the market for easygoing riders. I fear, however, this letter is too long already, and will only plead as an excuse that it is the first I have troubled you with. No. 7467.

57, Brixton Hill, April 15th, 1895.

Sir,—I think a 37lb. machine, for a 160lb. man, as in 4074's letter, is rather heavy; he has been unfortunate in his maker.

I weigh about 150lb., and got a machine a year ago, weighing 32 to 33lb. I have never been on a really good road on it, except once, for about thirty miles; for I am not strong, and the roads here are setts, some of them very rough setts, and macadam, with waves across it. I had only ridden two or three hours on a boneshaker before I got it; and my brother learned on it, after one hour on the "boneshaker. He charged a wall with it, and I, amongst other accidents, fell on it with my whole weight, the only damage being a bruise on my shin, which stayed for a fortnight. So the machine has had pretty rough usage. I have done, perhaps, 700 miles on it at a moderate pace, especially on the wavy macadam. The machine is as good as new, and has cost, for repairs, nothing. The price was £13 10s. The same firm's '95 machine will weigh about 28lb. No. 5657.

#### CYCLE BEARINGS.

Sir,—I have read with interest—and some amusement—the discussion which has arisen from the description of our new bearings in your January issue by Mr. C. W. Brown. In your April number I notice that Mr. J. Elliott appears to

be somewhat sceptical as to the advantages obtained from our new departure in the construction of cycle bearings. To confirm his prejudices he says he "consulted a manufacturer as to the merits of the collar adjustment, and was informed that such collars do not really lock." If he had consulted the manufacturer I think my firm could have set his fears at rest. Since September last we have sent out over 5000 machines fitted with these new bearings, and if the method of locking the cones is ineffective, all we can say is that our clients have been very careful to conoeal this fact from us. "Even adjustment" I also notice he tries to depreciate

We do not attach very much importance to this, but still any arrangement which tends to keep the chain sprockets in perfectly true line with each other is not to be despised.

The Oil Bath he dismisses by saying "Much oil and much dirt are synonymous." We need scarcely say that the arrangement we use to keep the oil in is effective in keeping the dirt out, and if an oil bath is good for a gear case, it is certainly not a bad thing for bearings.

As Mr. Elliott appears to take such an interest in cycle manufacture—if he is not really a manufacturer—may I be permitted to respectfully point out to him that the new method of fixing, locking, and adjusting of cones, together with the retention of oil, and exclusion of dust, does not sum up all that can be said in favour, or against, our new departure. He must be aware that one of the results of the craze for abnormally narrow tread has been not only to reduce the tensional base but to correspondingly reduce the distance between the ball races, which, to say the least, has not improved the running, or stability of the bearings.

By our new method, we have in the back hub a distance of 41/8 in. between the races, this being fully one inch more than any ordinary ball bearing, but what is of still far greater importance is, the chain wheel is fixed inside, instead of outside the ball races as in ordinary hubs.

Therefore, it can be readily understood that the cross winding strain is considerably reduced.

E. Mushing (The Centaur Cycle Co. Ltd.).

Sir,—In reply to Mr. J. Elliott's letter in last month's Gazette, 1 presume that he refers to my remarks respecting the "Centaur" bearings. If your correspondent has, as he states, consulted a manufacturer respecting them, and has failed to lay his complaint before the manufacturer, I fear he has started upon rather a wild goose chase. There is all the difference in the distinguishing adjective! Any bearing will either tighten up or loosen unless the locking arrangement be properly screwed up. The great advantage of the "Centaur" and similar pattern hubs is that they are far more dust-proof than any other type, while oil bath lubrication in them is under vastly better conditions than is possible with a gear-case, no matter how well the latter may be fitted.

If your correspondent does not like the "Centaur" method of locking the collars there are several alternative plans by which he can retain the advantages of the collar system. They are, however, rather more complicated and probably will be found to be unnecessary. It is of course possible that as this class of hub comes into general use—as it must in time—improvements will be made, but I can see no reason why the "Centaur" collars should come loose, provided they are properly tightened up.

I did not lay great stress upon even adjustment. I said that "theoretically" it is correct, and that it would whenever possible be a good plan to perform the operation on each

side alternately.

Mr. Elliott is quite welcome to stick to the old pattern of hub if he likes, and 95 per cent. of the trade will applaud his decision, the type is so much cheaper to make. I only recommended what I consider the best, and I shall stick to the collar adjustment whenever I can get it.

Finchley. C. W. Brown.

#### BRAKELESS MACHINES.

Sir,—A short time ago it was my sad privilege to render some assistance on the occasion of a fatal bicycle accident.

A cyclist, riding a pneumatic safety without a brake, was descending a very steep hill, the full length and danger of which were not visible from the top. His machine became quite unmanageable and utterly ran away with him when still far from the bottom of the hill. The pace, of course, became terrific, with the result that the rider was thrown with fearful violence and dreadfully hurt, the injuries received being of the very gravest character and causing death in about an hour.

In view of this sad accident I sincerely hope you will find room in your next issue to draw the attention of cyclists to the danger of the too common practice of riding machines

unprovided with any form of brake.

If brakes acting on pneumatic tyres are unsatisfactory, could we not have either a band brake acting on a drum placed on the hub, or a brake acting on the metal rim of the wheel? The advantages to be expected from the lastmentioned form of brake as compared with one acting directly upon the tyre are :-

(1) That it would not scatter dust upon the rider.

(2) That it would not be so readily affected by wet roads, for it sometimes happens that the tyre of a machine becomes wet and slippery, thus destroying the brake power, while the rim remains comparatively clean and dry.

(3) That the brake power would not be destroyed if the air tube of the tyre were punctured when descending a hill (as would be the case if the brake acted directly upon the tyre), or if the machine were used

when the tyres required blowing up.

A machine without a brake on an unknown road is a positive danger of no trifling kind, and it is to be much regretted that for the sake of saving a little weight, or on account of the difficulty of fitting a reliable brake to a machine with pneumatic tyres, that machines are so often sold for road riding without any brake at all.

#### THE IMPROVED GAZETTE.

Sir,-Mr. Tyrwhitt's wonderful display of arithmetical skill is by no means so convincing as he imagines. Did he ever hear of the Irish orangewoman, 1 wonder? The idea of him compressing the whole matter into a nutshell is ridiculous—it is much too complicated for that. For his special benefit I may tell you, sir, that the subscription to the British Medical Association is 21s. per annum—exactly six times the subscription to the C.T.C. The B.M.A. sends to all members a sixpenny journal weekly, so surely the C.T.C. could supply its members with a penny Gazette weekly for half the year. The B.M.A. also provides for the members a library and reading room at its home in the Strand. The British Medical Journal, besides being second to none of its kind, is a source of profit to the association, and I am convinced that our Gazette with careful management might be made a profit to the Club instead of an expense. And, sir, anticipating an objection raised by yourself in years gone by, I maintain that it could be done without unduly puffing, and without refraining from adverse criticism when necessary of any particular product of the cycling trades.

Our chairman at the last meeting put his finger on the weak spot when he said, "The drawback was that they were unable to sell the Gazette and publish it weekly," &c. Why should not the Gazette be sold to the public? Mr. Clarkson also spoke very much to point when he alluded to the tendency of the Club to drift into "official administration," which we know means letting things drag on as they There can be no doubt that the future welfare of the C.T.C. is intimately connected with the Gazette, and I contend that it is better worth while at the present time to spend money on improving the Gazette than on any Road Book either British or Foreign. Every member has the Gazette, but the Road Books are only purchased by comparatively few.

Stretford, 10th April, 1895. J. T. FAULKNER,

#### SIDE-STEERING TRICYCLES.

Sir,—As a tricyclist since 1882, and now nearly eighty-one, I can express a very hearty "Yea" to No. 3134's preference for side-handles.

I am riding my fourth machine. Three were "Devons," and the fourth was built to meet my wants and wishes in

Exeter.

Side-handles should be low enough to enable one when sitting upright to pull against foot pressure on pedals in uphill work.

The open front is to me a great comfort. The mount and the dismount are both very easy. But, to an old man, the getting into the saddle from behind is, to say the least, very risky.

The bicycle bar increases the weight of the machine, and as its first purpose is steering, the increased weight seems

to be constructionally wrong.

I like free pedals, but perhaps it is not wise for an old man to trust only to a band-brake. No. 169.

#### OUR LAST EASTER TOUR.

Sir,-In continuation of the list of Easter tours published in the March Gazette, undertaken by myself and friends, I send you a summary of our last one, which would make an easy five days' run, and embraces fine scenery all the way; the roads we found excellent. Putney, Esher, Guildford, Godalming, Liphook, Petersfield, Portsmouth, Gosport, Southampton, Romsey, Salisbury, Amesbury (for Stonehenge), Tidworth, Savernake Station, Hungerford, Newbury, Kingsclere, Basingstoke, Bagshot, Virginia Water, Chertsey, Weybridge, Esher, etc. CHAS. T. DICKINS, No. 3957.

Barnes.

#### THE COST OF TYRES AGAIN.

Sir,-Mr. Parbury has misread my letter published in the February Gazette. From February 24, 1893, to January 5, 1895, is 221/3 months, not 19, as he says. Moreover, in this period the worst seven weeks of the year occur only once, so that it does not afford a basis for calculating mileage per

Before I answer his question, let me add to my statistics the fact that on February 22, 1895, the third back wheel cover developed an enormous boil which necessitated a hasty patch and return home. It was found to be "going" nearly all round, and was condemned. With one re-canvasing it had lasted about a year, and had run 8294 miles.

Now for Mr. Parbury's question. The cost of the now superseded 1893 covers is of no importance except as a matter of history, and it is possible that if No. 3 back wheel cover had had the 1894 material from the beginning it would not have required re-canvasing. However, that re-canvasing cost me 6s. 6d. and 1s. for carriage. Taking the cost of the cover itself as 30s., this works out about 4s. 6d. per 1000 miles for the back wheel. The front wheel probably cost about 3s. per 1000 miles, but the data are not yet complete.

But too much importance must not be attached to mileage or time alone. I firmly believe that a Dunlop roadster cover, as now made, would easily last several years and run 20,000 miles, if used either only on dry roads or on roads made exclusively of limestone, granite, and oolite. What actually destroys the covers is three factors in conjunction, (1) cuts, (2) wet entering the cuts, and (3) time to allow the wet to rot the canvas. Rain and water-carts are found everywhere,

Digitized by GOGIC

and a little more or less probably makes small difference, but people who live in districts where the roads are made of flint or gravel, or of any material mixed with bottle glass and other sharp rubbish, must expect to have big bills for tyres. EDWIN CANNAN, No. 1159.

Oxford, April 7th, 1895.

#### A CYCLISTS' SERVICE.

Sir,—May I, through your columns, draw your readers' attention to the fact that a special service for cyclists will be held in Great Amwell Church, on Sunday, May 19th, at 3.30 p.m. As our accommodation is limited I shall be very pleased to forward any one a ticket on receipt of stamped addressed envelope. This will ensure a seat.

Amwell is nineteen miles from town on the Cambridge Road. The church, though small, is very ancient and picturesque. The service we held last summer was very much appreciated.

W. J. HARVEY,

Great Amwell, Ware.

Vicar of Great Amwell.

#### RATIONAL CYCLING DRESS FOR WOMEN.

Sir,-Whilst reading an article on Rational Dress in last month's Gazette an idea occurred to me which may perhaps be of some use. Generally, a business man, although he may use his cycle while at work, does not don a pair of cycling knickerbockers, but uses clips to keep his trousers clear of the gear. Now instead of having our ladies riding about in that semi-masculine rig known as Rational Dresswhich I, and I am sure hundreds of my brother cyclists, simply abhor—why could not they fasten the bottom of their skirts just sufficiently to keep them from blowing back on to the hind wheel, without cramping the knees, so that a lady on dismounting could unfasten the clip and be the same as her sister pedestrians? I daresay some unforeseen disadvantages may arise, or may be the idea has been tried before. Will Miss Erskine kindly give us her opinion? CHARLES N. SLANEY, No. 5568.

