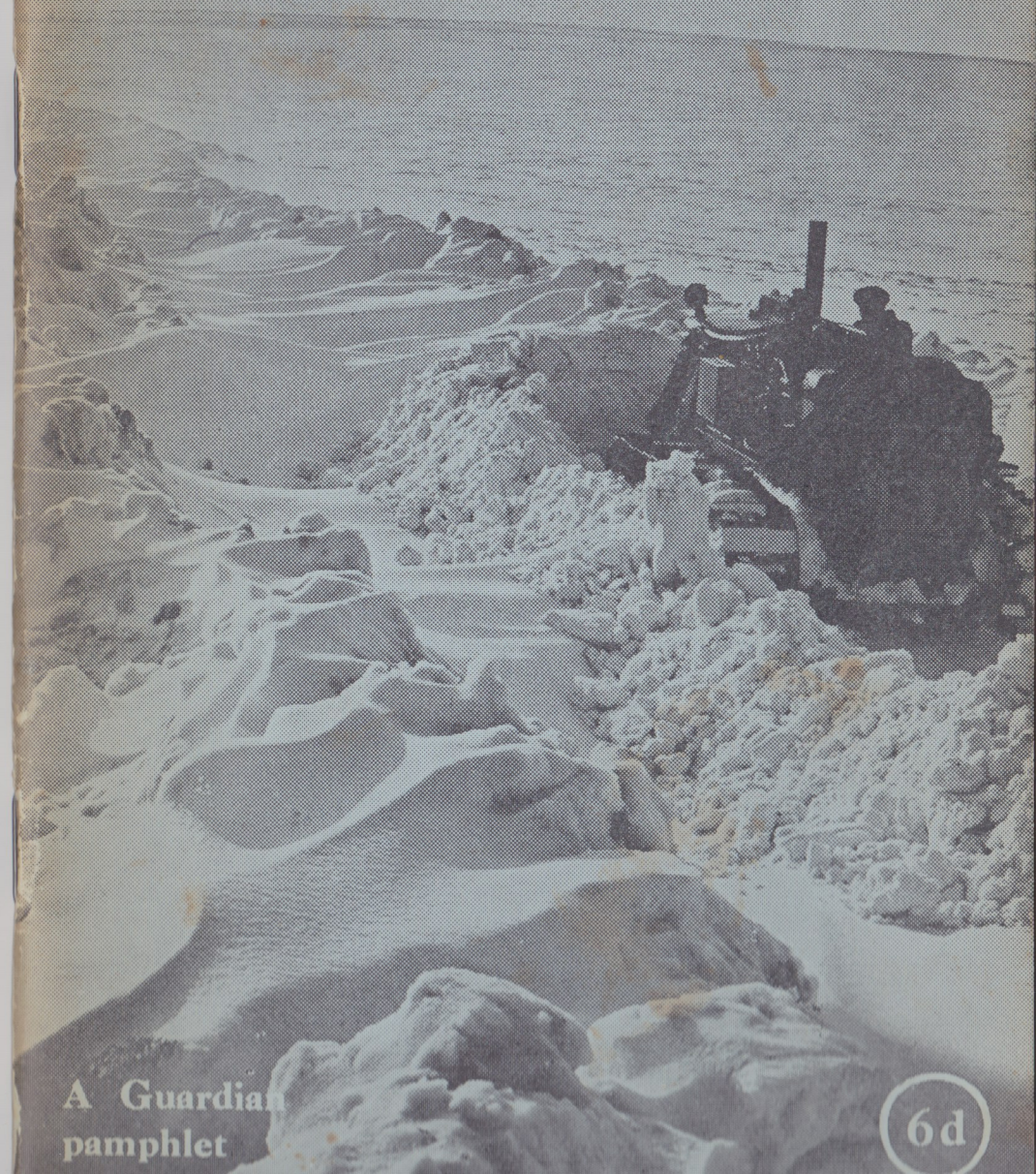


THE LONG WINTER 1962-3



A Guardian
pamphlet

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THE LONG WINTER

1962-63

A Guardian pamphlet

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BY any standard the winter of 1962-3 was one of the hardest Great Britain has ever had. It has been reckoned that in the Midlands, which didn't have the worst of it, there has been nothing comparable since 1740. Even the most conservative estimates for the country as a whole conclude that it was the coldest since 1829-30. It was a winter in which cars were driven across the Thames, pack ice formed a quarter of a mile outside Whitstable Harbour, a family was marooned on a Dartmoor farm for 66 days. It killed at least 49 people. And though its economic effects were not as severe as those of 1946-7, public transport was several times brought to a standstill, and the January power crisis was grave enough to provoke an emergency meeting of the Cabinet. It was a winter to remember. What follows—the day-by-day summary of the chilliest news, the special articles by “Guardian” reporters and correspondents which appeared in the paper at the time, the illustrations and the statistics—is a memorial to the long winter 1962-3. GEOFFREY MOORHOUSE.

Summary of the winter

First week

December 23: Hundreds of Christmas holidaymakers flew out of Manchester Airport after being delayed for as long as 27 hours by fog, ice patches were reported on roads in a score of counties, and snow lay on mountains in Scotland. The weather, in short, was normal for the time of year. But there were ominous signs from the Continent; 30 villages were cut off by snowstorms in the Abruzzi Mountains of Italy, parts of Germany looked like having their whitest Christmas in history, and the weather was so bad in Northern Greece that a state of alert was ordered.

