



## WESSEX CAVE CLUB

Journal No, 101, Vol. 8.

May 1965

### CLUB NEWS

#### Longwood Swallet

The Charterhouse Caving Committee have recently fitted the outer door to the entrance blockhouse. Members visiting the cave should lock the outer door whilst they are underground, as at G.B. Cavern. Also remember to take your C.C.C. Permit with you when you apply for the keys from Mr. Young at Lower Farm.

#### Visit by party from Czechoslovakia

A party of distinguished cave scientists from Czechoslovakia will be visiting this country as guests of the U.S.S.S. from July 3rd - 18th. The party will be in the Bristol area from July 3rd - 6th and will then go on to County Clare, Yorkshire, Derbyshire and South Wales.

A public lecture with films as well as slides and with an English commentary will be given in Bristol on Monday, July 5th at 8.0 p.m. in the Geography Lecture Theatre (Entrance from University Road).

There will be, commencing in June, an exhibition about the Caves of Czechoslovakia in the Bristol City Museum. The exhibition will be open for about a month and will be later repeated in other centres.

#### Cave Research Group National Meetings 1965

The Southern Region meeting took place at Hereford on Saturday 8th May, too early to announce to members through this Journal. However, for those interested, the Northern Region meeting is to be held at Settle on Saturday 3rd July and the Annual General Meeting will take place in London on Saturday 13th November. Full details will be posted in the Hillgrove Hut when they become known.

#### New Members

We welcome the following new members to the Club, elected 4.4.65.

P.D. Gibbs, 40 Hollywood Road, Brislington, Bristol 4.

G.R. Hand, 21 Arne Crescent, Parkstone, Poole, Dorset.

Mrs. S.A. Morris (Joint Member), 4 Maple Court, Drayton Rd, Borehamwood, Herts.

#### Club Sales

The Club has recently purchased a supply of miners safety type lamps (similar to Nife cells), without switch, and these are available to members in the same condition as received from the National Coal Board at 25/- each. They are obtainable by personal application to Roy Staynings, 8 Fanshawe Road, Hengrove, Bristol 4, also a limited supply will be available from Hillgrove.

Also obtainable from Roy Staynings:- Club ties at 15/6d, Club cloth badges at 5/-. Car badges at 32/6d. Vol 1 reprints at 7/6d. Supplements to Vol. 8 (Log Book) at 6/- and the following Journal back numbers (1/6 to members, 2/6 to non-members) 78, 79, 80, 82, 84, 87, 88 91-100 incl.

## Address List

In the next Journal, No. 102, a complete Membership List of the Club will be published for the current year 1964-65. If you have moved recently and have not notified the Club, the Hon. Secretary or Hon. Treasurer will be pleased to hear of your new address.

## Alteration of the Hon. Secretary's Address

The Wells Rural District Council have recently renamed the roads between Wells and Wookey Hole and the Hon. Secretary's official address now reads:-

J.D. Hanwell,  
"Chaumbey",  
50 Wells Road,  
Wookey Hole,  
Wells,  
Somerset.

Confusing as this may be, the secretary still finds his house in the same place as it was before!

## CLUB MEETS

Work will be taking place on the Club Dig at Thrupe Swallet during the following weekends:-

June 5th/6th/7th (Whitsun Camp), June 19th/20th, July 3rd/4th.

Organiser: Alan Surrall, 216 Evesham Rd, Headless Cross, Redditch, Worcs.

Weekend June 12th/13th South Wales. It is hoped to visit Dan-yr-Ogof and/or Ogof Ffynnon Ddu. Numbers may have to be limited. Please send details of times of arrival & departure and transport available or required to; Oliver Lloyd, Withey House, Witney Close West, Bristol 9.

Saturday June 26th Stoke Lane. Meet at the Farm 3.0 pm  
Leader: Leslie Teasdale, 32 Tonfield Road, Sutton, Surrey.

Saturday July 10th G.B. Meet at the cave 2.0 p.m.  
Leader: Roy Staynings, 8 Fanshawe Rd, Hengrove, Bristol 4.

Saturday July 17th St. Cuthbert's Meet at the Belfry 3.0 p.m.  
Leader: Nick Hart, 80 Ridgeway Road, Long Ashton, Bristol.

Saturday July 24th Hillgrove Weekend - maintenance, etc.

Saturday August 14th August/Longwood Meet at the cave 2.0 p.m.  
Leader: Roy Staynings, address above.

Weekend September 11th/12th Steep Holm A "Long Weekend"?

Leader: Roy Staynings, address above.

Saturday September 25th Bath Stone Mines. Meet Bath Bus Station 2.30 p.m.

Leader: Will Edwards, 91 Rookery Road, Knowle, Bristol 4.

Saturday October 23rd. A.G.-M. and Annual Dinner. Details later.

Saturday October 30th G.B. Meet at the cave 2.0 p.m.

Leader: Roy Staynings, address above.

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Editor's Note:

There was an error made in the article on Notts Pot, Leck Fell, by Tim Atkinson, which appeared in the last Journal (March 1965). The correction is as follows:-

"The labelling of the pitch in 3 ways Chamber (on diagram) and of the passage entering the streamway roof downstream of the 5th Pitch, should have read "To Centre Series" and "From Centre Series" instead of To/From Left Hand Series, which is the Series shown in the diagram."

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Hon. Secretary: J.D. Hanwell, "Chaumbey", 50 Wells Road, Wookey Hole, Wells, Somerset.

(General Club Policy)

Hon. Asst. Secretary: T.E. Reynolds, Yew Court, Pangbourne, Berks.

(Membership applications, cave keys, C.C.C. permits, Survey Scheme)

Hon. Treasurer: Mrs. B.M. Willis, 3 Derwent Lodge, St. Philip's Avenue, Worcester Park, Surrey.

(Subscriptions, Accounts)

Editor: C.J. Hawkes, 147 Evington Lane, Leicester.

(Journal Material)

Hut Bookings: P.N. Riches, Priory Cottage, Chewton Mendip, Bath. Phone: 357

(Hillgrove & Eastwater Bookings, Mendip tackle bookings)

Activities Secretary: C.R. Hobbis, Warren Lodge, Long Ashton, Bristol. Phone: Long Ashton 2127

(Offers to lead trips, Requests for trips)

Publication & Badge Sales: R.J. Staynings, 8 Fanshawe Rd, Hengrove, Bristol 4.

(Club Publications, badges, ties, lamp sets)

## SURVEY SCHEME PRICE LIST

The following surveys are available at the prices listed:-

Balch Cave - plan	3s. 9d.
Balch Cave - sections	3s. 9d.
Browne's Hole	2s. 0d.
Eastwater (2 sheets)	8s. 3d.
Holwell Cave	2s. 6d.
Lamb Leer	3s. 9d.
Pate Hole, Westmorland	2s. 3d.
Quaking House Cave, Milverton	2s. 6d.
St. Cuthberts Swallet - plan	3s. 3d.
St. Cuthberts Swallet - section	2s. 3d.
Stoke Lane Slocker	4s. 3d.
Swildons Hole - New Edition	4s. 3d.
Threaplunds Gave	3s. 6d.
August/Longwood - Sheet 1	5s. 6d.
August/Longwood - Sheet 2	4s. 0d.
August/Longwood - Sheet 3	3s. 6d.
Goatchurch Cavern	2s. 6d.
Cooper's Hole	2s. 6d.
Pine Tree Pot	3s. 0d.
Ubley Hill Pot	2s. 0d.
G.B. Cavern	3s. 6d.

Note: August/Longwood Survey

Sheet 1: Plan of the complete known system with a projected elevation. Scale 1 cm to 10 ft. Also shows relationship of cave to the surface.

Sheet 2: Plan of upper series only. Scale 1 in. to 10 ft.

Sheet 3: True length elevation of complete cave with cross sections. Scale 1 cm to 10 ft.

### G.B. Survey

This consists of the U.B.S.S. Proceedings No. 2, Vol. 6, complete with a pull out copy of the survey.

The prices given above do NOT include postage and packing. To cover this the following charges apply:-

1 survey	1s. 0d.	5-6 surveys	2s. 6d.
2 surveys	1s. 6d.	7-10 surveys	3s. 0d.
3-4 surveys	2s. 0d.	Over 10 surveys	3s. 6d.

The surveys are sent folded in an envelope. People preferring to receive them rolled should send a tube plus an extra 1/- to cover additional postage, with their order.

Surveys are obtainable from:-

T.E. REYNOLDS, YEW COURT, PANGBOURNE, BERKS.

Cash with orders, please. Cheques and P.O's payable to: T.E. REYNOLDS'.