#### PNEUMATIC SADDLES.

Sir,—In reply to the request of No. 13,117, in the April number of the C.T.C. Gazette, in regard to pneumatic saddles, my experience with two of them may be of interest. During 1894 I rode a Spratley, which I consider quite a failure, apart from the clumsy construction of its so-called springs. It had a long flat peak, and the shape of the seat was such that to keep yourself from riding on the peak you had to hold yourself up by the handles, and there was hardly any scope for tilting it up or down. This year I am riding a Henson anatomical saddle. This is a vast improvement on the Spratley, and the main idea of the inventor is very good. It entirely does away with any bruising of the ischia bones, which is the greatest fault with most saddles, and there is no peak to cause harm. But it has two serious faults. First, the front part of the saddle catches you just under the thighs when riding. This would no doubt be a great annoyance on a long ride. The second and worst fault is that this saddle throws you too much on to the handles. If you had the saddle tilted up sufficiently to give you a firm seat "hands off" it would be quite unbearable on account of the chafing and pressure on the legs from the front of the saddle. The weight is also a drawback, likewise the heavy hard springs and awkward clip. Could these objections be done away with I have no doubt the "Henson" would have a great sale. Possibly the "anatomical" seat made more like an ordinary saddle in front, so as not to catch the legs, might answer. The peak being there does no harm if you are not thrown on to it by C.T.C., No. 7889. the formation of the seat.

The Oaks, Blakebrook, Kidderminster, April 2, 1895.

#### "ATTITUDE IS EVERYTHING."

Sir,-I write to you as I feel your ears are always open to the sorrows of the cyclist. I have just been laid up with a bad attack of the influenza in London, and during my convalescence it was my chief amusement to sit at the window and watch the busy traffic of one of our main thoroughfares in the suburbs. My recovery was greatly retarded by the feelings of wrath engendered by seeing the swarms of cyclists speeding past (especially on Sundays), all with their backs arched, their heads between their knees, and resembling monkeys on sticks more than lords of creation. I am an enthusiastic cyclist both for pleasure and utility, and cn a journey anywhere my bicycle is as much part of my kit as my Gladstone bag, but I sit bolt upright and enjoy the scenery and the air, without incurring the scornful and pitying gaze of the passers-by. I find that sitting as straight as a life guardsman I overhaul and pass the pitiful objects who try to look as if they were racing, and I have proved that for road work, apart from racing, the human croquet hoop position is absolutely unnecessary for speed. Cannot the large number of sensible cyclists who are daily growing in number do something to put a stop to a position that will affect the health and physique of posterity, and which brings a noble sport into ridicule amongst non-riders? One way would be only to give prizes at races to those who rode in the "correct position," in the same way that at military musketry competitions the competitor is disqualified if he does not shoot in the "correct military position." Prizes might also be given at cycling parades for the best seat in riding. In France the nose-brake position is almost unknown.

G. L. B. KILLICK, Captain, late 60th Rifles. St. Catherine's Cottage,
Blackgang, I.W., 29th March, 1895.

#### THE TOURIST TRICYCLE.

Sir,—It is pleasant to see the mass of evidence for the merits of a really up-to-date tricycle, and as to what that tricycle ought to be. Besides what has appeared in our Gazette, there was an article in The Cyclist early in February, which, from internal evidence, seems to be from the pen of Mr. Sturmey, and gives remarkable testimony. If the authorship be as supposed, let it be remembered that this evidence is from a man of the widest experience, who has ridden safeties for years, almost every pattern made being submitted to him for actual trial. After telling us first that the makers of really first-class new tricycles "are finding a steady sale for their goods," and are catering (as I have several times insisted) "for a separate and distinct class, many of whom will take a tricycle or nothing" (and whose wants I once more insist are not met by the road-racing type), he writes as follows:—

"By those who have had the experience which we have had, both past and present, the tricycle, as an all-round road vehicle for use over bad roads and in all conditions of weather, is superior to anything else. As to the difficulty of driving it, with equal constructional merits there is not 5 feer cent. advantage in favour of two wheels, whilst the mental strain—unnoticed by the practised bicyclist, but existent nevertheless—is absent; and on a long journey, especially when the ride is getting fagged, strange as it may seem to the uninitiated, the tricyle becomes the easier vehicle of the two."

In another article on March 13th, Mr. Sturmey returns to the merits of the three-wheeler; says he is convinced that its great popularity rests entirely in the power of the manufacturers and agents, of whom the latter could undoubtedly sell many tricycles where no other machine would be purchased did they explain its capabilities to certain customers; and, in conclusion, he again affirms most categorically, this time specially after taking several tricycle rides, that when an equally improved machine is compared, "so small is the difference in the ease of propulsion over average roads, that

Digitized by GOOGLE

the man, much more the woman, who wants the maximum of ease and comfort, desires to face grease without a tremor, ride through traffic with the minimum of risk, and be able to stop without dismounting, will take the tricycle without hesitation."

I do hope some of our members who may have given up the old heavy machines as too laborious, and especially ladies, will mark these words. I have myself received (through the Editor) a letter from which I may quote a few lines:—

"I am forty-four and weigh eleven stone, and have for some years ridden a safety bicycle. But this I have never thoroughly enjoyed as I such to enjoy cycling in the 'eighties,' on a Premier tricycle, which I then rode, weighing about one cwt."

I venture to prophesy a new lease and sense of enjoyment to this correspondent, on a good band-braked machine well within 45lb., only 10lb. probably over the weight of his aafety. Ladies especially should note it, and the testimony of "Bos" that he can ride farther on his tricycle and feel less fatigue, and that of others to the very same effect. I feel absolutely certain that a great many ladies who have "learnt to ride" a bicycle with the idea that it is the easiest, would find much more real ease and comfort from a tricycle properly made, which is certainly in some other respects better adapted to their use.

It is needless to repeat what I think such a machine should be; but it should be stated, from actual experience in seeking a mount, that in several cases those firms which profess to fit "28in. wheels to order," do so simply by putting all 28in. wheels to the same machine, thus raising the crank-axle to as much as 12½ inches in three actual instances. No tricycle can be safe at such a height, for any but very short persons; 10½ inches is quite enough, and gives 4 inches clearance for 6½ in. cranks. Much higher than this is very dangerous at corners. It cannot be too clearly understood that justice is not done to 28in. drivers, unless the machine is built to correspond, keeping the crank-axle down, and with a 26in. front wheel; and those who desire to fairly try such a model should insist on these points. It is useless, and unfair, to judge of it under other conditions.

I have had a machine built for myself fulfilling these conditions, and with a band-brake on a 4-inch drum, with a wide strap, the makers taking real pains to meet my wishes. I decided finally on hollow rims, rat traps, and (by their strong advice as practical tricyclists) 1½ Clincher tyres. The weight is 43lb., and I am satisfied the strength is ample. Later on I will report upon it further. The front wheel alone has ½ balls; the other bearings ¼ and ½ balls; and the axle outruns down an incline any other which I have met with. The crank axle is within 10½ or 10½ inches of the ground.

In reference to points mentioned in correspondence, the Press opinion in favour of "side-steering," quoted by No. 3134, is eight years old, and I suppose such machines failed to find purchasers. When I changed from sidehandles to the Cripper bar, in my own case the immediate result was that I could easily ride hills I never attempted before, even as a younger man—and probably this experience is general. Few will desire with "Viator" to give up pneumatics, and his "momentum" idea, carried too far, would land us in the extra fly-wheel patented so many times. I did point out last year that a machine must have some momentum, and it is possible for a safety to be under the best weight perhaps, but I do not think it is possible for a tricycle to reach such a limit, beyond that imposed by size of wheels and stiffness. It is true that, by the arch principle, much better "cushion" tyres can be made than the common plain ones, and an improved best pattern cushion would find a field; but the later pneumatics rarely give trouble now. In regard to "Bos," there is no reason why people who are really comfortable on 26-in. drivers should have alb. heavier for 28-in., but I myself have tried 26-in. on the very machine he names—the Rudge—and did not find it comfortable compared with larger wheels. They were Dunlop pneumatics. But then I have suffered more or less from a stiff and aching back all my life. Practically, 28-in. drivers mean adding 1lb. per wheel, and it is just a question, which is worth most to the individual.

And now for brakes. It is obvious that the most efficient brake for actual and general use by the "separate and distinct class" Mr. Sturmey refers to, is a matter of the utmost importance. A dozen "makers" will tell you the front brake is the best. Well, most of us have had to revise some opinions, and we would all be open to good evidence on such a point. It ought, however, to be evidence of experience; and such mere general assurances are discounted by the fact that all the "makers" formerly vouched, as some vouch even now, for the safety and efficiency of metal spoons, which every good maker now admits to tear a tyre to pieces. It also seems discounted by the great variety of rubber and other brakes introduced, presumably to cure some obvious faults. But there is something to be said, and it may be of use to recount some of the things actually said to me on my rounds in search of a machine.

At one great house on the Viaduct an experienced man of apparently twenty-five to thirty years of age remarked, that for some people front brakes were undeniably safer. He said he presumed that I was "careful to keep my band-brake in order." Naturally, I replied: it was always kept adjusted, and from time to time made more or less adhesive if required. Then, said he, it was all right, and I was right in my preference; but there were some people who never gave any care to a brake, and with such, a band-brake might be utterly useless when wanted; whereas the front brake would always have some action, so long as the brake and tyre lasted. That seems sense; and it may be freely granted that for such people the plunger may be best, at least for a time; though I should think the same careless neglect would let them in with that too, sooner or later. As he mentioned Muswell Hill, and had ridden both up and down it, I asked about that; and he said he would not be at all afraid to come down it so far as the tyre itself was concerned, but certainly would not like to trust himself to a front brake alone, or for any lady he cared about to ride down the hill at all with one. There Though a safe brake for a lady down that is the point. ought to satisfy all reasonable requirements, I don't call Muswell Hill a bad hill. On the north side of London, the hill into Rickmansworth from Pinner Road is considerably worse; but hills I have more in mind are such as River Hill near Sevenoaks, the long hill at Chatham, and some in Devonshire.

At another Viaduct house I saw a middle-aged gentleman nearly as old as myself probably, who was himself a tricyclist, but for personal reasons had not ridden for two years. His firm do not make a band-brake machine at present. He regretted it, and said that he himself certainly considered that form the right thing for miscellaneous riders, and would take it for his own riding.

The builders of my own machine are practical tricyclists, and they strongly urged a rubber front brake. One of them said he should "put it on" upon a Clincher without the smallest compunction, and if the tyre cover wore out within a year would give me a new one free; the wear was in the brake, not in the tyre. That, too, is pretty obvious to those who understand rubber. But the wear of the brake, if friction enough for a steep hill is applied, must be very great and rapid, and the heat developed on such a short surface very considerable. I asked about wet, and "of course" that would make considerable difference. But chiefly, neither of these, though experienced riders, use their brakes to any appreciable extent. So, as they both admitted, it was opinion, and not actual experience.

So there we are. What we really wanted was actual evidence, from experience, of steady men, and ladies, who constantly use front brakes on tricycles down hills of con-

siderable pitch, as I habitually use my brake, and who find it answer, without excessive wear of the brake, or injury to the tyre, or failure at the crown of the fork. Such a brake is lighter, cheaper, and easier to make, and it is a really important question. I am far from saying there is no such evidence. I hope we shall have it if forthcoming, and

am quite open to conviction.

But how overwhelming all the real evidence has been the other way! One after another has written. Two have had the vaunted new Quadrants, on the faith of the strong assurances given them. Well, they did not find it answer with the front brake; and the only man who is satisfied with this is one who expressly says that he considers a tricyclist, like a bicyclist, should not "depend" upon his brake! Granted, that on some hills every sane rider would keep his feet on the pedals; we can and do "depend" on good bandbrakes, and (as pointed out before) unless we can, half the rest and comfort of general country riding is destroyed. This is one of the very points wherein a good tricycle makes up its balance of account with the safety bicycle.