December 26: Snow fell throughout the country and roads were “exceptionally dangerous” everywhere except in Devon and Cornwall. Nineteen of the 46 Football League games were postponed and three others abandoned; the Rugby League programme was wiped out; only three major Rugby Union matches were played; all racing was cancelled. In the North-west candles were lit after widespread power failures. But Bournemouth was the coldest place in the country with —8deg. C. The sea froze in Poole Harbour for only the second time in 25 years.

December 27: Continuous snowfall almost everywhere, with the South getting the worst of it. Traffic-jams of up to 10 miles long were reported from many places, mostly in Kent. Some Southern Region trains cancelled, others delayed. British European Airways had to cancel 37 flights from London Airport and there were 10in. of snow on the runways at Gatwick.

December 28: Blizzards swept across Devon and Cornwall, fog covered much of the Midlands and the North. The lowest temperature was —9deg. C in parts of Suffolk and Yorkshire. Twenty-six of the Football League games due to be played next day were postponed.

Second week

December 30: At least five people died in snowstorms over Southern England, two of them from suffocation after spending the night in a car under a drift. More than 200 roads were blocked and it was estimated that 95,000 miles of roads were snowbound. Things were worst in the West Country, where drifts were up to 15ft. deep. Only the Tamar Bridge linked Devon and Cornwall. Helicopters were called to assist people trapped in North Devon. In Kent it took one man 90 minutes to drive 440 yards. The Meteorological Office reported signs of a thaw.

December 31: Five more deaths occurred, and in Devon conditions were already comparable to those of 1947. Two thousand ponies had been buried under drifts on Dartmoor for three days and an unknown number of sheep were in similar

plight. In the North there was a gale which brought down a 200ft. chimney in Rochdale. Men at 26 power stations decided to ban overtime and work to rule, which meant, according to their spokesman Mr. Charles Doyle, that "roughly one-third of the electricity supply industry" was affected. The Meteorological Office reported that seven towns had beaten the December sunshine record of 100.1 hours, which had existed since 1917. At the same time, it decided that there wasn't, after all, going to be a thaw.

January 1: Continuing blizzards over the South of England were described as the worst for 82 years (on January 18, 1881, according to legend, there was a 15ft. snow-drift in Oxford Circus). Dozens of villages were cut off and helicopters were used to drop fodder and other supplies to isolated communities in the West. One flight was made with milk and food for a children's nursery in Dorset. More than 500 lorries from all parts of the country were queueing for rock salt at a mine in Cheshire. The National Dairy Council suggested that so many empty milk bottles had been lost in the snow that there might not be enough full ones to go round.

January 2: It was snowing hard in nine counties south of the Kent-Somerset line and an Automobile Association spokesman reckoned that "the only thing travelling up the M1 is snow." Four more deaths were attributable to the weather. Men at another eleven power stations joined the work-to-rule movement. Vegetable prices began to rise rapidly.

January 3: A slight thaw came to parts of Europe, excluding Britain, where the blizzard spread northwards. A Royal Automobile Club official, not to be outdone by the fluency of the A.A., said that "the Peak District looks like the Alps," and Pennine villages became isolated. In Somerset the railway line between Minehead and Taunton was blocked by a train stuck in a snowdrift, another train in the area was abandoned by its crew, who took refuge in a farmhouse, and rail conditions in the West were so bad that priority was given to trains carrying food, coal, oil, and petrol. Fifty B.E.A. flights were cancelled at London Airport, Gatwick was closed, and London dairies began drawing on emergency stocks. It was reported that more than 20,000 driving tests had been cancelled during the week. The unions recommended an official work-to-rule in all power stations.

January 4: The thaw reached parts of the Midlands, the South, and West, but it was too late to save most of the next day's sports fixtures. All but five of the 32 F.A. Cup third-round ties were postponed—a record—and for the second successive week the football pools were cancelled. The Ministry of Agriculture advised farmers to shoot house sparrows on sight now that they were in their hundreds seeking food in farmyards.

Third week

January 6: Dynamite was used after an avalanche had blocked the railway line from Edinburgh to Carlisle near Galashiels and 1,300 sheep, ponies, and bullocks were dug out



Footballers on ice. J. Armfield and A. Waiters, of Blackpool F.C., skate across their frozen pitch at Bloomfield Road. January 8.

of drifts on Dartmoor. A lifeboat from a coaster which had been missing since December 28 on a voyage from Swansea to Rouen was found near Land's End.

January 7: At Grantown-on-Spey, Morayshire, the temperature fell to -22deg. C. It was noticed that sheep were being eaten alive by foxes on Dartmoor and it was feared that hungry ponies might attack people carrying food in the New Forest. At Billesdon, in Leicestershire, dustbins began to freeze on to the fingers of the dustmen.

January 8: The rearranged F.A. Cup ties were again postponed; 145 out of 211 Cup and League matches had suffered this fate in 19 days. It was decided to move the final England Rugby Union trial from Twickenham to Torquay, where things might be balmier. In Scotland aircraft dropped 96 bales of hay to animals near Hawick.

January 9: The chief operations engineer of the Central Electricity Generating Board said that the London area survived its peak demand for power "by the skin of its teeth."

January 11: Shop stewards representing the London power stations met on a day of reduced voltage throughout the country and voted for "a more rigid application" of the work-to-rule. Candles were ready on the table during the meeting lest the worst should befall. Football pools were again cancelled. Bristol harbour froze, and so did Britain's second fastest-flowing river—the Arun, in Sussex.

Fourth week

January 13: The C.E.G.B. asked housewives to postpone the morrow's washing—or, at least, to put off the ironing until later in the week. Thousands of homes in the London area were again without electricity, among them Mr. Charles Doyle's. The Southern Region of British Railways announced that there would be a 50 per cent reduction of heating on its electric trains. Two more people died as a result of the weather.