## CHARTERHOUSE CAVING COMMITTEE

A 'code' for the issue of Charterhouse Caving Committee permits has been recently agreed by the Charterhouse Caving Committee. This, coupled with some changes made by the club for administrative reasons, means that in the future there are going to be slightly different arrangements for issuing permits (chiefly permits for non-members). In order to clarify the position complete details of the present situation as regards access to G.B. and Longwood/August Caves are given below, together with details of the method by which permits are issued. It would be greatly appreciated if members could study these details in order to save unnecessary work for the Asst. Secretary and to avoid disappointment if a trip to a cave in the Charterhouse Caving Area has to be cancelled because the members of the party have not got valid permits.

### A. GENERAL

1. Every person, before they may descend a cave in the Charterhouse Caving Area (this includes G.B. and Longwood/August), must have signed an indemnity chit and also be in possession of a valid permit.
2. The C.C.C. indemnity chits only refer to one person; so each person has to sign a separate indemnity chit. Indemnity chits remain valid until:-
  - a) The person who signed it dies; or
  - b) If the person who signed the indemnity was under 21 at the time he signed, when he becomes 21.
3. Permits are obtained by application to the Asst. Secretary. If the applicant has not previously signed an indemnity chit it will be necessary for him/her to do this. Indemnity chits are obtainable from the Asst. Secretary.
4. For legal reasons permits cannot be issued to any person who is under the age of 16, or is a married minor.
5. Permits are not transferable, and are subject to cancellation at any time without prior notice.

### B. ACCESS TO THE CAVES IN THE CHARTERHOUSE CAVING AREAS.

1. Persons visiting the caves must make their own arrangements as regards changing accommodation, use of barns, etc., with the tenant farmer.
2. Access to G.B. Cave is obtained by writing to the Asst. Secretary stating the date of the intended trip as far ahead of the date of the trip as possible. The Asst. Secretary will book the keys for the date in question from the U.B.S.S. The keys will normally be sent to the leader of the trip a few days before the trip. If the keys are posted they **MUST** be sent by recorded delivery or registered post. A tackle fee of 1/- a head is charged by the U.B.S.S. and this must be sent to the Asst. Secretary with the keys after the trip is over. The keys should be returned as soon as possible after the trip to the Asst. Secretary.
3. Access to Longwood/August is obtained by collecting the keys to the cave from the tenant farmer at Lower Farm (he is at present Mr. F. Young). No prior booking is normally required.

### C. PERMITS ISSUED TO FULL MEMBERS

1. Members are issued with period permits valid for any length of time up to three years. Holders of these permits have full access rights to the caves in the C.C.A's, subject to the rights of the tenant farmer.
2. For administrative convenience permits have been made out so that they will expire at either the 30th September or 31st March of various years, but permits issued to persons under 21 are generally made out so that they will expire on the day before the person's 21st birthday.
3. When a permit expires it must be returned to the Asst. Secretary. If a new permit is then required, provided that the member's indemnity chit is still valid, it will be issued on request. Otherwise a new indemnity chit will have to be signed before a new permit can be issued.
4. If a member loses his permit and requires a new one he should apply to the Asst. Secretary. Normally a charge of 2/6d. will be made for issuing a new permit in order to cover administrative costs.
5. If for any reason a person ceases to be a member of the club his/her permit should be returned to the Asst. Secretary.

### D. PERMITS ISSUED TO MEMBERS OF AFFILIATED CLUBS

The details of these permits are generally the same as for the permits issued to full members (see above). The main difference, however, is that permits issued to affiliated members are valid for one club year (1st October to 30th September) only.

### E. PERMITS ISSUED TO NON-MEMBERS

1. Wessex members who hold valid C.C.C. permits may take, as their guests, non-members down the caves in the C.C.A. These non-members must have a C.C.C. permit.
2. C.C.C. permits for guests of Wessex members are obtainable from the Asst. Secretary. If the person has not previously signed an indemnity it will be necessary for him/her to do this.
3. As from 1st July 1965, in order to cover administrative costs, a charge of 2/- a permit will be made on all C.C.C. permits issued to non-members. This money must accompany the application for the permits - NO CASH = NO PERMITS. But a refund of 1/- will be made on all permits returned after they have expired. NOTE: This section only applies to permits issued after 1st July 1965. Before that date a charge of 1/- was made.
4. If a non-member who has been issued with a C.C.C. permit requires another permit at a later date it will not normally be-necessary for him/her to sign another indemnity chit. But the old permit must be, or must have been, returned before another permit will be issued.
5. C.C.C. permits issued to non-members are only valid when the non-member is accompanied by a member who holds a valid period permit. Normally permits issued to non-members are only valid for a specific trip on a specific day.

Dear Sir,

A disturbing feature of the Mendip scene is the ease and frequency with which great quantities of earth or rubble are being transported from place to place by mechanical means. The topsoil and turf go to commercial undertakings, but much of the rubble is dumped into natural depressions or sinkholes. In the main this reflects the farmers' aim to eventually level off these depressions so as to bring the land into agricultural use, and his realisation that the job is now easy and inexpensive.

During the last three years a number of depressions have been filled and levelled over, and thus lost to the caver. These include Barrow Rake Swallet, the deep depression in the field opposite the Queen Victoria Inn (almost vertically over Sump 12 in Swildons), a depression half a mile west of the Batch at Priddy, and several depressions south of Tankard Hole. Others, such as Tankard itself and one of the Brimble Pit (Westbury Hill) swallets, are being filled. In the latter case it is the farmer's declared intention to level off this and the seven adjoining depressions due to the loss of a valuable cow in an inadequately protected caver's dig.

In the long run the number of open depressions on Mendip and hence the number of sites for new cave discoveries, is likely to be drastically reduced. To reopen a depression once it was filled would be a major engineering operation.

There would seem to be little hope of halting or reversing the trend towards filling depressions, but one may deduce from the current attitude of landowners that a depression containing the entrance to a sizeable cave has a good chance of being spared, and the cave preserved. Once we have a cave, we are likely to be able, to keep it. It follows that digging groups might perhaps do well, in view of the long-term threat to all our interests, to make short sharp efforts at one depression after another rather than a massive sustained operation at a single site. The Harvey-Millward procedure of spending an agreed number of weekends at a site and then filling it in if it didn't look exceptionally promising, could be a suitable approach. Dallimore's Cave, Ubley Hill Pot, Cuckoo Cleaves and Cow Hole are examples of dry depressions that were penetrated after a minimum of work.

Yours faithfully,

William I. Stanton.

## MENDIP NOTES

### Cheramodytes

It has not - had its lot!

Nick Hart and Bob Gannicott have scored a notable success at the end of Shatter Passage in Swildon's Hole. After blowing the boulder at the end of the duck, which had made progress very difficult, they pushed the dig at the far end and broke through into about 200 ft. of new passage on March 20th 1965. On the 4th April they extended this by about another 500 ft. and a week later broke through again. The total length of new passage is now 1090 ft. and ends in Shatter Chamber, which is one of the biggest in Swildon's, second only perhaps to Swildon's VII. At the far side of Shatter Chamber is a boulder choke where the roof comes down to the floor. According to Willie Stanton's survey it stops about 200 ft. short of Swildon's VII.

### Easter in Yorkshire

Another time it might be simpler to transfer the places and leave the population, since so many Mendip cavers went north. There was a party of B.E.C. at the Flying Horseshoes, the U.B.S.S. at Clapham, while the Shepton made tea for the Wessex at Horton-in-Ribblesdale. Not a lot of caving was done, and the weather was blamed. Only on Good Friday was it fine enough to bottom Grange Rigg and nobody even bothered to go to Magnetometer Pot. Alum Pot was attempted but was too wet near the bottom. The B.E.C. abandoned their attempt on the main shaft of Gaping Ghyll. Some parties had a good time down Ireby Cavern, but Jangling Pot proved equally exciting on the Sunday. When cars were being struck by lightning, Roger Biddle was heard plaintively enquiring whether lightning went down ladders. Bob Pyke had some fun in Mere Gill, where he did a dive in the entrance pool, believed 40 ft. deep. He overcame an unduly rapid descent, due to overweightness, and the only thing which reached the bottom was the nife cell he had borrowed from Jim Giles. He has since explored a nice long resurgence sump in Bull Pot.

### Cave Guiding

Having hurt himself on the first day, Oliver Lloyd was hobbling about on Good Friday like an old man on a walking stick. He hobbled down to Ingleborough Cave, which is run by Bob Jarman and Alf Hurworth, and offered his services for the day as a cave guide. The day proved busy, so that he finally logged up 5 miles of cave. "This, ladies and gentlemen, is the largest stalactite in the cave. It is called the Sword of Damocles. Beneath it is a post, which has been put there so that you shall not knock your head against the stalactite as you pass. Not that we mind you breaking your head, but we don't want you to break our stalactite!" He joins a distinguished company of caver guides, including William Dowden, Colin Bristow, Bob Pyke and Mike Boon, How odd that so many of them should be cave divers.