And now to sum up-

I. Mr. Sturmey, whose knowledge from the "trade" point of view is simply unrivalled, has been the first to point out that tricycles can be built now so nearly equal to safeties in ease and speed, and so superior to them in some other points, that if agents and manufacturers only try, they can sell them when they can sell nothing else. Is it not worth their while to try, in these days of shrinking business? When they have failed to sell a safety, let them tell a customer what the tricycle has been brought to, or let them press it for those to whom the safety is obviously unsuitable. Business will follow if makers will provide what the public want.

2. Can there now be any real doubt as to what genuine tricycle riders do want? And is not demand manifestly checked by the obstinate refusal to provide it? Firms may, like the Quadrant Company, refuse to supply band-brakes. Is it not pretty plain that however many they may sell, they are missing a great deal beside? Here we have that company successful in forcing machines with front-brakes on two purchasers; and we have the direct evidence of the result. Does such a result really promote sales, or do makers any good? As another correspondent put it, will not more business be done, and more money made, by

supplying what the public want?

3. And there is no need that purchasers should have forced upon them what they do not want. A little perseverance and inquiry, and looking about, and if they cannot perhaps get every little detail they fancy (I, e.g., still consider a mild automatic action advisable in a general tricycle, and had to go without that; personally, I don't care about it), they can at least get the essential points, as I have got my bandbrake and 28-in. drivers, with cranks kept down, on a stiff machine of 43lb. This last point, let it be remembered, is very important. One correspondent expressly states his difficulty with the Quadrant at corners. This is partly owing to the rather narrower tracks now adopted, and a little to the "give" of pneumatic tyres: all the more is it necessary to keep down the centre of gravity.

TOMMY ATKINS, Private, C.T.C.

P.S.—I ought perhaps to say that the Raleigh Co. wrote me that there was some mistake about the weight of 54lb. they had quoted me, and that it would be only 46lb. for a band-brake. As I understand, their pattern is the same as the Humber, with only 26in. wheels, which is quite natural under Mr. G. P. Mills. As remarked on the Humber itself, if this is so, the saddle position is too far back for the present day. I also find from inquiries, that the Coventry Machinists keep up their band-brake pattern, and make 28in. wheels, though not shown on their stand. The position of their central-frame pattern is also, however, very backward, and the crank-axle decidedly high. Both are a little heavier than need be. My machine, with 26in. wheels, would only weigh about 41lb.

#### DISTRICT SECTIONS.

Sir,—I have had so much pleasure in reading the February issue of the Gazette that I must write to appreciate it. The matter from beginning to end is thoroughly interesting, and the mechanical and practical papers just begun will be useful to all, whether advanced cyclists or novices.

It would be, in my opinion, a great success to have a "Mersey District Branch" of the C.T.C., with meetings fortnightly. This district, making Bebington, in honour of No. 5489, a centre and taking a radius of about twenty miles, should make a fine field for profitable cycling. Although I am not fond of a snail's pace a wheel, I hold that dust raising should not be the whole aim of the wheelman, and that the meet should be held always with a view to the improvement of both mind and health.

Cycling clubs as a rule, to say the least against them, do not meet the want I denote. I feel sure that there are in the ranks of the great Club many who are competent to take charge—if one may advisedly use the term—of a party, and discourse upon the natural, social, or ecclesiastical history of the place visited, and who would take a pleasure in doing so.

Although I may be opposed in my views, I am of opinion that cycling clubs are generally not as successful as they should be. The point of meeting is fixed at the home end, and at a time which is too early for some, and too late for others. Owing to this, uncertainty and confusion prevail, and club men with more leisure are tempted to go further afield, those coming later are in doubt, and go elsewhere than the appointed place. A branch of the C.T.C. could overcome this tendency by appointing the house and time of which tea will be had, the goal thus becoming the centre of interest, and members enabled to take their own time in coming.

It has been suggested to me that there is a lack of sociability in the C.T.C., members not knowing each other as they should, and I seel sure that the "District Branch" would overcome this want, and in many ways strengthen the parent body.

I. D. MATHLAS.

Wavertree, Liverpool.

Many letters and articles are unavoidably crowded out.—ED.



THE CANVASSING MEMBER—whether lady or gentleman—will welcome the new Prospectus-Application enclosed.

SIGNS OF THE TIMES.—The Clewer Highway Board has petitioned its County Council in favour of Universal Lights.

PLYMOUTH.—The old-established yet enterprising Plymouth Cycling Club toured in North Cornwall at Easter, C.T.C. houses being exclusively patronised, and that too with unqualified satisfaction to all concerned.

THE ANNUAL GENERAL MEETING.—Through an oversight on the part of our special reporter, the name of the gentleman who presided over the proceedings recorded in the last Gazette was omitted. The gentleman in question was Mr. H. Croydon Roberts, the retiring Vice-chairman of the Council.

"THAT 20,000."—The attention of every member is directed to the new Prospectus-Application enclosed in the current issue. Any reasonable number of additional copies will be sent to any address upon receipt of a post-card.

THE SCOTTISH ROADBOOK. —Mr. Arthur Poyser, the Editor, has accepted the post of organist at St. Mary's Episcopal Church, Dunblane, Perthshire, and at Springfield Terrace in this town, he should now be addressed.

"THE CYCLE PRESS, LIMITED."—A company bearing this title is about to be formed to produce *The Cycle* and kindred publications. Shares in the same are offered to the public, and full particulars thereof will be found in our advertisement pages.

HERTFORD. — The Hertford Literary and Debating Society was, on the 12th ultimo, entertained and interested by a paper upon "The Pleasures of Cycling: the Pastime of the Future," the author being none other than the veteran rider Mr. W. Cosens, the Vice-chairman of the Council of the CTC.

"GLEANINGS FROM THE HISTORY OF DUNLOP TYRES."—A most attractively-got-up catalogue bearing this title reaches us at the hands of the Pneumatic Tyre Co., of Alma Street, Coventry, and we would advise all who are interested in the tyre question to send for a copy. In so doing members will do well to quote the C.T.C. Gazette.

CYCLE INSURANCE.—The London and Provincial Cycle Insurance Corporation is issuing an illustrated show card and certificate of appointment to all its agents and repairers. The card is not in the highest style of art, but it serves to recall to mind the risks to which cycling flesh is heir, and at the same time serves as a good advertisement.

THE ROADS IN THE WEST.—To the severe weather or, in the alternative, to the indifference of the responsible authorities must be attributed the complaint of a writer to the Standard who asserts that he found the roads between Wells and Taunton, and Exeter and Launceston, simply unrideable at Easter. New metal abounded, and cart loads of stones were alleged to have been shovelled promiscuously on to the surface.

A MISSING LANDMARK. — Sir Thomas G. Parkyns, of Greenwich, the inventor of a steam tricycle the use of which was some years since forbidden by the authorities unless the user conformed to the provisions of the Locomotives (Amendment) Act (including one that limited the pace to five miles an hour, and another that said the machine must be preceded by a man on foot carrying a red flag), died a few weeks ago.

"LET OTHERS PRAISE THEE."—The old-established Finchley Tricycle Club, in its Handbook, speaks of the C.T.C. as follows:—"Cyclists who are not already members of the Cyclists' Touring Club should join at once. The organisation offers many advantages, including a greatly reduced hotel tariff, which has just been carefully revised, and is now so arranged that great benefit will be derived from it by all those who tour awheel, if only for a few days. The Club Gazette, which is published monthly and sent freet to members, is the only cycling journal which is entirely independent. The subscription to the Club is 3s. 6d. per annum, and the address is 139 and 140, Fleet Street."

A HINT.—A North-country member writes:—" Might I suggest that you point out in the next Gazette that members may often get others to join the Club if they will only offer to fill up and forward their applications. I have found this to be a great factor in obtaining a number of fresh members."

DURHAM.—"The whirliging of Time brings his revenges."

A farmer has already been fined for non-compliance with the new bye-law enforcing the use of lights at night. The wheelman may well reflect that he has not played the part of pioneer in vain.

THE MUD-GUARD QUESTION.—In reply to "R.Y.F., No. 4425," Mr. H. Mellor writes:—"If he has a mudguard brought at least half way down the rear portion of the hind wheel and fitted with a small leather flap at the end, he will be well protected there, as I can testify from experience, in the roughest weather. I have even tried flaps on the front wheel which at times touched the road, but very often in a head wind the mud will fly from the top of the wheel into one's face, and how can a guard protect that?"

AN ENCOURAGING SIGN.—In spite of the fact that April is a short month, and that the Easter holidays did not terminate in time to admit of members sending in for the May Gazette the nomination forms of the candidates they secured when on tour, the current list shows an increase of sixty-six over the corresponding month of last year. The new prospectus-application blank should be productive of even better results for the months to follow, if members will but accord us the co-operation we bespeak.

TETANUS.—Mr. F. Lewis, of Bromley, writes:—"While quite agreeing with Miss Erskine's praise of boracic acid (page 106, Gazette), would it be worth while to remark on the general popular error regarding lock-jaw or tetanus? The generally conceived notion is that lock-jaw results from a cut or wound between the thumb and forefinger. The fact is that tetanus may result from any wound, or even from a scratch from a pin, provided that dirt be allowed to get in. The tetanus microbe has its home in horse-manure, and, as that must be present in 'dirt,' it is easy to understand the error, the hand being the part par excellence of the human anatomy to come into contact with dirt. A case occurred last year in Essex, where a boy had his foot crushed by a horse—tetanus set in within ten days and he died. During the past winter, in this locality, a young man was injured in the face while toboganning; tetanus set in and he lost his life. The result of the inquiry in each case forms my warrant for the above.'

"THEY DO THESE THINGS BETTER IN FRANCE" Do They?-Cyclists are not to have it all their own way in The pedestrians, who resent the increase of wheeled traffic on the roads in consequence of the extraordinary spread of the fashion for cycling, have formed themselves into a League, in order to assert to the fullest extent their rights on the public highways. Every member of the League enters into a solemn covenant never to get out of the way of a cycle of any description. In vain will the cyclist tinkle with his gong, or make hideous noises with his horn, the pedestrian Leaguer, who presumably is gifted with strong nerves, will proceed calmly on his way without turning to the right or the left. "We never take any notice of such signals," said one of the members, amid loud applause, at a meeting of the League; "the cyclists have to get out of our way." And he added, "I have been pushed and bumped, but I have never been knocked down, It is the cyclist who falls, as a rule, in case of a collision, not the pedestrian."-Daily News

## The Club Uniform.

#### SPECIAL AND IMPORTANT NOTICE.

The uniform stock is now kept at No. 7, Maddox Street, Regent Street, London, W., where it is under the direct management of Mr. T. H. Holding, who will execute WHOLESALE and RETAIL orders as heretofore, and at the same tariffs.

The new Uniform Catalogue and Price List is now ready, and will be sent to all meru members in due course, while any old members will receive one by return of post on sending stamped and addressed envelope to Mr. Holding at the address referred to.

All Orders should be accompanied by the needful remittance. Cheques and Postals should be made payable to T. H. Holding, crossed "—— & Co., Not negotiable," and P.O.O.'s should be made payable at Vere Street Post Office, London, W.