January 14: Three people were gassed after the frost had burst mains and 20 others were taken to hospital. Workmen at three London power stations suspended their work-to-rule campaign, but much of the city was still blacked out and the Ministry of Works stopped the fountains in Trafalgar Square. Over 5,000 children were sent home in Portsmouth, where twenty schools were closed because of frozen lavatories. Sea-gulls were frozen into the water in Poole Harbour.

January 15: Eight more people were gassed as a result of burst mains, five of them in one family in Salford.

January 16: A compromise was reached in the dispute over wages which had led to the work to rule in power stations. For the twenty-fifth consecutive day the temperature in London was below -4deg. C., the only comparable spells there being runs of 24 days in 1890 and 1895. Blizzards swept over the Yorkshire moors and 100 vehicles were abandoned on the road between Whitby and Pickering. The A39 at Porlock Hill in Devon was blocked for the twenty-first day in succession.

January 17: In spite of the pay settlement the work to rule continued unofficially in some power stations. This, together with a record demand for power in the area, caused yet another blackout in South-east England. At the laying of a foundation stone in Nottingham a brazier had to be lit to stop the concrete from freezing.

January 18: Blizzards virtually cut Scotland off from England and more than 200 vehicles were abandoned on Stainmore in Westmorland. Locomotives in the Western Region began to freeze up while they were running. In Gloucestershire a woman was found frozen to death outside her cottage. But the chilliest news of the day was of the death of Mr. Gaitskell.

Fifth week

January 20: After a week-end of blizzards in most parts of Britain, conditions were worse than ever. In only six of the 86 counties (excluding Ireland) were roads free from blocks and stranded vehicles. Helicopters evacuated 300 workmen from the Fylingdales early-warning station. Two climbers were killed by an avalanche in the Chew Valley, near Oldham, a walker died some miles away near Ramsbottom, and a man was found dead in a stranded car near Blackburn. Ice floes in the Bristol Channel stopped the Beachley Ferry. Two coachloads of people stuck all night in a snowdrift were rescued in

Derbyshire, and trains were trapped in drifts in Hertfordshire, Lancashire, and Cheshire. Forty lorry drivers spent their third night in hotels or cafes between Bowes (Yorkshire) and Brough (Westmorland), and 23 men were saved from a Lebanese vessel which went aground at South Shields. London Airport was closed and the Pools Promoters' Association, after another blank Saturday, decided that drastic measures were required. From now on, even if more than 30 football matches were postponed, the weekly gamble would be possible. A panel of experts would produce a hypothetical result for the unplayed games.

January 21: Seven other deaths were attributed to the weather.

January 22: For the first time since 1947 large patches of ice were seen drifting in the Mersey off Liverpool and pack ice was also reported from the Solent, the Humber, and from East Anglia. At Eastbourne the sea froze 100 feet offshore along a two-mile stretch of the coast. Gas supplies were cut off from industry in South Wales after the Wales Gas Board had reported an unprecedented demand.

January 23: On what was generally the coldest night of the winter, the British Insurance Association estimated that already the weather had cost more than £5M in claims. Two hundred London buses were put out of action when their fuel froze. Two more people died from the cold. The Mancunian express took nearly ten hours to get from Euston to Manchester—a journey it generally completes in just over three and a half hours.

January 24: There was more chaos on the railways as diesel fuel, coal, points, and water-troughs froze. Passengers travelling in one train from St. Pancras to Manchester took only ten minutes short of twelve hours to cover the 189 miles. They were lucky. Many trains didn't run at all. Fifty families were evacuated from a block of flats in Streatham because they were too hot; there was a fault in the central-heating system. On the other side of London bonfires were lit in the streets of Paddington to prevent water freezing in the stand-pipes. Cabinet met to discuss emergency measures.

January 25: Four more people were gassed and in Belfast a large area was closed to traffic and declared a no-smoking zone after a gas main had fractured. A man successfully applied to the magistrates at Mortlake, Surrey, for a notice ordering Barnes Borough Council to remove snow which, he said, was obstructing the road outside his house. Factories making disposable nappies were working overtime after supplies had sold out. Millions, it was said, had been sold because the icy weather had prevented mothers from drying conventional flannelette nappies.

Sixth week

January 27: A week-end thaw coincided with the worst power failure in the national grid in 35 years of operation. The East Midlands was cut off from the North and South and there

were widespread power failures. But the thaw allowed the National Coal Board to get supplies moving again. After water mains had burst, there was flooding in London (where firemen dealt with 1,473 cases during the week-end), Camborne, and Oxford (where several hundred books were damaged in the library of Trinity College). A 45lb. lamb was roasted on Oulton Broad, Norfolk—then it was taken ashore in a hurry because the charcoal was melting the ice. In the same county an amateur forecaster who had accurately predicted a severe winter last September suddenly decided that the summer would be “so hot that people will drop down dead from the heat.”

January 28: The slow thaw continued and a new hazard arose. Trains were diverted at Caerphilly after 10 tons of ice had dropped on to the track from a ventilating shaft, and at Torpantau, Brecon, where 50 tons overhung a tunnel mouth. Derbyshire County Council decided to use 400lb. of gelignite to blow up a snow cornice hanging 200ft. above the Snake Pass, which had been closed to traffic between Manchester and Sheffield for eleven days. The British Insurance Association revised its estimate of winter claims. These, it now reckoned, would amount to £15M. In Liverpool it was said that the cost of snow clearance was by now £95,000—almost twice as much as in 1947.