## Cave Diving

There has been a comparative lull since the last number of this Journal. The Wooding team has visited Sump XII in Swildon's again, but still cannot find a way on. There is a new cave diving team in Southampton, based on the Spelaeo Rhial Caving Club and led by Mike Atherton. He started caving about 4 years ago at the age of 13 and has been a constant visitor to Cook's Farm ever since, so Mr. Stock tells me. There are plans ahead for doing an electrical survey from Stoke Lane 6 to the surface, with a view to finding out just where the cave goes to.

## Access to Stoke Lane Slocker

Cavers may have seen a new notice at the entrance, which Mr. Stock has been obliged to put up. This he did after a request had been made by the manager of Cooks Wood Quarry. The manager also wrote to Oliver Lloyd asking him to inform the member clubs of the Southern Council that cavers in the inner reaches of the Slocker were to be regarded as trespassers. The facts are that the quarry company has no control over access to the cave, since the entrance is in Mr. Stock's land.

His part of the cave goes about as far as the Pebbly Crawl; the rest is under land belonging to the quarry company, who may be making the northern parts of the cave dangerous by their blasting. They would dearly like to quarry away the whole cave, but they dare not, because the water would flood their quarry and because they would mortally offend the Bristol Waterworks Company, who take water from St. Dunstan's Well.

Oddly enough, therefore, the Bristol Waterworks, who were at one time threatening to fill the entrance to Longwood with concrete, if the cavers didn't come to heel, are now our strongest ally (because the wealthiest) in the friendly tussle which is going on to preserve the Slocker. The other interested party is the Nature Conservancy, which gives good advice. Good advice weighs heavy, but money even heavier, and the Waterworks are said to be in a confident mood.

## C.R.G. Grading

Members of the Club have read in their journal a lot of articles in the past year or so concerning the relative accuracy of survey methods. They will also remember that on 31.8.1963 a number of Mendip cave surveyors met and issued a report, which was sent to the C.R.G. for consideration. In this report they recommended slight changes in the C.R.G. grading of a line survey. They also said that detail should be graded and suggested some alterations in the symbols to be used on surveys.

The gestation period of an elephant is two and a half years and it is possible that the Mendip cave surveyors were being a little impatient when, a year and a half later, they called a second meeting, since the C.R.G. had done nothing. This was held on 24.4.65 and was attended by Arthur Butcher of the C.R.G., the man who started the grading system. Much detail was discussed and one or two hairs were split, but the recommendations are now going to the C.R.G. with Mr. Butcher's blessing.

It is interesting to note that the C.R.G. is showing signs of grading caving publications. I note in a recent review by their Hon. Secretary that Type One includes only a brief description of the cave, lacking in detail, and a survey of sorts. Type Two tells you about the cave's history but doesn't help you to find your way down it; while Type Three gives you everything - "stratigraphic observations, sediment analyses, passage topology and topography, solution phenomena," - and is very rare.

### Gating Caves

When I visited Carlswark Cave last July I was told that the Derbyshire Caving Association proposed to gate the entrance to the new series. This was to protect the formations from damage. A cynic might have replied that the damage had already been done, but my regret was that cavers should be trying to keep one another out. Now the D.C.A. is looking a little foolish, because no sooner was the gate finished than it vanished without trace. I'm afraid my rebellious nature sympathizes with the thieves.

Gating is only excusable when it is insisted on by the landowner. The D.C.A. did a good job when it negotiated the re-opening of Ecton Mine. The gate was part of the bargain. It is there to keep the mine open, not to keep it shut.

The right way to protect caves is to try to teach cavers to treat them properly. It is an unending task, sometimes gratifying, sometimes exasperating. Much can be done by propaganda, taping or setting a good example. The wrong way to do it is to try to force the inclination of cavers. A young chap grows in moral stature when he learns good cavemanship. He learns nothing by being kept out. Cavers are more important than caves.

### Black Humour?

Editorial matter from a brand new caving publication, that has just reached me:-

“We do not apologise for spelling or grammatical errors, we are cavers not publishers.”

The only possible answer to this is to stand it on its head and see how it looks:

“We do not apologise for smashing formations or leaving litter in caves, we are publishers not cavers.”

### Additional paragraph to “Access to Stoke Lane Slocker”.

The much-awaited survey trip in Stoke Lane eventually took place on May 22nd, but the extent of the exploration and the result of the survey have not yet been released. For this occasion the Wooding trio was joined by the Great Ken Pearce himself, and had the satisfaction of completely out caving him. This all goes to show that, although a Pearce-sized caver may be the most efficient human machine in the Gouffre Berger, a Mendip-sized caver best fits a Mendip cave. Unfortunately caves have a way of expanding, when Pearce goes through them, and I am told that the Second Boulder Choke will never be the same again, while Sump 2 is no longer a squeeze.

## THREE CAVES IN CALIFORNIA AND A VISIT TO CARLSBAD

Derek Ford

My family and I spent the winter of 1963-4 in southern California. Immense in the general variety and extent of its scenery, the land of the lotus eaters is not a great place for cavers. Four biggish systems are known (about G.B.-sized), and I was able to visit three of them, the other being snowed in.

Lost Soldier's Cave would rate as a real gem anywhere. I took a party of beginners from a Los Angeles mountaineering club to it in the depth of winter and immediately got twenty converts to caving. It is 4,000 feet up in the western Sierra Nevada, where igneous mountains rise abruptly to 10,000 feet from the semi-desert plain of the Great Valley of California. Entering the mountains at 900 feet, one turned off on a rough dirt road, climbing through the vivid greens of orange and lemon groves up into beef cattle and oak country and then into snow and pine trees in a deep, narrow valley.

The cave is formed in a little pendant of limestone, a few hundred feet wide and deep, sticking down into metamorphic rocks. It took us half a day to find the unobtrusive entrance amongst the pines; a common problem in this big country. Once inside, a slit-passage dropped steeply into a larger gallery with a rounded phreatic roof and a few dry stalactites. Quite like Long Hole. A short crawl at the bottom and we were into another Eastwater. Boulders and a black rift led to a 60 foot pitch, much like the first pitch on the classic route in the Mendip cave. But the landing was into the Main Chamber of Stoke Lane. Many ways led off, giving short, exciting climbs in quite lovely grottoes glistening with moisture. A roof traverse to the East led to the "Contact Room". The caver is brought up short by a blank wall of gneissic rock; no hope of a dig here.

Down through more fine formations to the West we found a 30 foot chimney to a lower level. It was tight and strenuous. We stuck a socialite party of girls here good and proper on a later visit and they never came back for more. On our first exploration the Second-in-command bounced two sizeable boulders on to me. An archetypal American (two parts Blackfoot, one part Cherokee and one part Irish), he took the incident very philosophically.

At the lower level the cave changed again. No formations; a rough, raw vadose passage led to a great stream gallery 300 feet below the entrance. But you would never find the like in Britain. Everything was bone dry and boots raised clouds of dust. The gallery petered out into a rift maze at the western limit of the limestone. Here there was water again - a deep pool in wholly gneissic rocks. The indefatigable Californians had tried an aqualung dive but nobody has ever found big caves in gneiss and the whole system ended in tiny cracks.

40 miles to the North is Church Cave. 400 feet in depth and with 7,000 feet of passages mapped, it is the biggest known cave in the state. It is entered from an excessively steep gulch, overhung by marbloid spires and tributary to a great canyon, King's Canyon, where the cave drains out.

Church Cave is a very complex system but, by the route that we took, offered few difficulties. It is a series of collapsing rifts in steeply bedded rock, with many promising routes being blocked by boulders or stream gravels from the gulch. There was one hard climb and a wire traverse of the O.F.D. type over a fine pot. But most impressive were the great veins of igneous infusion material standing out in half-relief on the limestone walls, and the number of alternative entrances to the cave - at least seven within a few yards of one another. They are very low and wide but, in the best traditions of the sport, the Californian cavers are setting out to gate the lot.

For obvious reasons, deserts are not a promising place to look for big caves but one is known 300 miles east of Los Angeles, in the mountain-and-salt-flat country of the Mojave Desert. A 20-mile drive over jeep ruts - it is enlightening to see how the chrome falls off a Chevrolet - brought us to a mountain wall in limestone overridden by rhyolites. A few hundred feet of scrambling up through cactus and an exasperating search in the heat discovered the entrance to Cave of the Winding Stair. From the parched cliff the visitor slithers straight into solid, well-formed phreatic cave. A radical change in both the local topography and the climate is necessary to explain the cave, which is quite fossil today.

The system consists of two major rifts, each one a hundred feet deep, negotiated in succession. A 45-foot pitch brought us to a boulder scramble down to the floor of the first. The walls here were coated with what the southwest American caver calls "cave coral". This is an immense profusion of helictites of nodular and botryoidal form growing 6-12" out from the wall. Besides Winding Stair, I have only seen such formations in Carlsbad Cavern: they appear to be peculiar to semi-arid conditions and in both caves were super-imposed upon earlier stalagmite sheets and bosses in every respect like the Mendip forms. The coral was completely dry (like the rest of the cave) when we saw it and is probably fossil today.