#### LIST OF OFFICIAL TAILORS HOLDING APPOINTMENTS.

(The firms marked with an asterisk have been appointed Ladies'

Tailors also, at the usual prices. ABERDEEN—K. Maclean & Son, 17, Bridge Street.
ACCRINGTON—J. W. Foster, 25, Blackburn Road.
AYR—Currie, Rae & Co., Aika Buildings.
BALE (Switzerland)—V. Settelen.
BARNSTAPLE—J. N. Brewer, Cross Street.
BATH—"Gould & Son, 23, Milsom Street, and 1 & 2, George BARNSTAPLE—J. N. Brewer, Cross Street.
BATH—"Gould & Son, 23, Milsom Street, and 1 & 2, George Street.
BEDFORN—J. Beagley, 5, High Street.
BEDFORN—J. Beagley, 5, High Street.
BERLIN (Germany)—W. Köpsel, W 8, Mohrenstrasse 50.
BERKIN (Germany)—W. Köpsel, W 8, Mohrenstrasse 50.
BERKIN (Bermany)—W. Köpsel, W 8, Mohrenstrasse 50.
BERKING MAM—"Husband Bross, 21, Paradise Street.
BELACKBURN—Tomlinson & Co., 17, Aspden's Buildings.
BOLTON—J. Boyd & Co., 21, Fold Street.
BOURNEMOUTH—W. Rogers & Sons, 1, Albany Terrace.
BRADFORD—Macvean Bross, 17, Darley Street.
BRIDGNORTH—W. Jones & Co., Waterloo House.
BRIGHTON—R. Needlam & Son, Castle Sq., Old Steine, and Palace Place.
BRIGHTON—R. Needlam & Son, Castle Sq., Old Steine, and Palace Place.
BRIGHTON—R. Needlam & Son, Castle Sq., Old Steine, and Palace Place.
BUNNLEW—J. Leedam, 5, Red Lion Street.
BURTON-ON-TRENT—W. Brown, 184 and 185, Station Street.
BUNNLEW—J. Burrow, Silver Street.
CAMBORNE—J. Vivian & Brother.
CAMBORNE—J. Vivian & Brother.
CAMBORNE—J. Vivian & Brother.
CANDENBERUR—J. G. Jackman, 6, Parade.
CARDIFF—E. J. Baker, 33, Queen Street.
CANLISLE—H. L. Pass, 10, English Street.
CANLISLE—H. L. Pass, 10, English Street.
CHELINSPORD—J. P. Green.
CHELTENHAM—S. King & Son, 35, Winchcomb Street
CHESTER—J. T. Davis, The Cross.
CHICHESTER—W. Long & Son, Southgate.
CIRENCESTER—G. Fraser & Son.
COKE—J. Drew, 34, Princes Street.
COVENTRY—B. Riley, King's Head Buildings.
CREWE—Vickers & Son, High Street.
DARLINGTON—W. G. Wallis, 4, North Gate.
DERNY—"Gamble & Cunningham, 54, Sadler Gate.
DORCASTER—G. Goldthorpe & Son, St. George Gate.
DORCHESTER—H. Bascombe, High West Street.
DUDLEN—"T. J. Callaghan & Co., 15 & 16, Dame Street.
DUDLEY—W. R. Kneale, 251, Castle Street.
FLONENGE (Italy)—L. Dotti & Co.
FLANSTONE—W. Ward, 38, Guildhall Street.
FAREHAM—W. Surman, 4, High Street.
FAREHAM—W. Surman, 4, High Street.
FAR

FOLKISTONE—W. WARG, 35, GUIIGIABI STREET.
FROME—Swaine & Son.
GLASCOW—R. W. FORSYth, 13, 17, Renfield Street.
GLOUCESTER—Wareing & Son, 3, Westgate Street.
GREAT GRIMSBY—C. H. Thompson, 112, Cleethorpe Road.
GUILDFORD—J. Levy & Co., Bank House.
HALIFAX—W. H. Graydon & Son, Northgate and Crossley Street.
HANLEY—T. & R. Gilman.
MANUELORDWEST—Greatich & Dawking 24, Market Street.

HANLEY—T. & R. Gifman.

HAVERFORDWEST—Greenish & Dawkins, 24, Market Street.

HBREPORD—C. Witts.

HULL—C. H. Capes & Son, 20, Savile Street.

ILFRACOMBE—R. Jewell, 123, High Street.

INVERNESS—H. Fraser, 23, Bridge Street.

IPSWICH—W. Damant, Old Bank Buildings.

JERSEY—E. P. Falle, 10, Beresford Street.

KIDDERMINSTER—Thos. Bennett, 6, Oxford Street.

TROWRRIDGE—W. Beaven.
TUNBRIDGE WELLS—J. Pickett & Son, 25, Grosvenor Road.

\*E. C. Jenkinson, 28, Mount Pleasant.
UTRECHT (Holland)—J. de Gooijer, jr., 304, Kromme Neuve Gracht.
UXBRIDGE—Carrick & Coles, Waterloo House.
VIENNA I—F. Kadlezik, Rothenthurmstrasse 31.

Vienna I—F. Kadlezik, Rothenthurmstrasse 31.
WAISALL—Barrett & Forrester, Park Street.
WARMINSTER—Foreman & Son, 23, Market Place.
WARMINSTER—Foreman & Son, 23, Market Place.
WATORD—"J. P. Taylor, 95, High Street.
WESTON-SUPER-MARE—"Tytherleigh & Son, Church Road,
WIGAN—Coop & Co., 23, Walgate.
WINCHESTER—F. W. Flight, 90. High Street.
WINCHESTER—F. W. Flight, 90. Plassed Street.
WINDSOK—R. Whitaker & Sons, Peascod Street.
WOLVERHAMPTON—H. B. Burslem, 19, Darlington Street.
WORKESTER—H. PARSONS, 23, The Cross.
YEOVIL—I. A. Milborne, 21. Prince's Street and Church Street.
YORK—W. R. Beckwith & Son, 30, Colliergate.
ZURICH—A. Whittlinger, Bahnhofstrasse.

"T. A. Harrison, Anglo-American.

## List of Candidates, May, 1895.

Amateur Bicyclists and Tricyclists—Ladies and Gentlemen—in all parts of the world are cordially invited to join the Cyclists' Touring Club. The Subscription is a nominal one: Three Shillings and Sixpence per annum only. The Entrance Fee is One Shilling in addition, and both are payable upon making application for admission. Forms of Application for Membership are obtainable gratis of the Secretary.

ARTICLE 6.—All Members shall be elected in the following manner: The candidate shall apply for election to the Secretary on such printed form as shall be from time to time prescribed by the Council. His name shall be sent by the Secretary to all members of the Club in such manner and with such particulars of his application as the Council may from time to time direct, and at the expiration of seven days from the issue of such notice he shall become duly elected providing that no protest shall have been lodged against him with the Secretary. In the case of a protest being lodged against any Candidate for election the same shall be considered by the Council at their next meeting and they shall have full power to elect or reject such Candidate. The Council may temporarily set aside or anticipate the usual formalities relating to the election of a candidate should good cause be shown and grant upon such terms and conditions as they may determine a provisional certificate of membership in advance of the time at which the member would be entitled to the ordinary ticket.

ARTICLE 7.—The Secretary shall send a copy of the Memorandum and Articles of Association of the Club with a ticket of membership and other rules and regulations of the Club as the Council may from time to time direct to every member

within one month from his election.

ARTICLE 8.—Any member of not less than two years' standing may become a Life Member upon payment of such sum as a composition for all future annual subscriptions and upon such application and notice as a General Meeting shall from time to time determine, but the Council may in special cases dispense with the necessity for two years' standing. In every respect except the payment of annual subscription, a Life Member shall stand upon the same footing as an ordinary member. All moneys received from Life Members shall be dealt with and applied in such manner and form as a General Meeting shall from time to time determine.

Particulars of the conditions upon which a Provisional Certificate of Membership or Life Membership is procurable may be obtained of the Secretary upon application.

WOTICE.—This List is published with the "Monthly Gazette" on the 1st of each month. "Application for Membership" forms must reach the Secretary not later than the first post on the 20th of the preceding month to ensure insertion.

• The Names and Addresses of the Chief Consuls set over the various Counties will be found in the Club Handbook (price One Shilling, of the Secretary).

#### BEDFORDSHIRE.

Fishwick, J. L. Grimmer, G. J.

12, Grove place, Bedford Arthur street, Ampthill

#### BERKSHIRE.

Frogley, W., jun. Hopkinson, Rev. H. Turner, H. Westcot, Wantage Gloucester Villa, Marlow road, Maidenhead News Office, Newbury

#### BUCKINGHAMSHIRE.

Steele, A.

4, High street, High Wycombe

#### CAMBRIDGESHIRE.

Beckett, G. W. (Leys S.B. Club)
Buckton, W. W.
Clarke, J. S.
Crisswell, H. B. (New Market C.C.)
McPherson C.
Smith, A.
Smith, T. B. Gilbart

Leys School, Cambridge
Pembroke College, Cambridge
Caius College, Cambridge
Meldreth House, Newmarket
60, Devonshire road, Cambridge
46, St. Andrew's street, Cambridge
Trinity College, Cambridge

#### CHESHIRE.

Allen, A.
Archibald J.
Brewster, W. R.
Buckley, Rev. A.
Carter, J. D.
Davenport, J. B.
Gibson, J. T.
Hulme, J.
Kendall, P. D.
Kerfoot, G. (Godley C.C.)
Liy Bank, Mersey road, Ashton-on-Mersey
Beechwood, Nursery lane, Fulshaw, Wilmslow
Oak Cottage, Kerridge, near Macclesfield
Eversley, Frodsham
73, Redling lane, Hyde
Saxonhurst, Rock Ferry
Dial House, Muslin street, Newton, Hyde
Claremont, Cheadle Hulme
The Lakes, Dukinfield
324, Hamilton street, Birkenhead
Mount Lodge, Chester
1, Enfield terrace, Slatey road, Birkenhead
Laurel Bank, Albert road, Sale

#### CORNWALL.

Beadsworth, M.
Bone, Rev. F. J.
King, D.
Treffry, Miss V.

12, Market-Jew terrace, Penzance St. Newlyn East, Grampound road Mount Edgcumbe, near Plymouth Place, Fowey

#### CUMBERLAND.

Wilson, J. H., B.A., LL.B. (Carlisle C.C.C.) 18, Lismore street,
Carlisle
Wright, J. (Y.M.C.A. C.C.) York Villa, Etterby Scawe, Stanwix

#### DERBYSHIRE.

Donne, F. M.

Jelf, A. R.

Offcote Hurst, Ashbourne
Owen, A. J.

Reeve, C. F.
Sampson, W. C. O.

Prospect House, South Normanton, Alfreton
Wells, G. A. (Eckington United C.C.)

Prospect House, South Normanton, Alfreton
Somerville, Eckington

#### DEVONSHIRE.

Charles, G. W. (Exeter C.C.) Falcon, T. A.

43, Sidwell street, Exeter 46, Southernhay West, Exeter

#### DORSETSHIRE.

Barton, N. F. J.P. Guest, M. Lea, H.

8, The Crescent, Weymouth Devonshire House, Weymouth Islington Lodge, Puddleton, Dorchester

#### DURHAM.

Galloway, W.
Goodwin, R.
Hughson, A. S.
Lang, Mrs. R. T.
Pallister, G. C.
Palmer, H., F.R.M.S. (Ferry Hill C.C.) The Manor House, Crook
Tinnion, G. (Lockharts C.C.)
Turnbull, A.
Wilkinson, E.
Watson, H. C.
Wester hill, Sunderland
Wodencroft, Norton, Stockton-on-Tees



#### ESSEX.

Broxted Vicarage, Dunmow 80, Woodlands voad, Hford 87, Capel road, Forest Gate Stuart House, Upton Cross, Forest Gate 46, Hanfrith road, Forest Gate 42, Jedburgh road, Plaistow S. Stephen's Vicarage, Upton Park Battiscombe, Rev. H. F. Bramston, Mrs. G. Christmas, S. Gray, A. A. Jones, E. H Kennedy, W. Lane, Rev. A. P., B.A. Smith, V. O. 19, Northcote terrace, Grove Green road, Leyton

#### GLOUCESTERSHIRE.

Brain, W. T.
Bullock, D. M. W.
Corpe, R. N.
Franklin, A. R. B.
Heelas, A. H. G.
McCrea, P. W., M.D., B.B., and T.C.
Rogers, B. M. H., B.A., M.D., B.Ch.
Siepmann, O.
Waters, L. 2, Hil Greet, Winchcombe 5, Quay head, Bristol 62, Queen's road, Clifton 93, Southgate street, Littleworth 93, Southgate street, Littleworth
7, George street, Stroud
d T.C.
19, Portland square, Bristol
B.Ch.
11, York place, Clifton
42, Clifton Park road, Clifton
a, Hillside place, Terrell street, Bristol
Hasfield Court Waters, L. Wolseley, Sir C. C., Bart.