January 29: The coldest place in Europe was Brussels, where Britain's application to join E.E.C. was rejected.

January 31: The Queen and Prince Philip left London for their tour of New Zealand and Australia. The thoughts of a nation went with them.

February 1: The thaw ended and there were snow showers in central and southern England; in West Sussex three inches fell in an hour. On the eve of another chill Saturday the number of football matches cancelled since December 22 approached 400.

Seventh week

February 3: The R.A.C., whose stock of occasional phrases looked as if it might just outlast the winter, called this “Snowplough Sunday.” Roads in North Devon and the Lake District were still blocked. At Sunderland coal for London was loaded into ships on a Sunday for the first time since 1947. In the London area the Metropolitan Water Board experimented with a new way of defreezing pipes by putting an electric charge through them.

February 4: Cornwall and Pembroke were cut off by blizzards; 50 people spent the night in a train on the edge of Dartmoor and 70 lorry drivers took refuge in a school at Whiddon Down, between Exeter and Okehampton, after being surrounded by deep drifts. In Wales Llanelly was isolated. In Scotland 150 lorry drivers, caught between Lanark and Abington, took to a public hall for the night; two school buses were stuck in Midlothian, the children being rescued by farmers; and passengers in three buses stranded at Drum-

goyne were sheltered at Killearn Hospital. Twelve school-children had to be found accommodation in Kirkby Stephen, Westmorland, when drifts stopped their bus.

February 6: The blizzards continued in the North. A helicopter rescued passengers from a train stuck overnight at Barrhill, Ayrshire, and another train was dug out of a drift at Disley, Cheshire. A third arrived in Stranraer 17½ hours late from London. Nearly 1,000 vehicles were trapped on the Great North Road near Alnwick, a snowplough got stuck in a drift in Perthshire, and Edinburgh was cut off. In the West Country a thaw brought danger of flooding. Devon Water Board ordered a 24-hour watch on all rivers, and in Plymouth the Services planned a flood-relief operation, using helicopters and amphibious vehicles. In Essex it was feared that seven weeks of frost had killed between 60 and 70 per cent of the local oysters in their beds.

February 7: Only two roads were open between England and Scotland, and in Edinburgh the snow was said to be “so thick in places that people are walking about on the hedges.” At Belfast's airport staff were marooned for the night and helicopters flew food supplies to isolated villages in County Londonderry. Devon River Board's chief engineer, in a broadcast, said he expected rivers in the county to burst their banks within 24 hours. Police dynamited ice on the Exe to prevent flooding and children were evacuated from a school at Crediton. At East Grinstead, in Sussex, foxes began to hunt in pairs in the town centre and cat-owners were advised to keep their pets indoors. Another winter death was reported.

February 8: There was a general thaw except in Scotland, North-east England, and North Devon, where a sudden reversion prevented the expected flooding of rivers. Five villages in the Border counties were still cut off and 108 main roads in Britain remained blocked. More helicopter flights took place in Northern Ireland, where farmers prepared to slaughter 1,500 pigs because they had run out of feeding stuffs. There was another death.

Eighth week

February 10: The thaw ended and there was more snow across Southern England, Wales, the Pennines, and Northumberland. The G.P.O. announced that the demand for weather information this winter was three times greater than usual. In Manchester 28,000 people had dialled ASK in January, compared with 8,300 twelve months ago.

February 11: The Air Ministry decided that the cold spell would not end “for quite a long time to come,” while troops with bulldozers struggled through snowdrifts to relieve five farms in West Carmarthenshire. The Scottish Football League Management Committee, anxious that 1963 should remain a unique experience, proposed that in future the close season should extend from December 7 until the first Saturday in March.

February 13: The Meteorological Office prophesied that temperatures would shortly rise in all parts of Britain, and



Whitstable Harbour frozen up, with pack ice for a quarter of a mile out to sea January 14.

Devon's flood-emergency plan was again brought out of cold storage. In the North-west stocks of house coal were "almost exhausted."

February 14: Devon got its floods at last, and so did other parts of the West Country. There was 4ft. of water on the Crediton-Okehampton road, 3ft. between Exeter and Bridgewater, and the same depth on roads between Taunton, Langport, and Wantage. The Army sent eight D.U.K.W.s to Taunton, where cars and lorries were stranded in the flood water. On the Scottish Border, however, snow conditions were "fearful," according to the R.A.C., workers at Fylingdales were again marooned, there was more snow in Derbyshire, and a full blizzard in Hampshire.

February 15: Once again the thaw cut out, which at least relieved the threat of disastrous flooding in the West Country—though hundreds of acres in North Dorset and East Somerset were by now under water. There was more snow from Kent to Scotland. Roads were again blocked across the Pennines, over Shap, in Mid-Wales, North Yorkshire, and Scotland. Conditions were the worst of the winter between Perth and Inverness, where vehicles were buried beneath 15ft. drifts. Water rationing began in Aberystwyth, an emergency it shared with Carmarthen. For the first time since 1947 the Derbyshire Moorland Grazing Committee started an emergency feeding programme for 3,000 starving sheep on the fells.

Ninth week

February 17: In the South and West hopes rose on a day of brilliant sunshine and all main roads were open across Dartmoor for the first time since Christmas. Things, in fact, looked like getting back to normal everywhere except on the Border and in South and East Scotland, where many roads were still blocked. After a snowplough had given up trying to get across Stainmore, an A.A. patrolman leaned on his shovel and struck the roof of a car buried beneath his feet.