The second rift began with a straddling traverse over a deepening trench. Eventually it became necessary to climb down "Coral Chimney". This was 30 feet deep and a wide straddle. Being clothed with the coral it was the father and mother of all disinheritors. It gave access to the final 100-foot pitch over stalagmite into a super-Lamb Leer chamber with giant, dead formations everywhere. The cave was great fun but desert caving is quite exacting. The near-total absence of our old enemy, water, even in the air, makes it an enervating and headachy business.

At Easter 1964 we joined Marjorie Sweeting of C.R.G. in a visit to the world-famous Carlsbad Caverns of southern New Mexico. These are worth all the hyperbole and more and I recommend any Wessex visitor to the U.S. to get to them. The setting will be topographically familiar. A steep hill front rises 800 feet above a semi-desert plain, as the Mendips between Wells and Axbridge rise above the moors. Extending the analogy, the main level of Carlsbad (the "Big Room") is at the Mendip sea level. Further passages are known to extend 600 feet below it whilst it is entered

by way of a single steep passage descending from the Priddy elevation.

Because of shortage of time we were only able to see the tourist section. The entrance passage is rarely smaller than the larger parts of G.B. Gorge. After three-quarters of a mile or so it ends in a colossal fallen area frozen by the enormous stalagmite deposits for which the cave is famed. There is a very steep descent through them and one admires the original explorers. Pretty pools appear at this depth; the cave is quite dry higher up.

At first the Big Room is a disappointment. It is not really a vast chamber but a big piece of phreatic cave passage. There are several bifurcations breaking its continuity. The roof is often a smooth phreatic form instead of the broken residual of great collapse found in most big chambers. Its height ranges from 30-100 feet in the main.

But although I did not get an impression of vast echoing space, the number and variety of things to see is mouth-watering. The giant stalagmites, cave coral, disrupted gypsum beds, great pits, lovely solutional pocketing: scientific problems abound. The rock is light grey and the formations are invariably off-white, giving a pleasingly soft, monochromatic effect.

Carlsbad Caverns are a National Park, run by Rangers. As in every other one I have seen in the western U.S.A., the organisation and the men are superb. The development of the caves is excellent. A tarmac path threads unobtrusively around the passages; no rusting railings or rotted boards, but walls of local rocks where called for. White lights are used, always beaming from the floor. The ordinary tourist never sees the actual lights as these are shielded and, by using the floor, it has been possible to bury all cables. The non-natural only appears in one recess of the Big Room, where there is a full-blown restaurant, with white-tile bogs.

The quick way from the Big Room to the surface is a straight 780-foot pitch. Fortunately they've put an elevator in it. The effluent of the said bogs comes up this way too, constituting the greatest siphon that I have heard of in speleology.

## PEN PARK HOLE AGAIN

The Lovers Offering. By L.M. Thornton.  
Circa 1863. Published by Milner & Somerby of Halifax.

Pen Park Hole or The Lovers (A survey of Pen Park Hole can be found at the end).

(11 verses about the death by drowning of a priest in the pool of Pen Park Hole.)

Five short miles north west of Bristol,  
Where adventurers seldom stroll,  
Still in that abyss existing,  
Known so well as Pen Park Hole.

Round about the awful chasm,  
Flowers are rarely known to bloom,  
O'er the gulph a rock projecting,  
All the rest is hideous gloom.

One bright morning forth did salley,  
Four dear friends this place to sea;  
Two in tender bonds united,  
Ah- how soon to sever'd be.

"In the midst of life" we truly  
Are in jeopardy of death;  
Nor can tell how soon the strongest  
May be called to yield his breath.

To explore this deep abyss, then,  
Quickly was procur'd a line,  
And the hero of my story,  
Did himself to fate resign.

On he seem'd to go in safety,  
Till some distance hid from sight,  
When, alas - his balance losing,  
Down he sank to darkest night.

Striking 'gainst the rocks' rough edges,  
Till the plashing of the wave  
Told to thou above the chasm,  
That their friend had found his grave.

Forty days save one flew over,  
Then his floating wise was found,  
And the mutilated fragments,  
Were consigned to hallow'd ground.

But, what makes my sad tale sadder,  
Some few hours before his end,  
In the holy church at Clifton,  
Did his morning prayer ascend.

Calmly in his priestly office,  
See him with his people stand  
Each and all how little dreaming,  
His sad fate so near at hand.

And this passage from the Psalms read,  
Seem'd for that morn sadly fit;  
"In a place of Darkness, Thou hast ) \*  
laid me, in the lowest pit". )

\* "Thou has laid me in the lowest pit, in  
a place of darkness, and in the deeps".

Ps. IXXXVIII. 9.

\*\*\*\*\*

K. Top. Coll XIII 93-2 (Key to plan of Pen Park Hole)

- A. Ye Hole where ye accident Hapn'd.
- B. Where ye Boad was let down.
- C. Where his Companie Flood, a Western Trial for Lead Ore
- D. An old drifft work for lead.
- E. Ye drifft oposit ye Pool work'd for Lead, was 8 foot above ye western Ende of ye Pool 7 yards Broad, and 27½ yard in length with 2½ foot water at ye bothem on.
- F. The Pool: in Length from E. to West, is 30 yards long and 17 yard Broad, the Depth of ye Water was ye 21 March 1775 to ye Western Ende 10½ yard in the Centre 14½ yards, and at Eastern Ende 20 yards & 2 foot. ye hight of ye Roof at ye Western End was 10 yards, in the Centre 13 yards and at ye Eastern Ende 11 yards 1 foot.
- G. A Trial for Lead Ore.
- H. The beginning of the Perpendicular Roks y't run down in the Pool.
- I. A Small brik of Roks from E. to W.
- J. A Trial for Lead Ore.

Note: This poem was extracted from a manuscript plan in the Map Room of the British Museum by T.R. Shaw. It forms part of the King's Topographical Collection and the identification number is "King's Top. Coll. XIII, 93.2. The map was undated, drawn apparently soon after the accident which happened to the Rev. Thomas Newman in 1775.

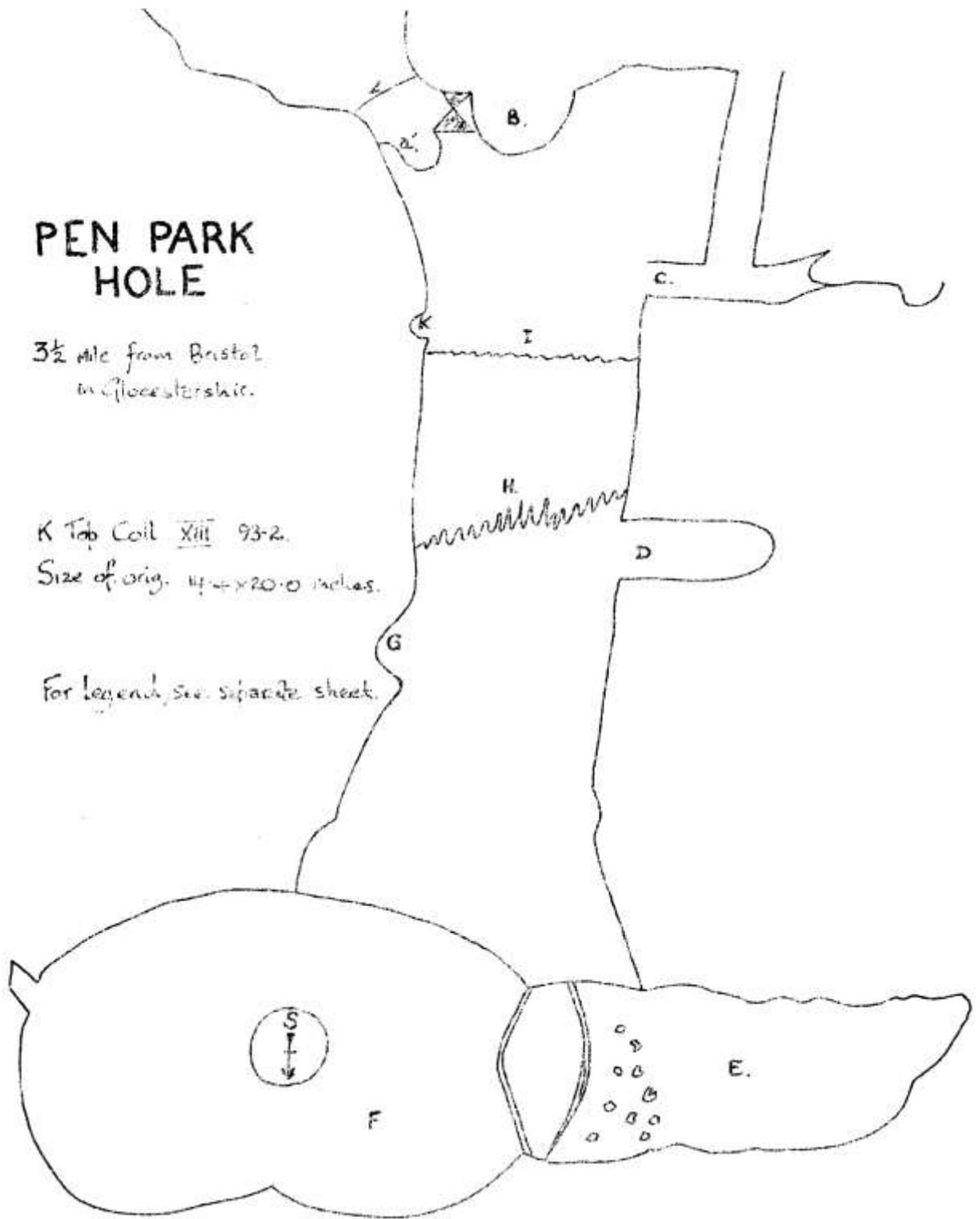
# PEN PARK HOLE

3½ mile from Bristol  
in Gloucestershire.