#### HAMPSHIRE.

12, Hill lane, Southampton St. Joseph, Christchurch The Square, Titchfield 4, Compton road, Winchester Ordnance Lodge, H.M. Gun Wharf, Partmouth Andreoli, M Arthur, Rev. C. Bland, W. C. Blood, Mrs. R. Bruno, Major H. W. B. Portsmouth Harman. A. B., M.R.C.S., L.R.C.P.
Hayes, Surg. Major A.
Hoare, Capt. C.
Hoare, Mrs. C.
Hoare, Mrs. C.
Hoare, Mrs. S.
Hoare, Wiss S.
Hoare, W. Wiss S. South street, Titchfield Ivey, H. Judd, F. Corum, Micheldever Myrtle Cottage, Bishops Waltham Sims, H. M. (Bishops Waltham C.C.) 27, The Triangle, Bournemouth Thompson, H. W. (Bournemouth B. & T.C.) Wix, H. E. Isbels, Emsworth

#### HEREFORDSHIRE.

The Ovals, Lyonshall, Kington Hope End, Ledbury Delfosse, D. C. Hewitt, J. W. Hewitt, C. J.

#### HERTFORDSHIRE.

Boreham Holt, Elstree Hovell, Capt. H. A. B.

#### HUNTINGDONSHIRE.

Morgan, H. T., M.B., C.M. 98, High street, Huntingdon

#### KENT.

208, Lewisham High road, St. John's 47, Kirkdale, Sydenham Highfield, Mottingham Anglesea road, St. Mary Cray 43, Knighton Park road, Sydenham Adams, T. F. (St. John's C.C.) Crump, F. T. C. Elliot, L. Glassup, L. Hartley, F. H. Hillier, H. L. Lenn, H. o, Effingham road, Lee Woodhouse Villa, Adelaide road, Brockley 72, Granville Park, Lee 8, Victoria road, Old Charlton Lenn, H.
Nöltingk, L. B.
Ozanne, Major C. H.
Pargeter, F. L.
Pickering, J. C.
Rhodes, J. M.
Simson, T. S.
Stokes, C.
Stone, E. W., M.A.
Willis, Surgeon. Major C. B.
Wilbisters, Cast 99, Darnley road, Gravesend Sunbury House, Venner road, Sydenham Harewood House, Newlands Park, Sydenham 15, Kidbrook Park road, Blackheath New Romney (S.O.) Stone House, Broadstairs Eardley Lodge, Sevenoaks Eastbridge House, Hythe Withington, Capt. G.

#### LANCASHIRE.

Acratopulo, A.

Applebee, H.

1, York terrace, Manchester road, Southport Ashworth, W. (Bury C.C.)
Atherton, J. W.

609, Atherton road, Hindley Green, nr. Wigan 26, Market street, Colne Backhouse, C. (Oldham Dominic B.C.)

8 Grey road, Walton-on-the-Hill Real, J. T. (Manley C.C.)

13, Greame street, Moss Side, Manchester Beckwith, H. G.

13, Alan road, Withington 19, Walton-on-the Holl Real, J. T. (Manley C.C.)

14, Crompton street, Oldham 19, Alan road, Withington 19, Alan road, Withington 20, Swan street, Manchester 30, Swan street, Manchester 30, Swan street, Manchester 18, Northgate, Blackburn 50, Park road, Southport 1, Wellington street, Higher Broughton Acratopulo, A.

10, Stalmine road, Rice lane, Walton Babylon Cottage, Catterall, Garstang Townfield House, Great Harwood Clarke, J. Cottam, J. Cran, J., M.D. Edwards, A. M. so, Keppel road, Chorlton-cum-Hardy Hartley, G. Hartley, J. W. Hartley, W. H. Hiller, E. G. Carnforth Sherwood, Hastings avenue, Chorlton-cum Hardy shaw C.C.)
Southleigh, Hooley Hill, near Manchester Southleigh, Hooley Hill, near Manchester Hodgson, H. (Audenshaw C.C.) Hodgson, P. (Audenshaw C.C.)

near Manchester
121, Grey Mare lane,
Bradford, Manchester
6, Belmont street, Southpor
34, Hartley street, Oldhan
107, Admiral street, Liverpod
1, Hartham and Palm Hulme, H. (Manchester Y.M.C.A. B.C.) Hutchinson, J. G. Kershaw, J. W. Kirby, L. Knott, P., A.P.S. 1, Blackburn road, Bolton 24, Chapel street, Liverpool 25, Bishop street, Brook's Bar, Manchester Elton Vale, Bary Moddree, J. M.
Need, F. J.
Parker, W. S.
Parker, J. H.
Peake, J. H.
Poole, J., A.M.I.C.E.
Rothwell, N.
Sharrocks I. H. (Charl Peake, J. H.

21, Binns road, Edge lane, Liverpool
Poole, J., A.M.I.C.E.

84, Heywood street, Moss Side, Manchester
Rothwell, N.

93, Hampton road, Southern
Shorrocks, J. H. (Chorlton-cum-Hardy B.C.)

17, St. Clement's road,
Chorlton-cum-Hardy

Southern, W. (Manchester Southern C.C.) 250, Great Clowes street, anchester Southern C.C.) 250, Great Clowes street,
Higher Broughton
Ebor House, Edge lane, Streetford
Cavendish street, Carmel
111, Withington road, Whalley Range, Manchester
23, Wellington street, Higher Broughton
The Bank, St. Ann's street, Manchester
4, Church street, Preston
Richmond Cottage, Wellington road. Eccles
Hamilton terrace, Warden street, Newton Heath,
Manchester Sumner, W. E. Swainson, W. S. Taylor, J. T. Thomaides, P. Towers, S. H. Troughton, R. H. (Preston C.C.) Turner, T. Warren, J. T. Manchester 87, Napier street East, Oldham 135, Upper Brook street, Manchester

#### LEICESTERSHIRE.

Wilkinson, J. H. Woodhead, B. T.

Rowlett, W., jun. Royer, L. W. Truman, Miss R. C. M. Walker, P. L. 14, Upper Tichborne street, Leicester East Tarndon Hall, Market Harbero' The High School, Loughborough 26, Mecklenburg street, Leicester

#### LINCOLNSHIRE.

Belcher, C. Cook, J. H., T.L.S., F.G.S. Leakey, C. M., L.S.A. Nelson, C. Ratcliffe, J. Sudthorpe Farm, Fulbeck, Grantham
123, Monks road, Lincoin
Tower House, Caistor
5, Bank street, Lincoin
Exchange Club. Brgg
Spa House, Monks road, Lincoin
15, Rigby road, Brgg Thorpe, A. Todd, C. W.

#### MIDDLESEX.

Alexander, F. C.
Andrews, F. E. H.
Anson, F. H., M.A.
Applegarth, R.
Arkins, E. W.
Arenberg, J. F.
Barraclough, E.
Bergel, C.
Berrill, W. J.
Best, W. S.
Burford, F. C.
Rurstall, Miss L. A. 117, Petherton road, Highbury New Park, N. 28, Hornsey Rise, N. 72, St. George's square, S.W. 11, Queen Victoria street, E.C. 21, Queen Victoria street, E.C.
382, Bethnal Green road, E.
9, New Broad street, E.C.
9, New Broad street, E.C.
27, Cromwell grove, West Kensington Park, W.
17, Pembridge crescent, Bayswater, W.
40, Penn Road villas, Holloway, W.
37, Lilyville road, Walham Green. S. W.
28, Nassau street, Berner street, W.
28, Stelle groad, Hamperton Burstall, Miss L. A. B., B.A. 25, Steele's road, Haverstock Hill, N.W. Chaffey, G. McC. Churchill, J. S. Clark, C. H. Clark, A. S. Cohen, C. A. 35, Queen Victoria street, E.C. " Harres Park House, East Twickenham Clark, A. S.
Cohen, C. A.
Cohe, W. H. (Langham Wheelers, C.C.)
Dams, L.
Walpole Lodge, Strawberry Hill, Twickenbam
Denison, Capt. Hon. H.
Eller, C.
Forster, H. O. Arnold, M.P.
Fox. Miss H. M. Brook
Fraser, Capt. H. E.
Greig, G.
Greig, Mrs. E. A.

26, Fitzjohn's Avenue, Hampstead, N.W.
39, Farleigh road, Stoke Newington, N.
Walpole Lodge, Strawberry Hill, Twickenbam
19, Carlton House terrace, S.W.
15, Sergeants Inn, Fleet street, E.C.
9, Evelyn Gardens, S.W.
11, Victoria street, Westminster, S.W.
34, Victoria street, Westminster, S.W.
65, Combill, F.G.
66, Kensington Palace mansions, 31 Grove, Mrs. E. A. Harding, W. H. Harris, L. 46, Kensington Palace mansions, 2, Nassau street, Berners street, W 55, Bunhill row, E.C.

Haynes, E. S. P. Headley, E. M. Homan, E. H. Hopton, G. Howell, M. (Ealing and A. Ive, E. J. Jay. C. V. U. Kershaw, L. A., Q.C. Kirk, F.C. Lawrance, R. C. Lawson, A. J. (Humber (Leigh, Capt. H. G.	15, The Green Way, Uxbridge 76, Princes square, Bayswater, W. 3, Hare court, Temple, E.C. 78, Westbourne Park road, W. 27, Charles street, Waterloo place, S.W. 7A, Upper St. Martin's lane, W.C. 19, Hans place, S.W.	
Macken, J. J. Mackenzie, L. W., M. I. N.	10, Whitehall Park, Upper Holloway, N. I.E. (Hampton C.C.) 40, Chancery lane, E.C.	
Mesurier, LieutCol. T.	A. Le 2, Gloucester walk, Campden Hill,	
	Kensington, W.	
Millar, C. R.	Heathdown, Hampstead Heath, N.W.	
Millar, E. W. H.	" - " - " - " - " - " - " - " - " - " -	
Mitchell, C. W.	Broadlands, Enfield Highway	
Moakes, Miss K. K. Moulton, H. L.	25, Steele's road, Haverstock Hill, N.W.	
Mower, C. H.	57, Onslow square, S.W. 75, Queen Victoria street, E.C.	
Nicolson, Miss A.	15, William street, Albert Gate, S.W.	
Parsons, LieutCol. R.	Naval and Military Club, Piccadily, W.	
Petherbridge, Miss M. (1	Howbray House C.C.) 9, Strand, W.C.	
Phipps, F. H.	128, Mount street, W.	
Filkington, E.	34, Victoria street, S.W.	
Prior, C. E., M.A.	5, Furnival's Inn, E.C.	
Pryor, C. H. Pryor, P. A. L.	2, Onslow Gardens, South Kensington, S.W.	
Quick, W. J.	, Charterhouse square, Aldersgate street, E.C.	
Saunders, G. R.	Thames Bank Villa, the Mall, Chiswick, W.	
Sevier, Rev. W. J.	4N, Hyde Park mansions, W.	
Sevier, Miss M.		
Smith, S.	88, Farleigh road, Stoke Newington, N.	
Smith, R. F., M.A., LL.	B. 26, Lincoln's Inn fields, W.C.	
Smith, C. L., B.A., LL.I. Stewart, C. J.		
Treherne, Miss F.	10, Eaton terrace, S.W. 20, Brunswick gardens, Kensington, W.	
Treherne, Miss V.	and the second s	
Ullman, C.	317, Amhurst road, Stoke Newington, N.	
Watts, W. W.	8. Rigault road, Fulham, S.W.	
Wilmer, L. Worthington-	12, Gunterstone road, West Kensington, W.	
Wollaston, C. H. R., B.A		
Woodhead, E. G.	36, Sunley road, Willesden, N.W.	
MONMOUTHSHIRE.		