February 23: More than half the Football League games were played and for the first time since December 28 the pools functioned without the hypothetical results of the experts. It was sunny throughout the country and only in the South-east were temperatures as low as 1deg. C. In this area there was more snow in the early morning. It was to be the last of the official winter period.

Tenth week

March 1: After three days, disastrous heath fires on the Isle of Skye were brought under control. In the north of the island they had swept across a seven-mile front; in the south thirty square miles of grazing land were burned and many sheep on them. They had been caused by two things: Skye's lowest February rainfall for thirty years and frost which had shrivelled the grass.

March 2: Troops relieved a farm on Dartmoor which had been cut off by 20ft snow drifts for 66 days. With only fourteen Football League matches postponed, soccer had its best day for eleven weeks. There was still no football at Halifax, but the local club opened its ground as a public ice rink and hundreds skated on it.

Eleventh week

March 5-6: This was the first night free of frost everywhere in Great Britain since December 22. On March 6 London had its warmest (16deg. C.) day since October 25, and temperatures rose sharply throughout the country. This, together with heavy rain, caused flooding on roads in Southern Scotland and the North of England. In Kendal, which had its first rain for 74 days, the River Kent was transformed from an almost dry bed into a 10ft.-deep torrent within 24 hours. And at Shrewsbury the Severn rose more than 5ft. between midnight and breakfast time.

March 7: Two hundred families were evacuated from Morpeth, Northumberland, when the River Wansbeck burst its banks and poured down the main street. By nightfall all electricity and water supplies in the town were cut off. But by early morning on March 8 the waters, which had been 7ft. deep in places, were receding. Flood warnings were also issued at Worcester and at York.

Severe winters in Britain

January 14
RECENT correspondence in the "Guardian" has been of much interest to those who, in our highly diversified, populous, cottage-pie of an island, venture to tackle the long, long tale of our meteorological records.

The cumulative impressions given by the available measurements of snow, the reports of drifting, and the extent of blockage throughout the southern counties certainly give primacy to the snowstorm of January, 1881. But to Mr Gold's query about that 15ft. drift that the storm is said to have raised in Oxford Circus, this comes from a long-lost newspaper report, and hence was probably an estimate subject to possible exaggeration. Yet contemporary accounts emphasise the strength of the wind, the exceedingly fine snow, and the exceptional drifting.

Drifts are commonly estimated to their summit, and under the lee of a building of suitable height and orientation the side of a wall might well become plastered to something approaching that depth. Such a drift might be likely to slope outward for 40ft. or so from the wall, and no doubt would soon begin to settle. Much depends on wind direction and fetch; the wind was due east on the morning in question, and New Oxford Street is quite wide. Sowerby Wallis quoted a report of a drift 13ft. deep at Oxford, where there was rather more snow than in London; although Glaister at Blackheath estimated an average of 15in. compared with nine or so in Middlesex.

The possibilities in Oxford Circus gain some support from Mr Lionel Baker's account (in "Weather," 1958) of a drift 18ft. deep near Cobham station. Given a lengthy fetch of open fields, this last week in Cambridgeshire has shown that locally such accumulation can develop, although not generally representative.

This snowfall coming at the end of December has slightly preceded one of the notable peaks in the frequency of incidence. In London the greatest frequency of days with snow falling, over 145 years, comes about January 10. From Hartlepool, Mr Gill was quite right about the greater chance of snowfall around "Old Christmas" before the 11-day calendar change in 1752. Both in Edinburgh and in London the records for more than a century indicate that the frequency of snow has been upward of 30 per cent greater; and in London the chance that snow will fall appears to increase to about two in seven for the days in the second week of January.

Various correspondents have noted the snowstorms in particular years—March, 1947, in Bedfordshire as well as Furness; January, 1940, in the Chilterns; December, 1927, and February, 1900, around London; March, 1909, in the West Country. Each of these in individual localities may have been more striking; but the noteworthy fact this year has been the much more widespread depth and drifting, not only in the customary uplands fringing the South Coast but also in the Cotswolds and Central Wales.

Just as in 1881, Lancashire has been relatively favoured, and has a long way to go yet before it can match January, 1940. According to one eminent wartime meteorologist, his opposite number on duty at Squires Gate declared that he was unable to take his observations at all. Blackpool, after all, must be able to say that sometimes it can match Brighton for bad weather. It would be unfair if that sunny Bank Holiday last August on the Lancashire coast were not counterbalanced some day for the benefit of all those Northerners who have chosen to embower their families amid the suburban sprawl of Surrey.

Statistically we have been running short of cold Januaries, and a severe month is by no means out of place. So far, the winter has provided some very interesting features; notably that quite formidable anticyclone over Iceland. No doubt we shall soon hear of some exceedingly low temperatures under the clear, calm skies in the Eastern Highlands, although both they and the North of England will find it hard to match the sequence of below-zero temperatures that befell 1881. Even Blackpool went to minus one (Fahrenheit) in that January.

The historic Januaries of the past 300 years in England were those of 1684, 1716, 1740, 1795, 1814, 1838, 1881, and 1940. We have more than one daily record during the "Long Frost" of 1683-4, and from the primitive instrumental readings then kept it appears that the three months December-February put together make that winter the coldest of all, although individual months in other winters may have been colder.

A cold, cold January

February 1
SOUTH of Leicester and Shrewsbury and, perhaps more widely, over much of the Midlands it is probable that January, 1963, will rank as the coldest month, and certainly the coldest January, since 1814. At Cambridge it is likely to stand below any other since observations began in 1876. In our more Northern Counties, and certainly in Scotland, January, 1881, and February, 1895, will have been slightly colder; in Sutherland and Caithness a number of months have been decidedly colder.