K Top Coil XIII 93-2.

Size of orig. 14.4 x 20.0 inches.

For legend, see separate sheet.



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## The First Rift Chamber Extension, Eastwater Cavern

Tim Atkinson

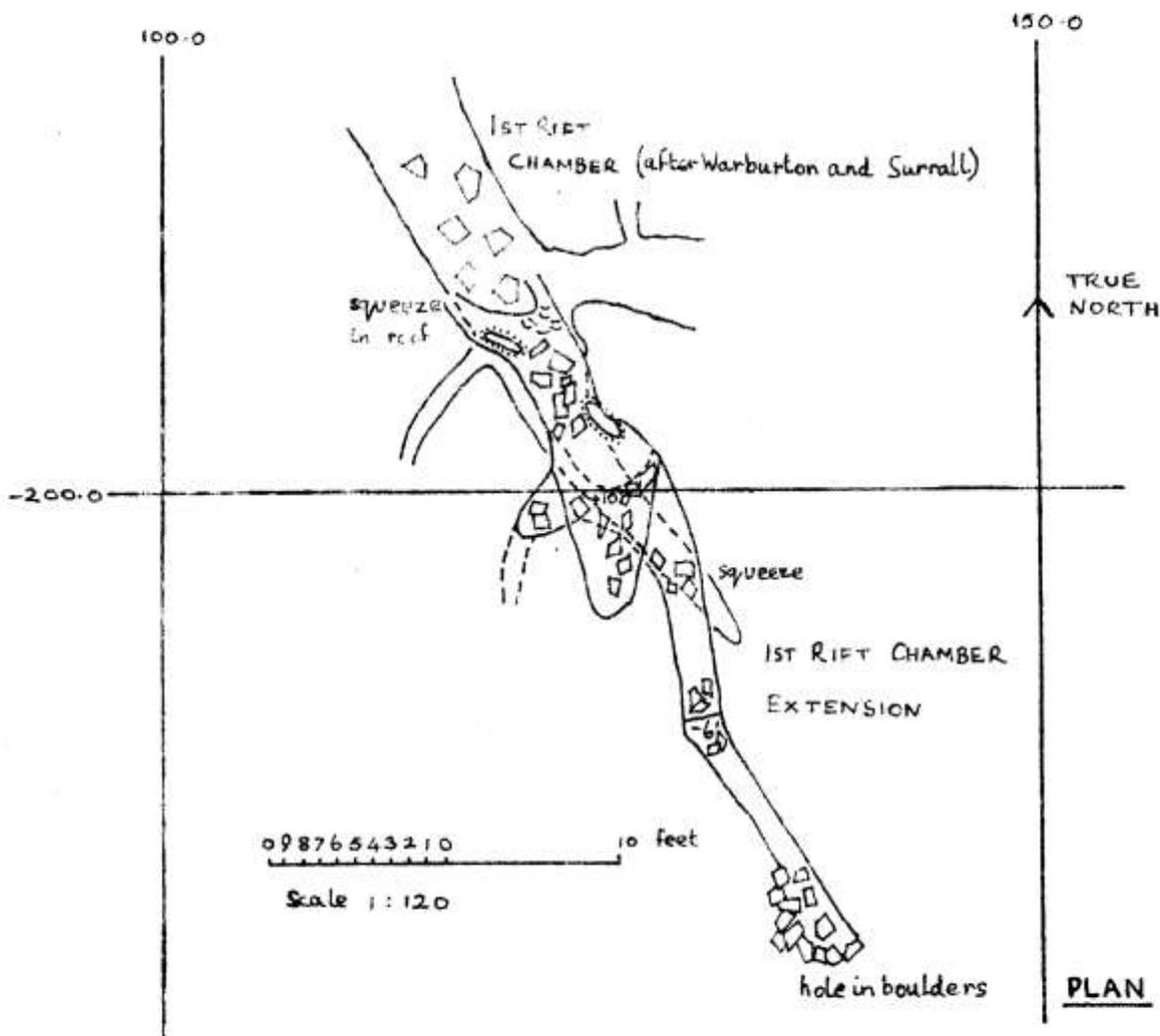
It has been thought for some time that new passages might be found high up in the First Rift Chamber, Eastwater Cavern, but as far as I know no attempt had been made to climb it until recently. On the 14th March, however, a party of six - Fred Davies (SMCC) Paul Allen (SVCC) David Rigg and Charles Hope (both from Millfield School) Lao Holland and myself - set out with the intention of climbing to the top of the rift and searching there for un-entered passages.

The most obvious place to begin the climb was three-quarters of the way along the First Rift Chamber, immediately opposite the passage to the Second Rift Chamber. A chimney leads upwards for 20ft. or so to a bridge of fault breccia. Above this is the rift proper, here about a foot wide. By back-and-kneeing, two ledges of unstable chocked boulders can be reached, 42ft. above the floor of the chamber. On the entrance side of these, the rift widens considerably, while the roof slopes upwards. There are adequate holds for a traverse to be made, and this was done by Paul Allen. He reports that the rift continues upwards, though it is only about a foot wide.

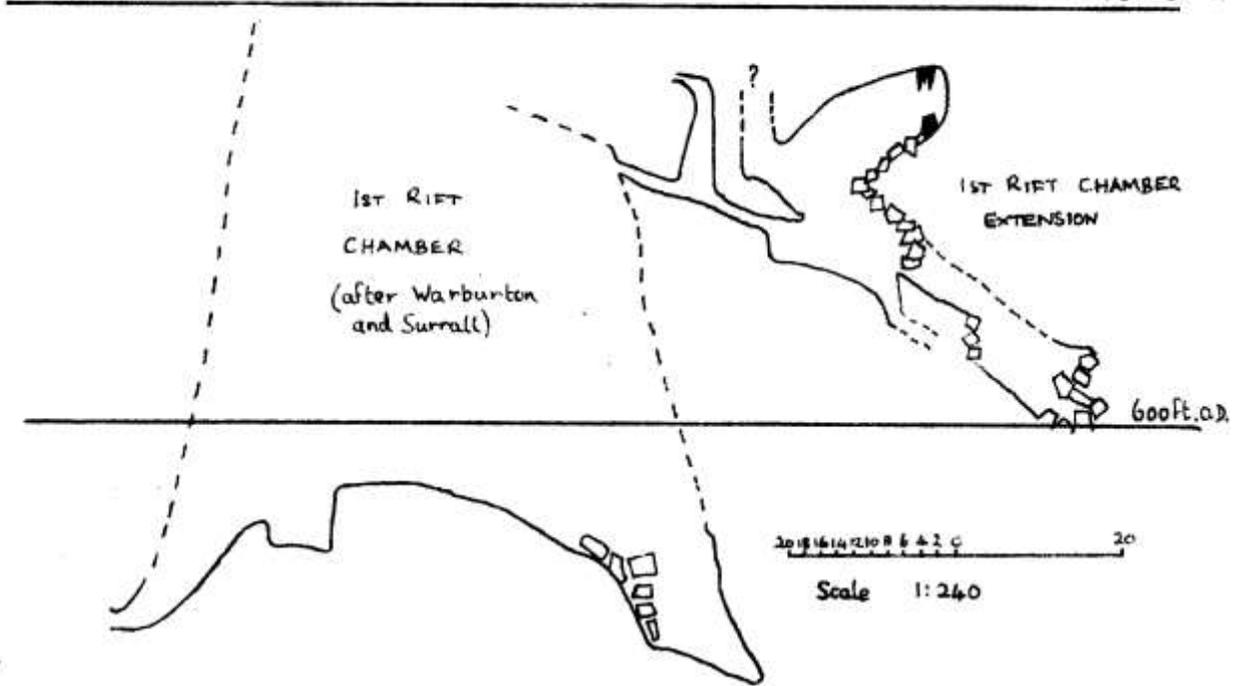
On the other side of the two chockstone ledges, the roof descends steeply. In it is a small hole, originally hung with rather nondescript stalactite curtains, leading into a horizontal passage. By enlarging the hole with a hammer, Fred Davies and I were able to pass through the tight squeeze into a low passage with a floor of boulders covered by stalagmite. At one point stones could be dropped between the boulders and into the Rift Chamber below. About 15ft. in is an aven in the roof leading up for 15ft. before becoming blocked by stalagmite. However, the way on lay over boulders in the low passage ahead, and into a chamber 25ft. high. This was split into two levels by a gallery of jammed boulders which run around the west and south walls. An easy climb allows the caver to stand on the boulder slope, which is very unstable indeed, and to admire a trio of stalactite and stalagmite pairs far prettier than anything else that I have seen in Eastwater. It is worth making the unpleasant trip through the squeeze at the entrance to the extension just to see it. Alternatively, from the same vantage-point, the explorer can speculate on the possibilities of a narrow rift which ascends into the unknown on the North side of the chamber. This rift was attempted but was rather tight.