#### MONMOUTHSHIRE.

Williams, T. A.

11, Priory street, Monmouth

#### NORFOLK.

Cowlishaw, J. H.
Hawkins, C. L.
Jackson, W.
Latham, Capt. G. N. (London B.C.)

Mack, E. (Aylsham A.B.C.)

The Lodge, Framlingham
Pigot, Norwich
Aylsham
Theobald, J.

Aylsham
Hebold, J.

#### NORTHUMBERLAND.

Beall, R. E. Macadam, D. Winter, F. Chelsea Gyst, Newcastle-on-Tyne Carlisle bank, Haltwhistle Percy gardens, Tynemouth

#### NOTTINGHAMSHIRE.

Green, W.
Harwood, F.
Lambert, H. W.
Robinson, Rev. R.
Rothera, F., M.D.
Taylor, F. G., M.A. (Univ Coll., Nottingham, C.C.) Univ. Coll., Nottingham, C.C. Univ. Coll., Nottingham, C.C. Univ. Coll., Nottingham, C.C. West Bridgiord
Winter, B. W.

8, Manor street, Sneinton, Nottingham 92, Ilkeston road, Nottingham
Carlton-on-Trent, Newark
Old Manor House, Beeston
Nottingham
Winters road, West Bridgiord

### OXFORDSHIRE.

Berry, G. G., B.A.,
Dickson, S. S.
Marriott, J. F.
Marriott, Mrs. J. F.
Monk, H.
Robertson, J. S., M.R.C.S.
Sadler, M. E., M.A.,
Sadler, M. T. M. E.
Whetton, A.

18, Walton street, Oxford
Witney
Witney

Bell street, Henley-on-Thames
Christ Church, Oxford
Christ Church, Oxford
Post Office, Deddington

#### SHROPSHIRE.

Bates, J., Clotleigh, Wellington
Kent, Mrs. J. Jerningkam Arms Hotel, Shifnad
Melland, R. S. The Hollies, Wem

#### Somersetshire.

Broderip, E., J.P.
Cossington Manor, near Bridgwater
Davies, G. Lloyd, B.A.
Rathborne, Col. W. H., R.E.
Strackey, Miss F.
Cossington Manor, near Bridgwater
Bruton
3, Glentworth terrace,
Weston-super-Mare
Sutton Court. Pensford, Bristol

#### STAFFORDSHIRE.

Bearne, T. H.

Bill, C. H.

Bill, C. H.

Bill, C. H.

Bill, C. H.

Butler, Z.

Butler, S. T.

Butler, R.

Emery, H.

Emery, H.

Gover, H., F.C.S. (Mount C.C.)

Heymann, T.

Hincks, J. W. O.

Ralph, J. (Bilston Wesleyan C.C.)

Scarratt, J. P. (Newcastle C.C.)

Steel, D.

Glenhurst, Wednesbury road, Walsall

#### SUFFOLK.

Clarke, H.

Clarke, Mrs. H.

Meikle, Mrs. D.

Read, P. J.

Smyth, W. B.

Ward, F. G.

Glaslyn, Ipswich

Daisy Bank, Belle Vue road, Ipswich

45, Berners street, Ipswich

45, Berners street, Ipswich

Chilton House, Stowmarket

SURREY.

Baxter, T.
Benton, H.
Cox, N. B.
Davis, W. A.
Gabell, D. P.
Goulding, H.
Grabham, J.
Heruitt, Miss E. M.
Heruitt, Mrs. J. H.
Kelly, A. F.
Layard, H. G.
Leeming, E.
Manaton, C. H.
Marquard, W.
Murray, C. M.
Dake, A. J. (Bermondsey Constitutional C.C.)
Parker, G. H.
Parker, G. H.
Parker, G. H.
Robarts, H. E.
Robarts, H. F.
Sutton, F. L., B. A.
Taylor, A. H.
Taylor, A. H.
Taylor, A. H.
Taylor, A. H.
Thorpe, J.

Arnko, Fassett road, Kingston-on-Thames
Foxley Croft, Purley
Foxley Croft, Purley
Roxley Croman, Se.
Gotton road, Peckham, S. E.
Abingdon, Addiscombe Grove, Croden
Roxley House, Kingston ond, S.E.
Chinthurst, Brantley Counting, S. W.
Parkside, Worcester Park
Roxley Croft, Purley
Roxley House, Kingston ond, Peckham, S. E.
Roxley H.
Rowley House, Kingston ond, Peckham, S. E.
Roxley Humber road, Lingston ond,

#### SUSSEX.

Bathurst, H. W.

Cox, H. W.

Duly, T. W.

Gripper, F. T.

Molteno, E. B. F.

Molteno, C. W. B.

Nix, H. J.

Noakes, T. A. (Hastings & St. Leonard's C.C.)

Pawson, Rev. F. W., M.A.

Pratt, H. A.

Pratt, H. A.

Street, H. B.A.

Stykes, A. A., B.A.

Wansey, W.

Holy Trinity Vicarage, Eastbourne

4, Sackville road, Hove, Brighton

6, Upperton road, Eastbourne

7, Combridge gardens, Hastings

73, Southover street, Brighton

73, Southover street, Brighton

74, Street, Brighton

75, St. Janes Street, Brighton

8, St. Michael's place, Brighton

8, St. Michael's place, Brighton

9, St. Janes

Warbleton Rectory, Heathfield

18, Lansdowne place, Brighton

19, Lansdowne place, Brighton

10, Lansdowne place, Brighton

#### WARWICKSHIRE.

Carr, T.

Collins, J.
Judge, J. J. (Coventry District C.C.)

Leser, H.
Prentis, E. J.
Spurrall, Rev. R.

The School House, Newbold-on-Avon, Rugby
The Cape, Warwick
17, King street, Coventry
40, Kingscote road, Edgl aston
Hill Side, Shustoke, near Coleshill
233, Monument road, Edglaston
Lyth House, Kenilworth

WESTMORLAND.

Cooper, Rev. T., M.A.

Crosthwaite Vicarage, Kendal

WILTSHIRE

Gregory, H. L., B.A.

Fisherton Mills, Salisbury

WORCESTERSHIRE.

Eastwood, C. E., B.A. Fullmer, Rev. C. H.

Warkworth, Malvern Wells Salwarpe, Droitwich

YORKSHIRR.

Armitage, G. F., M.A. Atkinson, T. A. Atkinson, J. Clokie, J. T. Clokie, H. McD.

52, Boar lane, Leeds Eastrington Station, near Brough Bainton Station, near Driffield

Pratt, H. J. (Halifax C.C.)
Ramsden, W.
Reed, G. A. (Market Weighton C.C.)
Riley, G. W. (Potternewton C.C.)
Shine, Rev. T.
Simpson, J. T. (U.P.H.C.C.)
Slater, J. (Holbeck C.C.)
Slater, J. (Holbeck C.C.)
Townsend, H. W.

Leeds
Eagle Works, Well lane, Halifax
13, Spring road, Headingley, Leeds
6, Chetwynd terrace, Leeds
St. Anne's Cathedral, Leeds
St. Anne's Cathedral, Leeds
6, Waverley mount, Beeston Hill, Leeds
33, Westborough, Scarborough
15, Church street, North Ormesby, near

Walsh, Rev. C. H.

Watson, J., jun.

Galloway House, Castleford

Clokie, H. McD.
Darley, Rev. B., M.A.
Dickinson J.
Douglas, J. (Halifax C.C.)
Farrar, E.
Gamble, G. C.
Garbutt, J., jun.
Johnson, H. J.
Levick, Rev. E. E.
Moxon, J.
Peck, H. W. (Leeds Friends' C. and R.C.)

Harthill Rectory, Sheffield
Wotloria terrace, Lightcliffe, Halifax
Woodlands, Lightcliffe
64, Beamsley road, Frizinghall
Kilton Mill, Carleshow
657, Attercliffe road, Sheffield
St. Anne's Cathedral, Leeds
Ropergate, Pontefract
Yorkshire Bank, Hunsler,
Leeds Leeds

St. Anne's Cathedral, Leeds Hazel Wood, Halifax 6, Waverley mount, Beeston Hill, Leeds 33, Westborough, Scarborough 15, Church street, North Ormesby, near Middlesbrough Walker, J. A. (Leeds C. and A.C.) 26, Winfield mount, Blackman

lane, Leeds St. Anne's Cathedral, Leeds Mason Green, Ovenden, Halifax

CARDIGANSHIRE.

Northey, W. A.

21, Chalybeate street, Aberystwith

CARNARYONSHIRE.

Davies, J. D. Lloyd, Rev. E. D., B.A.

Hafod, Penmaenmawr Gwylfryn, Penmaemawr

DENBIGHSHIRE.

Bushby, T. H. (Vale of Llangollen C.C.)

Oaklands, Trevor, Llangollen MOTTIS, T. E. (Vale of Llangollen C. Rathborne, Major H. Rowland. E. Turner, T. (Vale of Llangollen C.C. White, L. S. Morris, T. E. (Vale of Llangollen C.C.) Maesmawr House, Llangollen 8, Mount view, Rhossddu, Wrexham C.) 5, Oak street, Llangollen Brewery, Caergwele, near Wrexham

FLINTSHIRE.

Rathbone, M. P.

Aston, Hawarden

GLAMORGANSHIRE.

Colquhoun, Lieut. H.
Evans, L.
Hoecke, G.
Osbourn, E.
Wordsworth, Rev. J. T., F.R.G.S.

Acl-y-bryn, Walter road, Swansea
Brynleg, Margam, Port Talbot
18, Somerset place, Swansea
Margam, Port Talbot
12, Ninian road, Roath Park, Cardiff

MERIONETHSHIRE.

Lewis, Mrs. M. L.

Brynawel, Aberdovey

MONTGOMERYSHIRE.

Ward, A., M.D.

Park lane, Welshpcol

PEMBROKESHIRE.

Greenish, Mrs. F. R. ewis, T.

Summerville House, Haverfordwest
3. Castle terrace, Fishguard

ADEDDDDNCUIDE

Gordon, Capt. W. W.

Esslement. Ellen

ARCYLLSHIRR.

Shirvan, Lochzilphead

DUMBARTONSHIRE.

Nicol, G.

2. Bruce street. Dumbarton

EDINBURGHSHIPE.

Beveridge, W. K. Cross, J. Forrest, Sir J., Bart., J.P.

Campbell, R. C. Graham

Fairfield, Loanbead 13, Drummond place, Edinburgh New Club, Edinburgh

EIGINSHIRE.

Brown, D. C.

FIFESHIRE.

Oswald, J., J.P. Swan, T.

Duunikier, Kirkcaldy Mayfield House, Lestie

B. L. Co's. Bank, Fortes

FORFARSHIRE.

Cowan, J. Gray, W. McKenzie, W. 7, Castle terrace, Broughty Ferry Castlehill House, High street, Dundee 4, Union place, Montrose 1, Balmain street, Montrose Milne, D. J. Roxburgh, W. (Broughty C.C.) 8, Castle terrace, Broughty Ferry

INVERNESS-SHIRE.

Glasfurd, C. L. R. Malcolm, Capt. H. H. L.

Altnaskiah, Inverness Cameron Barracks, Inverness

Remie Rervie

KINCARDINESHIRE.

Gibb, A. Peter, W. B.

LANARKSHIRE.

Blackwood, A. (Southern C.C.) Kay, W. E. (Thorniebank C.C.) Pattison, J. 17, Clifford street, Ibrox, Glasgow Gowanbank, Busby

RENFREWSHIRE.

Barr, T. H. Doyle, J. Weir, J. (Paisley P. & P. C.C.)

Abington, Kilmalcolm 185, Main street, Barthead 2, Gladstone terrace, Paisley

ROXBURGHSHIRE.

Croall, P.

St. Leonard's, Kelvo

STIRLINGSHIRE.

Waugh, A. G.