So passes a remarkable month, and the impression from past seasons is that such cold Januaries tend to be followed more often than not by rather a chilly February. Really severe spells, however, appear very rarely to persist beyond five or six weeks without a notable interruption. But even if February is merely chilly, the cumulative result, after the distinctly cold December, will be to rank this winter well down the scale, quite probably below 1895 although above 1879.

Together with the cold Februaries of 1954, 1955, and 1956, the cold Scottish January of 1959, and the extremely cold March of 1962, the suspicion begins to grow that we may be working towards a group of rather cooler seasons than those to which we became accustomed before 1940.

The massive and lasting snowfall in Somerset and Devon, the ice-floes, the prolonged cold beginning about December 21, are all remarkably like that Stuart winter of 1684 when in

London the Thames was frozen for six weeks. When a thaw came on February 15, the ice broke on the Trent and the floes damaged the bridge at Nottingham.

The glorious day-time sunshine and the brilliance of the stars by night were a testimony to the unusually clear, dry air which, aided by the snow cover, did the mischief in quite respectable Canadian style. But on those days, when a layer of surface fog spread and gave a maximum of only 18deg. at Manchester and 19deg. at Cambridge, we can agree that we have gone quite close to the limits of which our lowland climate appears capable. In 150 years, there seems to be no report of a maximum below 18deg. at London.

Taking the mean temperature of the winter months that is representative of the Midlands, we can say that, in nearly three centuries, we can find about 33 months with a mean temperature below freezing-point: six Decembers, twenty Januaries, and seven Februaries. Only three times have two such months come in succession, namely in 1684, 1740, and 1879, although 1838 and 1895 almost brought it off. There have been only eight months with a mean temperature below 29deg. F., and it looks as if January, 1963, will be the ninth and may come close to 28deg.

Hardest winter since 1740

February 28

TAKING temperatures in the Midlands as representative, the months December-February have been the coldest since 1740. March, too, is likely to be colder than normal. We have long been accustomed to regard our Victorian grandfathers with a mixture of awe and annoyance. They were the men who wore boots: who told us tales of ice-yachting on Windermere in 1895, of that coach on the Oxfordshire Thames in 1891, of the historic blizzards of 1886 in the North-east and 1881 in the South-west, of the prolonged ordeal by cold from November, 1878, to May, 1879. They also founded the Meteorological Office to provide a satisfactory public record of these events so that we might pay heed in future.

Then came 45 years with only two severe winters: 1917 snowy and prolonged, 1929 short, sunny, and sharp. At length in 1940 they began again and it was Lancashire's turn to experience a snowfall probably unmatched since 1823. Lancashire weather has an individual eccentric quality very appropriate to that county of comedians, boggarts, and pure mathematicians. It does not always fit with what goes on elsewhere; this year the lowlands have been relatively free from snow and Manchester broke its record for January sunshine. And in Oswaldtwistle and those parts, who has yet forgotten that glorious snowfall on May 16, 1935? Last year's sunny Bank Holiday at Blackpool was almost unpardonable in the opinion of the rainswept South, where the legend of better weather is so strenuously upheld.

Compared with the South, Lancashire and the North-western lowlands generally, from Anglesey to Ayr, have of late been relatively favoured. This is because it has been one of

those winters with a high proportion of east winds reaching the southern counties by the short sea route. Tynemouth, in January, was considerably warmer than Plymouth; indeed, from an amateur record kept early last century it seems that to equal the January of 1963 for cold and snow in Devonshire we must go back to 1814. By the same token, average temperatures in Scotland have not departed anything like so far below normal as in the South. Aberdeen, this February, shows itself a shade warmer than Blackpool and but little below Plymouth.

Such a distribution owes much to the prevailing wind and the fact that throughout the South and Midlands snow came earlier and lay more deeply; and the strong cold east wind provided plenty of frozen ground before the snowfalls began on Boxing Day. Scotsmen noted similar differences in historic winters long ago, such as 1709 and 1891. South of Staffordshire and away from the East coast, January's average temperature fell below that of 1940, 1881, and 1838. We must go back to 1814 to beat it.

But farther north the winter of 1881 was colder. So far there has been no report of individual minimum temperatures surpassing those of 1881 and 1940 in January or 1895 in February. Reports of -8deg. F. and -10deg. F. on Speyside have come in: but in past winters Scotland has gone below -15deg., England down to -10deg. and -11deg. (Fahrenheit is used here because most people are more familiar with it.)

Quite evidently the cold last weekend will ensure that very many places will record both January and February below 32deg.: a very rare phenomenon in the lowlands. In consequence frost here and there has penetrated over two feet into the ground, as it did in 1895 near Liverpool, where there was little snow. Whatever may be said about individual extreme minima in unusual localities, the contribution of length with strength is best demonstrated by taking the mean temperature over the three months of "winter," December to February.

From long before the days of official records this island has provided its splendid quota of eccentric amateurs of every sort, not least those who contracted the habit of reading thermometers day by day. John Dalton stuck his head out of his bedroom window in Manchester with memorable regularity, while his equally punctual brother at Kendal satisfied his curiosity in the shade of what he called a large gooseberry tree.