Apart from a short extension to the west, the only other way out of the chamber is to pass under the loose boulders at the south end, and into a tight and awkward rift. There are prominent chert beds here, about two inches thick, and spaced a foot or so apart They accentuate the dip of the rocks, which is 25° or so to the south.

# 1ST RIFT CHAMBER EXTENSION, EASTWATER CAVERN



700 ft. a.d.



20 18 16 14 12 10 8 6 4 2 0

Scale 1:240

N-S PROJECTED ELEVATION

C.R.G. GRADE IV

T.C.A.

The cherty rift continues for only 30ft. before ending in a stalagmited boulder choke. There is a triangular hole between the boulders at the base of this choke, beyond which is a promisingly black space. Stones dropped through fall for about ten feet, and then rattle for some distance down a scree slope.

There are three places where further passages might be found. These are the boulder choke at the end of the extension, the rift in the roof of the chamber in the extension, and the upwards continuation of the First Rift Chamber. The boulder choke seems to be the most hopeful, though it is a little doubtful how worthwhile the passage beyond it may be. In any case, explosives will be needed.

The survey accompanying this article was made on the 3rd April by Andrew Parfitt and myself, assisted by the brothers Francis and Mark Morland. The instruments used were a hand-held prismatic compass, oil-filled, and of standard design, which could be read to 1°, a Watkins pendulum clinometer, accurate to 2° and a "Fibron" tape. Offsets were measured with a 6ft. extending tape measure. The height of the passage entrance above the floor of the First Rift Chamber was taken with a hemp line, which was measured at Hillgrove Hut the next day.

The compass was not calibrated for the day of the survey, but it was desired that the plan should be brought into alignment with Warburton's and Surrall's survey of Eastwater. Accordingly, in computing the coordinates on Warburton's and Surrall's plan, a correction of 9 from magnetic to true north was applied, this figure being the mean of three other calibrations made in the area, one the day before, and two on successive days two weeks before the surveying trip. Grade 4 is claimed as the accuracy of the survey.

While the First Rift Chamber Extension is far from being an epoch-making discovery, I think that it is worth recording for the fact that it is the only discovery made in this cave in the last decade, and that it may lead on to further passages.

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## WIRE ROPE

### C. Pickstone

Wire rope is used extensively in caving equipment nowadays, this article is concerned with giving a brief insight into the different types of small circumference ropes available for tackle construction.

The wire rope used in ladders, tethers etc. is required to be flexible, light in weight, ductile, and strong in tensile strength. The flexibility of a rope is determined by its construction, the more wires in the construction, the more flexible the rope. In the interests of weight saving, the diameter of the wire rope should be just sufficient to withstand the applied load, with a reasonable factor of safety and no more. The ductility and strength of a wire rope are governed by the steel used.

Wire rope manufactured in this country, is required to comply to a standard of manufacture, laid out in a British Standard, BS 302/621; for general engineering application, and by the "W" series; which deals with wire ropes for use in the aircraft industry. Stainless steel ropes are not considered because of cost.

The steel used, must also comply to a standard, BS 2763 which states:-

"The wire must be drawn from steel made by the open hearth, or acid type of furnace, and have a sulphur and Phosphorus content less than 0.05%. The tensile strength of wires used for ropes of less than ½" circumference shall be 130-140 tons/in<sup>2</sup>"

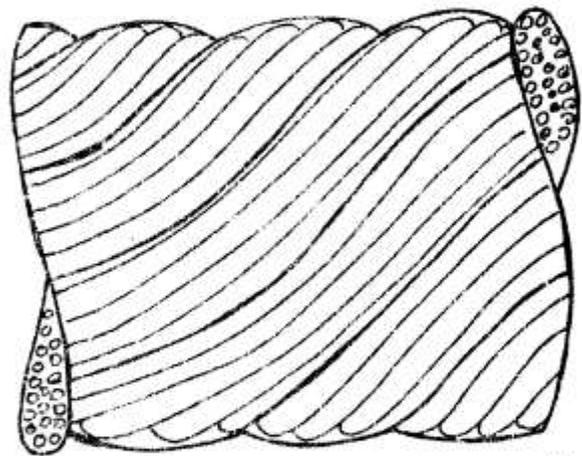
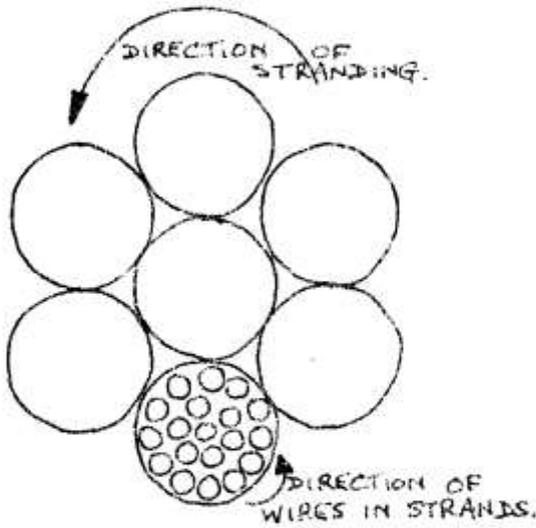
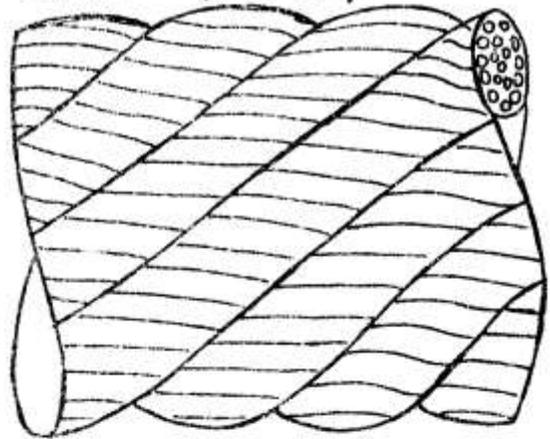
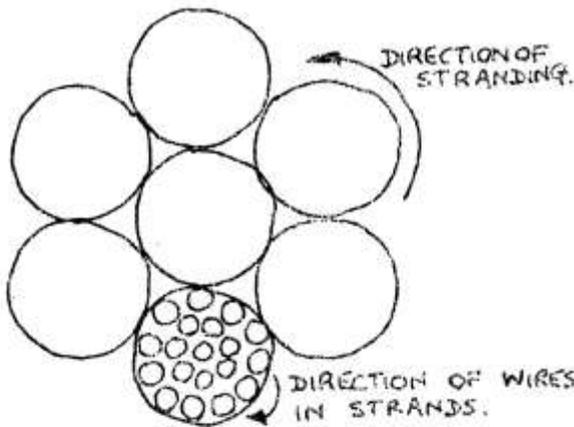
A steel to give this strength with ductility would be a Manganese steel, termed "Plough Steel", having on analysis as follows: 0.8% Carbon, 0.8% Manganese, 0.02% Silicon, the remainder being iron.