Craigbank, Avonbridge, near Falkirk

DOWN.

Thompson, S. B. (Richmond C.C.) Dundela Villa, Strandtown, near

DUBLIN.

Dagge, J. Harte, J. W. Kean, J. M. Lawless, Rev. C. O'N. O'Connor, Mrs. A. O. B. Robinson, T.

25, Norman terrace, Jones' road, Dublia 7, Richmond hill, Monkstown 1, Rathdown terrace, N. Circular road, Dublin St. John's, Blackrock
2, Arkendale road, Glenageary
33, Morehampton road, Donnybrock

KILDARE.

Boulter, Sergeant F. C.

3rd King's Own Hussars, Newbridge

KING'S COUNTY.

Clark, W. R.

Kilballyskea House, Shinrone

Longford.

Gunnis, J. W., A.R.I.B.A.

Loogierd

#### LONDONDERRY.

McKeag, H. (Coleraine C.C.)

Bridge street, Coleraine

LOUTH.

Davis, R. B., jun. Davis, Miss S. W.

7. West street, Drogheda .,

MEATH.

Barnes, R. S.

Tatestown, Navan

ROSCOMMON.

Carroll, T. J. Kerr, J. B. McHugh, J.

Holden's Hotel, Strokestown Strokestown

TIPPERARY.

Horgan, D. (Nenagh O.C.C.)

61, Barrack street, Nenagh

TYRONE.

Smith, J.

Castle hill, Dungannon

#### UNITED STATES OF AMERICA.

Allerton, O. H., jun. Beach, S. J. Brown, Miss A. Dickenson, Miss E. L. Dunning, H. W. Fegtly, S. M. Fisher, M. B. Fultz, F. M. Goldschmidt, O. B. Grey, E.
Hall, W. H.
Hine, C. G.
Homer, F. T.
Homer, C. jun.
Laguna, Miss L. de Laguna, Miss L. de Lees, Professor J. T., M.A. Ludington, D. M. Mallory, D. F. Miller, L. P. Moody, G. B. Nichols, J. E. H.

252, Shady avenue E.E., Pittsburgh, Pa. o, High street, Bangor, Mne. 67, Pinckney street, Buston, Mass. Leland, Stanford University, Cal. 7, St. John street, Jamaica Plain, Mass. Nevada, Iowa 41, E. Divinity Hall, New Haven, Conn. t, E. Divinity Hall, New Haven, Conn.
209, Marietta street, Burlington, Iowa
50, Broadway, New York City
419, Broadway, Milwaukee, Wis.
129, East 54th street, New York City
137, Broadway, New York City
213, Courtland street, Baltimore, Md.

Stanford University, Cal.
Nebraska University, Lincoln, Neb.
213, Courtland street, Baltimore, Md.
2316, Eutaw place, Baltimore, Md.
Corning, N.Y.
82, Broadway, Bangor, My.
4, East 33rd street. New York City

Osborne, G. N. (Philadelphia B.C.)

Parsons, W. N. Parsons, W. N.
Richards, F. B.
Runyon, E. P.
Runyon, C.
Sloane, T. O'C.
Sloane, Mrs. T. O'C.
Smith, S. K. Turneaure, F. E. Turneaure, Mrs. F. E.

115, North and street, 208, West 34th street, Jersey City, N.J.
Stelton, N.J.
Stelton, N.J. 361, Broadway, New York City

213, Courtland street, Baltimore, Md. 905, West Johnson street, Madison, Wis.

#### FOREIGN GENERAL

Bratanowski, P. S. Coningham, C. G. Herzenberg, L. Laguevnitsky, Lieut. V. Laguevnitsky, Lieut. V. Machado, J. Mueller, A. (Strelna A.C.C.) Wapshire, J. H. Weil, C. Wilkins. G. C. A.

Moscow, Russia Yokohama, Japan Moscow, Russia Odessa, Russia 22, Soledade street, Olhas, Portugal St. Petersburg, Russia Madras, India Lodz, Poland St. Petersburg, Russia

FRANCE.

Lee, F. B. Naegely, M. 2, rue de la Republique, Rouen 42, rue de Paradis, Paris

GERMANY.

Finch, A. J. K. Pusch, F.

Sugin, Westphalia Breslau

AUSTRO-HUNGARY.

Haggard, J. G., H.B.M.'s Consul

British Consulate, Trieste.

CANADA.

Wickham, H. J.

Toronto, Ontario

SWITZERLAND.

Dubois, G.

rue de Bourg 20, Lausanne

ITALY.

Abrate, E. Rossi, M.

All'Aurora, Torino Via Stella 6, Modena

### ALTERATIONS AND ADDITIONS

## BRITISH AND IRISH HANDBOOK, MAY, 1895.

#### REPRESENTATIVE COUNCILLORS.

Grouped Counties of England - Insert Essex and Page Northumberland.

#### CHIEF CONSULS.

Page 9.—Insert Rev. H. Callan, M.A., The Manse. Catrine.
Insert C. G. H. Greaves, M.A., Royal Academy, Inverness.
Insert T. E. Lowe, 89, Darlington street, Wolverhampton.
Insert A. M. Porteous, Coldstream.
Erase A. Sandison, Wick.
Page 10.—Insert A. F. Webster, King street, Toronto, Canada.

#### . STEAMBOAT AND FERRY CHARGES.

Page 81.-Hull to New Holland. The price for bicycle and tricycle Page 82.—Hull to Yarmouth. The Company is Woodhouse & Co.
Oo.—Yarmouth to Hull. The Company is Woodhouse & Co.

#### TABULATED LIST.

Page 104.—Tarporley—Insert Bell and Lion, No. 1, 1/-; No. 2, 1/3; No. 3, 1/6; No. 4, -; No. 5, 1/-; No. 6, 1/6; No. 7, 2/-; No. 8, 1/6; No. 9, 2/-; No. 10, 3/-; No. 11, 3/6; No. 12, -/2; No. 13, -/6; No. 14, -/4; No. 15, -/6; No. 16, -; Discount, -/12.

Page 105.—Helston—/nsert Rell, No. 1, 1/-; No. 2, 1/3; No. 3, 1/6; No. 4, 2/-; No. 5, 16; No. 6, 1/6; No. 7, 2/-; No. 8, 2/-; No. 9, 1/-; No. 10, 1/6; No. 11, 2/-; No. 12, -/3; No. 13, -/6; No. 14, -/9; No. 15, -/6; No. 16, -/4; Discount, -/2.

TOWNSHIP WITH THE PARTY OF

Page 106.—Redruth—Insert Druid's (Temperance), No. 1, 1/6; No. 2, 1/9; No. 3, 1/9; No. 4, —; No. 5, 1/6; No. 6, 1/9; No. 7, 2/-; No. 8, 1/6; No. 9, 1/6; No. 10, 2/6; No. 11, 2/9; No. 12, -/6; No. 13, -/4; No. 14, -/6; No. 15, -/6; No. 16, -/6; Discount, -/3.

Page 109.—Ashburton—Insert London.—No. 1, 1/6; No. 2, 1/9; No. 3, 2/-; No. 4, -; No. 5, 2/-; No. 6, 2/-; No. 7, 3/-; No. 8, -; No. 9, 2/-; No. 10, 3/6; No. 11, -; No. 12, -/6; No. 13, -/6; No. 14, -/6; No. 15, 1/-; No. 16, -/6; Discount, -/2.

Chagford-Moor Park item No. 7, is 3/-.

Page 110.—Clovelly.—Erase H.Q. from New Inn, and Insert No. 1, 1/6; No. 2, 1/9; No. 3, 2/4; No. 4, —; No. 5, 2/-; No. 6, 2/3; No. 7, 3/6; No. 8, —; No. 9, 2/-; No. 10, 2/6; No. 11, 3/6; No. 12, 1/-; No. 13, -/6; No. 14, -/6; No. 15, -/9; No. 16, -/6; Discount, -/2.

Hartland, Hartland Quay .- Item No. 12 is 1/-.

Page 111.—Moretonhampstead.—/nsert Gray's.—No. 1, 1/6; No. 2, 1/9; No. 3, 2/-; No. 4, —; No. 5, 2/3; No. 6, 2/6; No. 7, 3/-; No. 8, —; No. 9, 2/-; No. 10, 3/-; No. 11, 3/6; No. 12, 1/-; No. 13, -/6; No. 14, -/6; No. 15, 1/-; No. 16, -/6; Discount. -/2.

Newton Abbot.-Insert A. S. Waddington, 73, Queen Street, as Consul.

Page 112.-Plymstock.-add C. T. to Harris'.

Taylstock. -/nsert Shepperd's (Temperance), No. 1, -/10: No. 2, 1/3; No. 3, 1/6; No. 4, -; No. 5, 1/2; No. 6, 1/2; No. 7, 1/9; No. 8, -; No. 9, 1/-; No. 10, 1/6; No. 11, 2/-; No. 12, -/3; No. 13, -/4; No. 14, -/4; No. 15, -/4; No. 16, -/3; Discount, -/3.

Page 118.-Great Chesterfield should be Great Chesterford.

Page 119.—Insert Ridgewell—King's Head, No. 1, -/9; No. 2, 1/-; No. 3, 1/6; No. 4, --; No. 5, 1/6; No. 6, 1/9; No. 7, 3/-; No. 8, --; No. 9, 1/-; No. 10, 1/6; No. 11, 2/-; No. 12, -/3; No. 13, -/4; No. 14, -/3; No. 15, -/6; No. 16, -/4; Discount, -/2.

Page 122.—Gloucaster—Insert Fowler's (Temperance), No. 1, 1/6; No. 2, 2/-; No. 3, 2/6; No. 4, —; No. 5, 2/-; No. 6, 2/6; No. 7, 3/6; No. 8, —: No. 9, 2/6; No. 10, 3/6; No. 11, 5/-; No. 12, 1/-; No. 13, -/9; No. 14, -/9; No. 15, 1/-; No. 16, -/6; Discount, -/3.

Page 124.—Bournemouth—Insert Grand, No. 1, 1/6; No. 2, 2/6; No. 3, 3/-; No. 4, 3/6; No. 5, 1/2; No. 6, 2/6; No. 7, 3/6; No. 8, 5/-; No. 9, 3/-; No. 10, 5/-; No. 11, 5/-; No. 12, 1/6; No. 13, -/9; No. 14, -/9; No. 15, 1/-; No. 16, -/6°; Discount, -/2; and Repairer, † p, H. Passmore, Seamoor road (C.S.).

Page 131.-St. Ives-Erase King's Head Q. St. Neots-Insert King's Head Q.

Ramsey—Erase H.Q. from Mitre, and insert No. 1, 1/6; No. 2, 1/9; No. 3, 2/6; No. 4, 2/6; No. 5, 2/-; No. 6, 2/6; No. 7, 3/-; No. 8, 3/6; No. 9, 2/6; No. 10, 3/-; No. 11, —; No. 12, 1/-; No. 13, -/6; No. 14, -/9; No. 15, 1/-; No. 16, -/6; Discount, -/3. Carisbrooke—Castle item No. 6 is 2/-.

Page 133.—Bridge—Erase Q from Red Lion, and insert No. 1, 1/-; No. 2, 1/3; No. 3, 1/6; No. 4, —; No. 5, 1/6; No. 6, 1/9; No. 7, 2 3; No. 8, —; No. 9, 1/6; No. 10, 2/-; No. 11, 2/6; No. 12, n/1; No. 13, -8; No. 14, -/6; No. 15, —; No. 16, —; Discount, -/1½.

Page 134. - Folkstone -- Erase Edinburgh Castle, C.T.

Page 137.—Tunbridge Wells. The Discount at the Castle is -/2.

Page 138.—Barrow-in-Furness—Erase D. Williams as Repairer.

Insert J. R. Service, 76, Cavendish road, as Consul;
and Repairers, † p, Service & Co., 76, Cavendish road. Bolton-Erase Saddle H.Q.