Such records—and there are many—can be integrated to provide us with representative values of the monthly mean temperatures characteristic of the Midlands for more than 240 years. Only twice in all that time have there been two successive months below freezing point, December-January, 1878-79, and January-February, 1740. For the lowlands in Northern England, however, January-February in 1838 and 1895 can be added. February, 1895, was considerably colder than January that year, and this probably explains why in 1895 Windermere seems to have been more thoroughly frozen than in 1963. But in 1740 we learn that "heavy-laden carts and droves of cattle" crossed the frozen lake.

Temperatures for the Midlands are reasonably represen-

tative of the wide area, from Canterbury to Chester and from York to Exeter, where this wicked winter has been but little exercised; and if we use the mean for the three months December-February as an index of "winter" it is clear that it will rank, below 1879, 1814, and 1795, as the coldest since 1740.

A table giving all the winters that appear to have departed 4deg. F. or more below the 1931 to 1960 average follows: they average one every ten years, but are irregularly scattered. Before 1729 the departures must be regarded as estimates only. The winter of 1684 (the "long frost") is that of "Lorna Doone."

1681 -5	1740 -7.8	1823 -4.3	1891 -4.4
1684 -9	1766 -4.7	1830 -5.1	1895 -5.0
1695 -6	1780 -4.6	1838 -4.6	1917 -4.4
1697 -4	1784 -5.0	1841 -4.2	1929 -4.0
1698 -5	1785 -4.6	1845 -4.4	1940 -4.5
1709 -5	1795 -6.2	1847 -4.1	1947 -5.1
1716 -6	1814 -6.3	1879 -5.9	*1963 -7.0

*Approximately

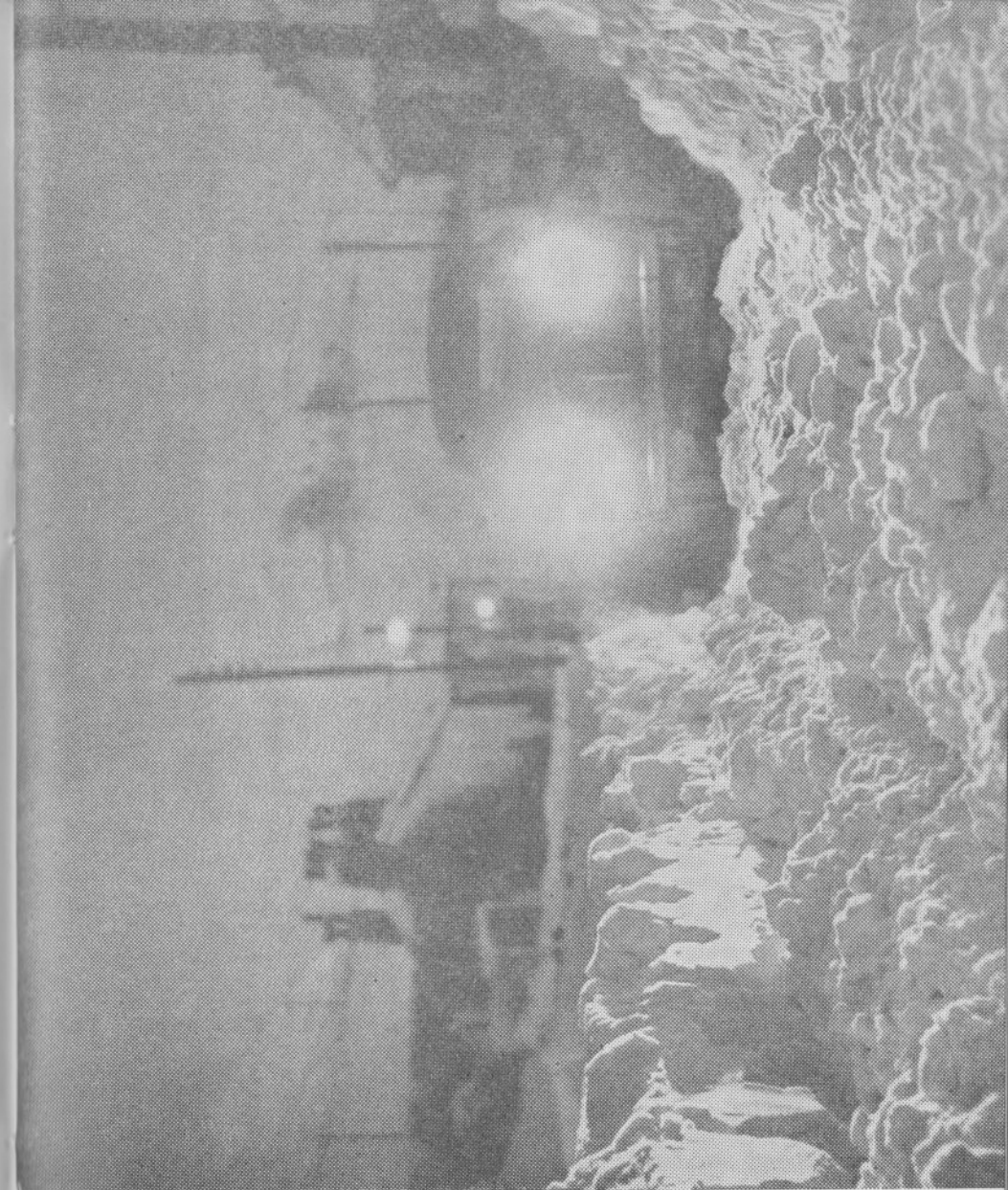
In London, where we have nearly three hundred years of data with regard to the frequency of snow falling, since early November Kew Observatory has already recorded 2.9 times its normal number of days of snowfall for the winter. In 1879 just over three times the normal number was observed; in 1695 approximately four times the normal. As March and April are yet to come, we may well break another record.