### CONSTRUCTION

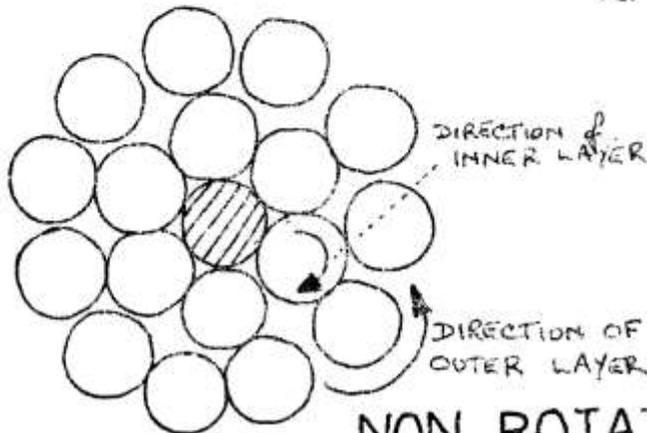
The wire rope manufacturers produce many different types of constructions, designed to suit the conditions under which the ropes will work, the construction being specified in BS 302/621. As the wire rope normally used for caving equipment is of small size, the choice of construction is limited to 'Round Strand' types. The 'Flattened' and 'Locked' strand types of construction are available only in the larger sizes of rope.

Wire ropes of 'Round Strand' construction are made up of wires laid around a centre or 'King' wire, to form a round strand, the strands being laid around a core, to form the rope.

# ORDINARY LAY (7x19)



# LANG'S LAY (7x19)



# NON ROTATING MULTIPLE STRAND (17x7).

The ropes may be obtained with either 'Langs' or 'Ordinary Lay'. With 'Langs Lay', the lay or direction of twist of the wires in the strands, is in the same direction, as the lay of the strands in the rope. A rope having 'Ordinary Lay' has the lay of the wires in the strands, in the opposite direction to the lay of the strands in the rope.

A rope with 'Langs lay' will give a much longer life than one with 'Ordinary Lay', because the wear is taken on a larger area of the wires, than the wires used in 'Ordinary Lay'. But 'Langs Lay' is unsuitable for conditions where one end of the rope is free, as it has a strong tendency to untwist itself.

The direction of stranding is usually right-hand unless stated otherwise.

Another, type of wire rope is specified as 'Preformed', this means that the wires in the strands are formed of an advanced spiral with an axis other than its own, a rope of this type will not spread out when cut. 'Preformed' ropes are mainly used in the aircraft industry, where large scale swaged terminations are used. Wire ropes other than 'Preformed' are made by forcibly laying the wires into the strands and the strands into the rope. Before cutting a wire rope not 'Preformed' it is advisable to seize the portion being cut, either by binding with wire or soldering.

Wire ropes may be manufactured with or without a galvanised coating, by either dipping or electrolytically depositing zinc on the wires. This galvanising has to comply to a standard B.S. 2763, there being two types 'A' and 'Z': Type 'A' has a thicker coating of zinc than type 'S'. Type 'A' is used mainly in the Marine engineering field.

## IDENTIFICATION

The constructions are identified as follows:-

a rope which is specified as a 6 x 19 (12/6/1), has six strands laid around a hemp core, the strands having nineteen wires in the form of a 'King wire' having six wires laid around it, over these are twelve more wires, making a total of nineteen wires. The 'X' sign is always used after the number of strands, the '/' sign representing a layer of wires. A rope having a 7 x 19 construction of the same diameter or a 6 x 19 rope has a steel stranded core. These steel cored ropes are used where the rope may be subjected to high temperature or damp conditions. High temperature will harm the core, and in damp conditions the hemp core will retain moisture, which may promote internal corrosion.

The size of ropes are usually quoted in terms of circumference. Ropes for use in the aircraft industry, to standard, B.S. 'W series' is known as 'Aero Cable' being specified by its breaking load, in C.W.T. The specifications of small round strand wire rope are as follows:-

Galvanised Wire Rope B.S. 302/621

SIZE OF ROPE		BREAKING LOAD IN LBS.		
CIRC	DIA	6 x 19	7 x 19	7x4
3/8"	0.12ins	1410	1520	1430
1/2"	0.16ins	2110	2270	2060
5/8"	0.20ins	2890	3110	3030

Aero Cable 'Preformed' B.S. W 9

TYPE	SIZE OF ROPE		CONSTRUCTION	BREAKING LOAD
	CWT	DIA		IN LBS.
1P	3	0.065	4 x 7	336
2P	5	0.08	4 x 7	560
4P	5	0.08	7 x 7	560
5P	10	0.12	7 x 14	1120
6p	15	0.15	7 x 19	1680

The 'Preformed' Aero Cable is denoted by the suffix P. to distinguish it from Non-Preformed types specified in B.S. 6 W 2.

Aero Cable is galvanised and has a steel stranded core.

### WINCH ROPES

These ropes must not have any tendency to untwist, this is accomplished by using a construction of 'Non-Rotating' type. The 'Non-Rotating' ropes are of Multi-Layer strand construction, each layer of strands being laid in opposing directions to the previous one, thus cancelling any untwisting moment that may occur. These ropes would be identified as follows, 17 x 7 Multiple-Strand, the strands being of six wires laid over one, the strands being laid eleven over six strands over a core, the core; for cave use, could have a telephone cable running through it.

### CONCLUSION

The size of wire rope to be used for a specific application is easily found, take for example, ladders. Each side of the ladder will in normal use, take half the load, assuming a caver weighs 200lbs. Each wire will carry 100lbs, in static condition. If a factor of safety (F of S) of 7-1 is employed, as is normal with lifting tackle, a rope having a breaking strength of at least 700lbs. is required. Ropes fulfilling this requirement are either 3/8" 'Circ' or No.5 Aero Cable. (10 cwt).

For maximum flexibility and corrosion resistance, the construction with the greatest number of wires, having a steel stranded core and galvanised finish is desirable.

A 3/8" circumference rope having a construction of (7x19) is clearly more flexible than a No. 5 Aero Cable (7x14). But a compromise has to be reached when the construction of ladders is considered, the 3/8" circ. is the strongest of the two, but as it is not preformed, the ends of the rope would have to be seized, before threading through the rungs. The Aero Cable can be obtained 'Pre-formed' (No. 5P) which requires no seizing, although ladder making with the Preformed Aero Cable is quicker, it is slightly more expensive than 'Natural' wire rope and not as strong.

If the facilities are available to seize the 'Natural' wire rope by soldering using Induction Heating or other high speed method, the 'Natural' (7x19) is the most suitable, if not then the No. 5P (10 cwt) Aero Cable is probably better.

The (7x19) 3/8" circumference rope will give a (15-1) factor of safety, No. 5 Aero Cable (11-1), under static conditions, thus bringing the stressing in the wires to a very low value.

The wire rope used for tethers is the same as for the ladders, although as they usually suffer much abuse when in use, the next larger size could be employed with advantage, which would be either 1/2" circumference or 15 cwt. Aero Cable.

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### FOR PEOPLE WHO HATE CAVES

Attention: If you are one of the many people who hate caving - if you have tried repeatedly to give up this nasty habit - unsuccessfully - there is new hope for you.

"Cavers Anonymous", a relatively new organisation, is ready and waiting to help you. Headed by the South West's well known Speleophobic Advisors it is rapidly gaining attention amongst cave haters. Members stand ready to come to your assistance at any time of the day or night. If you get an urge to go caving which you cannot suppress, you have only to call for help, and within minutes a qualified Speleophobe will be at your side to remind you of the horrors of caving.

He will give you full details of the more gory caving accidents and, if absolutely necessary, will read to you the S.V.C.C. Newsletter. He will in all cases remain with you until you are once again under control.

Do not wait! The Caving Season is at hand. Join today and protect yourself from another summer of caving.

"Cavers Anonymous" waits to help you.

## LIBRARY NOTES. MAY 1965.

Donald Thomson.

The reference library continues to acquire literature from near and far. Since the last Journal we have received the following publications.

First, the Journal of the Plymouth Caving Group No. 15 of January. This group has done a lot of good work in the mines of Devon and Cornwall, and two informative accounts are given, one of the exploration of the North Roskear Mine via the Dolcoath Adit, in Cornwall, followed by a most extensive bibliography, and the other of a trip to the Virtuous Lady Mine, near Buckland Monachorum. Does anyone, by the way, know the map reference of this place?

The N.S.S. of America has sent us three more editions of their "News" one of the first glossy magazines for cavers. Its standard varies. The photographs are plentiful and good, but there is not a lot of news in these three, Vol. 22 Nos. 11 & 12 and Vol.23 No. 1.

The Journal of the Cambridge University Caving Club contains the write-up of trips to the Pindus Mountains of Greece and to the Gouffre Berger, and a rather abbreviated account of a trip to Norway.

Another journal new to us is that of the Bradford Pothole Club. The current issue carries the description of a tourist trip into Postojna.