Page 139 .- Insert Dalton-in-Furness, and Repairer, tp M. Kay, 69, Market street.

Page 140.-Morecambe-The Middleton Consul and Repairer refer to this town.

St. Holons-Erase Churchill & Co. as Repairers.

Page 141-Wigan-Erase Victoria H.Q.

Page 141—Wigan—E-rair Victoria H. Q.

Page 146—Newport—Erase H. Q. from Queen's and insert No. 1, 1/6;
No. 2, 1/9; No. 3, 2/-; No. 4, --; No. 5, 2/-; No. 6,
2/6; No. 7, 3/-; No. 8, -; No. 9, 2/6; No. 10, 4/-;
No. 11, --; No. 12, -/9; No. 13, -/9; No. 14, -/9;
No. 15, -/6; No. 16, -/6; Discount, -/2; and Morrish's
(Temperance), No. 1, 1/-; No. 2, 1/6; No. 3, 1/9;
No. 4, --; No. 5, 1/3; No. 6, 1/9; No. 7, 2/-; No. 8,
2/6; No. 9, 1/6; No. 10, 2/6; No. 11, 3/-; No. 12,
-/6; No. 13, -/6; No. 14, -/6; No. 15, -/9; No. 16,
-/6; Discount, -/2

Pontypool—insert Waverley (Temperance), No. 1, 1/-; No. 2, 1/4; No. 3, 1/8; No. 4, —; No. 5, 1/6; No. 6, 2/-; No. 7, 1/8; No. 8, —; No. 9, 1/6; No. 10, 2/6; No. 11, —; No. 12, 21/; No. 13, -/6; No. 14, -/6; No. 15, -/6; No. 16, -/6; Discount, -/12

Page 151.-Blyth-Star and Garter is Q. not H.Q.

Corbridge-Insert W. E. Leach, Main Street, as Consul.

Page 159.—Crewkerne—Erase George H.Q.

Page 160. -- Mighbridge -- Erase George Q.

Page 161.-Street-Erase Bear (Temperance) Q.

Page 162.-Yeovil-Insert J. Moffat, 5, High Street, as Consul.

Page 174.-Atherstone—Erase Atherstone C.T., and insert Repairer.
† W. Johnson, Long Street (C.S.).

Berkswell—Erase W. Johnson as Repairer.

Page 180.—Insert Martley—Admiral Rodney, No. 1, 1/-; No. 2, 1/6; No. 3, 2/-; No. 4, --; No. 5, 1/6; No. 6, 2/-; No. 7, 2/6; No. 8, --; No. 0, 2/-; No. 10, 3/-; No. 11, 4/-; No. 12, -/6; No. 13, -/6; No. 14, -/6; No. 15, 1/-; No. 16, -/6; Discount, -/3.

Severnstoke—*Erase* Q, from Board's Head, and *insert* No. 1, 1/-; No. 2, 1/3; No. 3, 1/6; No. 4, —; No. 5, 1/6; No. 6, 1/6; No. 0, 7, 2--; No. 8, —; No. 9, 1/6; No. 10, 2/-; No. 11, —; No. 12, m/l; No. 13, -/3; No. 14, -/3; No. 15, —; No. 16, —; Discount, -/12.

Page 181.—/nsert Barmby Moor—New Inn, No. 1, 1/-; No. 2, 1/3; No. 3, 1/9; No. 4, -; No. 5, 1/6; No. 6, 2/-; No. 7, -; No. 8, -; No. 9, 2/-; No. 10, 3/-; No. 11, -; No. 12, nil; No. 13, -/6; No. 14, -/4; No. 15, -; No. 16, -; Discount, -/1½.

Page 183.—Paull—Insert Royal Oak. No. 1, -/0; No. 2, 1/-; No. 3, 1/6; No. 4, —; No. 5, 1/6; No. 6, 1/6; No. 7, —; No. 8, —; No. 9, 1/-; No. 10, 1/6; No. 11, 2/-; No. 12, ni/: No. 13, -/6; No. 14, -/6; No. 15, —; No. 16, —; Discount, -/1}.

Page 191.—**Beddegelert**—/nsert Royal Goat, No. 1, 1/6 No. 3, 3/-; No. 4, 3/-; No. 5, 2/6; No. 3/6; No. 8, 4/6; No. 9, 12/6, ¶3/6; No. 11, 5/-; No. 12, 1/-; No. 13, 1/-; No. 25, 1/-; No. 16, 1/-; Discount, -/2.

Page 191.—Penmaenmawr—Erase Q, from Mountain View an insert No. 1, 1/-; No. 2, 1/6; No. 3, 2/-; No. 4, —
No. 5, 1/6; No. 6, 2/-; No. 7, 2/6; No. 8, 3/6; No. 6, 1/6; No. 1, 3/-; No. 12, n/f; No. 15, —
-/6; No. 14, -/6; No. 15, —; No. 16, —; Disconnt, -/2.

Page 192.-Wrexham-Erase (Temperance) from Jones' Hotel

Page 202.—Aberiour—Erase H. Q. from Aberlour and insert No. 1, 16; No. 2, 1/9; No. 3, 2/-; No. 4, --; No. 5, 1/6; No. 6, 2/-; No. 7, 3/-; No. 8, 3/-; No. 9, 2/-; No. 70, 2/6; No. 11, -; No. 12, 1/-; No. 13, -/6; No. 14, -/9; No. 15, -/6; No. 16, free; Discount, -/12.

Chirnside-Insert A. Mitchell, The Bridge, as Consul. Duns—Erase (Temperance) from Swan and insert J. H. Barrie, Cumledge Mills, as Consul.

Insert Gordon and G. McDongall, Bassendean, as Consul.

Page 203.—Aprochap—Insert Ross's (Temperance), No. 1, 1/3; No. 2, 1/9; No. 3, 2/-; No. 4, 2/-; No. 5, 2/-; No. 6, 2/-; No. 7, 2/6; No. 8, 2/6; No. 9, 2/-; No. 10, 2/6; No. 11, 3/6; No. 12, 1/-; No. 13, -/6; No. 14, -/8; No. 15, 1/-; No. 16, -/6; Discount, -/2.

Page 205.-Edinburgh-Erase A. T. Poyser, as Consul.

Elgin—Erase H.Q. from Station, and Insert No. 1, 1.6; No. 2, 2/-; No. 3, 2/6; No. 4, 2/6; No. 5, 2/-; No. 6, 2/6; No. 7, 3/6; No. 8, 3/6; No. 9, 2/6; No. 10, 3/6; No. 11, 4/-; No. 12, 1/6; No. 13, -/6; No. 14, -/9; No. 15, -/6; No. 16, free; Discount. -/3.

Page 207. - Montrose, Star item No. 14 is -/6.

Page 208.—Portree—/ssert Royal, No. 1, 1/6; No. 2, 2/-; No. 3, 2/6; No. 4, 2/6; No. 5, 2/-; No. 6, 2/6; No. 7, 3/6; No. 8, 4/6; No. 9, 2/6; No. 10, 4/-; No. 11, 4/-; No. 12, 1/6; No. 13, -/6; No. 14, 1/-; No. 15, 1/-; No. 16, -/6; Discount, -/2.

Page 214.—Insert C. Rattray, 1, Manse St., Tain, as Chief Consul of Ross and Cromarty.

Hawick-Erase Washington (Temperance) Q.

Page 215 .- Kelso-Insert R. R. Porteous, jun., Bridge Street, as Consul.

Page 220.-Midleton.-Erase D'Alton H.Q.

Insert R. Macgregor 3, Carlisle Road, Londonderry, Chief Consul of Donegal.

Page 225.—Insert R. Macgregor, 3, Carlisle Road, Londonderry, Chief.
Consul of Londonderry.

Page 227.—Insert Strokestown and T. J. Carroll as Consul.

Page 227.-Waterford.-Insert Victoria Q.

#### INDEX.

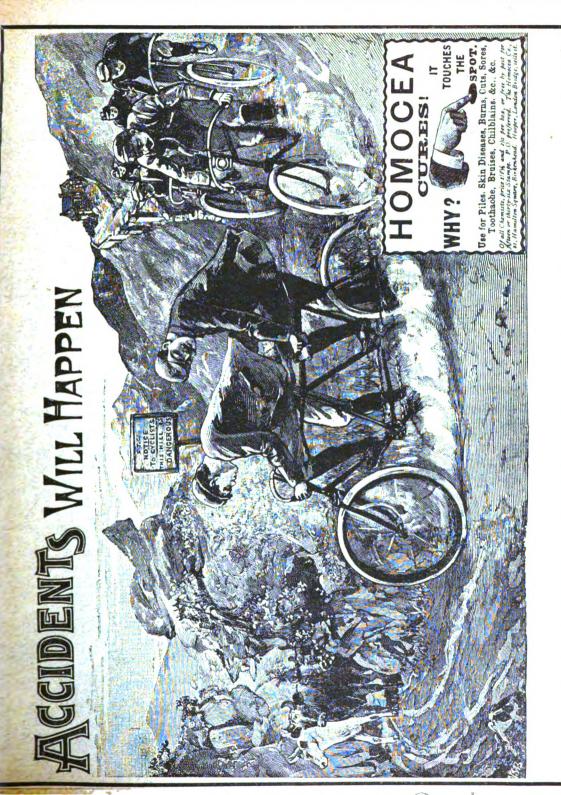
Amend in accordance with foregoing.

\* In Bedroom. Back Bedroom. T Front Bedroom.



THE "SCOTTISH CYCLIST" ANNUAL (GLASGOW: HAY, NESBIT & CO. PRICE 6D.)

The current edition of this handy little volume has left the press. It forms a valuable book of reference, and should be in the possession of every rider Digitized by Google Border.



Digitized by GOOSE



AIR CUSHION, to fit any Saddle, 12s. 6d. AIR SADDLE. on light, low frame, 15s. Single or Bifurcated Pommel.

SPRATLEY AIR-SADDLE CO. LUTON.

W. J. PILE,

Athletic and General Outfitter,

22, Philpot Lane, Fenchurch Street, E.C.

(First turning on the right out of Gracechurch St.),

73, PARK STREET, GLOUCESTER GATE, N.W.

OFFICIAL TAILOR TO THE C.T.C. AND LEADING CLUBS.

FIT AND WORK GUARANTEED.

Every Requisite for Cycling, Cricket, Rowing, Tennis, Running, Swimming, &c., &c.

## CYCLE OILS.

## TRINGHAM'S



HAVE THE OLDEST HISTORY AND HIGHEST

THE ORIGINAL REFINER.



ELECTRIC LAMP OILS.

Tins 6d., 1s., 1s. 6d. and 3s. Large Tins carriage paid.

FINEST JET BLACK ENAMEL, 6d. and 1s.

Sold by all Cycle Agents and Stores,

Warehouse: 267, St. James's Road, Bermondsey, S.E.

# 15/- BUYS ONE.

Makes perfect Pictures 15 in. in diameter.

25 at one loading-Snap Shot or Time Exposure.

Ask your Dealer Sample Photograph and Illustrated Booklet Free.

ALFRED C. KEMPER, Sole Manufacturer. ADAMS & HAYDEN, Managers, 36, Oxford St., London, W.

#### "THE CYCLE" PUBLICATIONS.

"THE CYCLE." The Rider's Paper. Published every Tuesday.
Weekly, id.; post free, 6s. 6d. per annum.

"THE LADY CYCLIST." A Monthly Magazine for Wheel-Periodical exclusively for women. The only Cycling
Periodical exclusively for women. Price 3d. Monthly; 4s. 6d. per annum, post free.

"The Cycle" Pocket Road Book
"The Cycle" Road Map of England and Wales
"The Cycle" Map of 50 Miles Round London
The Art and Pastime of Cycling. In Boards,
2s. 3d.; in Cloth

. Send Postal Orders or Halfpenny Stamps.

THE CYCLE PRESS, 108, Fleet St., London.

The Transparent



C. W. BLUEMEL & BROS., CROWN WORKS.

Digitized by GOOGE