Several more editions of the Chelsea Speliological Society's Journal have fallen into our hands. These always make interesting reading and we have Volume 7 Nos. 2-7 inclusive. One of the Chelsea members seems to be a Kiwi, and, writing in the February number almost gives the impression that New Zealand is hollow underneath. In the November issue Vol. 7 No.2., George Fletcher gives us the victim's view of a cave rescue from Agen Allwed, and Colin Holdsworth adds his comments. He is taken to task, unfairly I think, by Don Robinson in the C.R.G. Newsletter of March 65 (No.95) on the grounds that no mention was made of first aid to the injured caver who was supposed to have two broken legs. He goes on to criticize (with more justification) standard splints and padding. This seems to illustrate the difference in thought between North and South, and it seems to me that first aid applied to fractures in caves before arrival of rescue squads should be minimal. It must be seldom that a surfeit of doctors is not present at a cave rescue on Mendip or in South Wales, and the use of polythene packed plaster of Paris splints obviates the use of standard splints. However, they are expensive, and for this reason splinting of fractures on practice rescues is probably better left to the imagination. Such matters as P.O.P. splinting and subsequent observation of the casualty are best left to the medical warden who is the person who should see the patient out of the cave. On Mendip we have tended to think that the problems of immobilization of fractures, along with such considerations as the use of morphia, are best decided by the medical warden in appreciation of the circumstances.

Nearer home we have had No. 204 of the Belfrey Bull, the Axbridge Journal of December 64 and January 65 and the Westminster 1965 No. 1 & 2. Another new addition is the Gloucester Speleo. Soc. Vol. 3, No. 2 of November last. This club does a lot of work in the Forest of Dean and Cirencester areas.

Tony Oldham's "Mendip Caver" Nos. 5, 6, 8, 10, 11 and 12 are with us, but this, so I understand, has been discontinued, to be resurrected, in part at least, in The Speleologist. We have had the second edition of this, and it is being reviewed later.

The National Engineering Laboratory's publication No. 162 deals with the strength of karabiners and is a caver's guide to the best Krabs. The breaking strain of all of them seems to be about fifteen cavers, but it is nice to know how much reserve one has.

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### LETTER TO THE EDITOR

Sir,

Of late I see your manuscript "Wessex Cave Club" and express interest in the communication of Mr. A.D. Oldham (z. 216); "The Carbide Mines of Svenstavik".

We have here in the Institute greatly interested in the carbides are, and this occurrence in cluster Aretius B<sup>IV</sup> have demonstrate using microwave elektron diffraction spectroscope.

We find these carbides more numerous in the galaxy to occur and so not so much iniquity.

I think this of usefulness your men will be.

Yours gratefully,

Finkmann,

Institute of Extra-terrestrial Mineralogy,  
The University,  
Leeds. 2.

## BOOK REVIEWS

THE SPELEOLOGIST, Vol. 1, No. 1 (Jan-Feb 1965) & No. 2 (Mar-April 1965)

Edited by J.K. Dryden

4to, 40p. each, surveys, illus. 4/- a copy or 21/6 (p.f.) per year (6 issues) (DRC Publishing Co. Ltd., 24 Southernhay West, Exeter, Devon).

Not since 1938 have we had a well-printed national caving magazine of international scope. The Yorkshire Ramblers' Club, the Craven Pothole Club and the U.B.S.S. have continued to produce printed publications of a high standard but, for all their merits, they cannot and do not try to fulfil the same purpose as a good quality magazine. One might as well expect the Proceedings of the Zoological Society of London to do the same job as Country Life. It is the good quality magazine, the caving equivalent of Country Life or Discovery that we have lacked for so many years.

Do we want such a magazine even now? it may be asked. Can it provide anything we don't already get from the dozens (or hundreds) of publications already issued? Perhaps it cannot supply any actual information that would not otherwise appear in one of the other dozens (hundreds), though it is likely to supply it more quickly; but who except a near-professional speleologist can afford the time or money to examine all the rest? And is it not more enjoyable to read a well-edited illustrated magazine rather than the production of the average small club? Is there any other periodical that covers such a wide range of subjects and regions, except for the avowedly scientific journals?

Each individual decides for himself whether he personally likes the idea of a glossy magazine, but there is also another aspect to be considered: its effect on the sport/movement/hobby/science as a whole. It must have an effect on the public relations that seem to be becoming so increasingly important. There is a tendency among outsiders to think (not unreasonably perhaps) that a sport that cannot produce a printed magazine need not be taken very seriously. Fishermen, stamp-collectors, bee-keepers, rugger-players all have their own magazines that give them an air of respectability. "Status symbol" is a horrible expression but it describes something many outsiders base their opinions on. "We don't need one", says the ardent speleo, "we are a 'strong silent sport' that depends on its own merits, not advertising", or "We are scientists, we don't need a popular magazine". But is it true of all of us? And, more to the point, do outsiders know it?

So much for the need for a good quality caving magazine. If we do need one, is The Speleologist the right one? Is it well enough produced and printed? Are the subjects dealt with at the right level - not too elementary, yet not written only for experts? Is the range of subjects wide enough? Is there too much politics? Have the editors and the authors between them produced a high enough standard of writing?

The questions seem to sort themselves into two groups; one concerned with the quality of the magazine, the other with its scope.

The quality of production is impressively high; it looks, as indeed it is, a professional production. The standard of the articles is rather more uneven; some are very good indeed and none is poor, but there is room for some improvement.

With regard to scope - the subjects dealt with and the level of their treatment - every reader will have his own ideas, and the dislikes of some will almost certainly be countered by the likings of others. There is no purpose in your reviewer airing his personal views on the balance of subjects. Whether or not he agrees in points of detail, he firmly believes that the editors have produced a very good compromise.

Certainly the range of subjects is wide: Mossdale Caverns, filming a practice cave rescue, Scottish cave paintings, water analysis, Ogof Cil-Yr-Ychen, recent diving in Mendip, a New Zealand exploration, instructions for colour photography underground, book reviews, the Stump Cross to Mungo Gill break-through, Cornish mining, councils (various) of caving clubs, Derbyshire discoveries, caves in N.W. Spain, humour that really is quite funny, formation of cave pearls, two German show caves, synthetic ropes, and so on. This is only part of the contents of the first two issues, but enough to show the variety.

Only a very foolish caver would fail to subscribe to *The Speleologist*. It is interesting and up to date; it is easy and enjoyable to read; and it is remarkably cheap - equivalent to just one pint of beer a month. These first few issues will be scarce in years to come and there is nothing more irritating than having a set of magazines complete except for the first few numbers ("If only I had ..."). Another point, too; unless these early issues are bought, there won't be any others. What better way of killing several birds with one metaphorical brick, than by giving subscriptions or copies to people one wants to thank - farmers, land-owners or hospitable foreign speleos?

T.R.S.

#### HYDROLOGY Edited by Oscar E. Mainzer

165 illus. XI + 712 pp 6 $\frac{1}{8}$  x 9 $\frac{1}{4}$ , Paperback, pub. 1964 by Dover Publications, New York, 3.25 Dollars, (published in London by Constable & Co.Ltd @ 28/-)

This weighty volume (avoirdupois wise) is the tenth in the series "Physics of the Earth". Written by twenty-four experts and with a bibliography of 950 items, it is the equivalent of a reference library on classical hydrology. Although covering a wide field, it has not been revised since it was written for the National Research Council of America in 1942, and consequently it is partially superseded by more recent publications such as "Andraea, Neue Hydrometrische Verfahren

(reviewed W.C.C. Jnl. No.95, p.96).

The section on the Hydrology of Limestone Terraines by Swinnerton, whilst originally was fairly conclusive, is now somewhat antiquated by the vast amount of literature on this subject which has appeared in the last two decades.

A.D.O.

### SURVEY REVIEW

#### YORDAS CAVE, Kingsdale, Yorkshire.

NGR SD 705791 surveyed 1963/4 by G. Stevens, C.R.G. Grade 4.

Scale 1/240. A useful 30" x 18" sheet showing that Yordas Cave is not just one chamber but quite an interesting pot with a 70 ft. pitch. Obtainable from G. Stevens, Pembroke College, Oxford. 2/6d. post free.

A.D.O.

#### BRISTOL MOUNTAINEERING 1965

(The Journal of the University of Bristol Mountaineering Club. Edited by Ian Smith, 28 pp. obtainable from the editor at Holmes Cottage Annexe, Wills Hall, Stoke Bishop, Bristol, at 2/-.)

Bristol Mountaineering, although primarily intended for the climber, contains plenty to interest the caver from many amusing anecdotes, to a note on the discovery of a new chamber in Mercavity Cave by "banging on the wall with "magic hammers". The President's Report is the most amusing one that I have yet read. The opening line "It falls to me", gives a good insight of what is to follow. The President complains that his memory is bad and his diary poor, but surely he is being modest, his report records everything of interest over the last year, including such sombre accident accounts as " an unroped climber fell from the Gallery 150ft. to the ground. He was killed" .

Full descriptions of fourteen new climbs, some of which are situated in two new quarrys, are given. This is a rather exclusive scoop as these routes do not appear in the forthcoming guide.

Well produced with "lino-cut" type photo on front and back cover, it represents good value for money at less than a penny per page.

A.D.O.