For snow cover, for which a strict criterion of observation must be upheld (drifts beneath a wall do not count), we have scarcely any reliable data before 1912. Hitherto it has appeared that in the lowlands a total of 50 days above the average is very rarely likely to be exceeded. But already many South Midlands places will be close to this total, and still there is March to come and plenty of cold ground for it to lie on. Nature has not yet used all her trumps, and might yet lead from a green suit to make the grand slam.

And why? The westward wrench that appears to have been imposed on the whole Northern Hemisphere pressure distribution will become the subject of research for a long time. Some will be tempted to blame warm water in the Pacific: but an ocean five thousand miles wide requires a lot of thermometers before we know all about it. Some will look at those very high "Polar-night westerlies" whose behaviour has recently begun to be watched: a displacement like that of 1947 has operated for a longer time.

But we can still safely say that 1740 and 1684 were more severe and more prolonged; that both 1784 and 1785 gave an appallingly cold March; that 1795 broke down with heavy rain and severe floods. We can rightly call this a great Georgian winter. Perhaps someone with a water-jug will provide us with Gilbert White's criterion of eighteenth-century severity: "Vessels frozen within the bedroom,"* and it looks like nearly seven chances out of eight that March will be appreciably colder than normal.

[*Somebody did!—Ed.]



A car stuck between 5ft. walls of snow on the A6033 near Hebden Bridge, Yorkshire. January 20.
Gerald Crowther

snow in Britain this week. Anyone likely to be exposed to these conditions for long should not only set out with dry clothing but should make sure it was of a particular type—oilskins, or other materials that prevented the free escape of sweat vapour, were out.

The ideal "wardrobe" was a string vest, loose-knitted woollens, and top garments made of a similar kind of material to that in anoraks. The legs should ideally first be covered by loose pyjamas, tucked into the socks, and women should wear trousers as well as men.

"Don't let anyone quote the case of the Eskimos and their blubber heat theories," Colonel Adam warned. Eskimos were not entirely fit, certainly not for real hard work, and the reason for their survival was their expertise with snow and the knowledge they had gained of its properties. "Blubber fat may be useful for swimmers but not for people trying to work in the cold."

Keeping moving, and exercising the fingers and toes, helped to fight off symptoms, and the greatest single danger to watch for was extreme pain in a finger, toe, or limb; if the sufferer suddenly found that the pain had gone away, while he was still exposed to the cold, he must be removed to shelter and warmth quickly. Inaction could lead to frostbite, total freezing, and death.

In the absence of doctors, sufferers should be taken into a warm room (hot-water bottles, in these circumstances, were dangerous because they might burn a numb skin), or given a bath in water at between 70 and 80 degrees Fahrenheit. If no shelter was handy, the affected parts should be covered with warm clothing and massaged.

Blizzards, he said, were especially hazardous, because it had been found, under what was now known as the "wind chill scale," that liability to frostbite increased under these conditions by precisely measurable factors.

For women, exposed legs can cause what the Scots call "grannie's tartan," a patchy discoloration caused by extreme cold. Thousands of women have it. But according to Colonel Adam, it means they have less chance of survival if they find themselves stuck for days in below-zero temperatures. In Arctic Britain, the knee-length products of fashion are best put away with bikinis. DENNIS JOHNSON.

Rural Rides 1963

1. In the West

IT helped that we were not unique. Every other car on the icy roads seemed loaded with prams and cots and children.

January 21.

We were the desperate ones, taking the road home at the whisper of better conditions, leaving our relatives and friends in the West Country, whose Christmas welcome had suffered such unfair strains. Most of us were several days over our rightful leave, a chunk already out of summer holidays. With young

children growing steadily more fractious, the days of waiting and worrying had not been easy.

There are worse places to be marooned than Torquay, but, while the corporation concentrated on its main roads, we on the lower alpine slopes were all but prisoners—how many clever people setting off for Christmas in Torquay had remembered to take their gum boots? Torquay hosts have a better line in gardening shoes than goloshes, and usually no skis or runners for prams. So it was that three days over my leave, with a Victor Estate car parked solemnly in the drive, and a wife and 17-month-old baby to get home to Hurstpierpoint, Sussex, I had to act.

Day One of the ensuing series produced the information from Exeter's AA office that the three main roads home—A35 via Dorchester, A30 via Yeovil, and A303 via Wincanton—were impassable east of Honiton. So I slid to Torre railway station, Torquay's freight depot, to see if the car could go by train. "Certainly sir. The car can go tomorrow, you and your family on Saturday." The total charge would be £11 18s.

Day Two (Friday) produced a snag. With Plymouth Argyle's match against West Bromwich Albion then the only Cup game in the south and I the only "Guardian" staff man within striking distance I volunteered to get there. This meant putting my car on the freight truck on Saturday instead of Friday. "That's all right," said Torre, "we'll keep the truck."

Day Three. I packed the car with cot, pram, and all but essentials for one night's stay, and delivered it, sliding downhill in reverse, to Torre.

"Sorry, sir," they said, "we had to let the truck go."

"Why?"

"Someone else wanted it." "But you told me you'd hang on to it."

"Well we've ordered another one . . . it's coming from Birmingham."

I gave up, and I also made up my mind. Tomorrow I would make a bolt for it by car. The road report was hopeful for the first time: bumpy, but passable on the A30 if I made the journey in two stages.

Day Four (Sunday). Torquay to Honiton was not bad—average speed: 20 m.p.h. with tyre ruts down to the road surface in most places. A fair amount of snow clearance had been done since the blizzard stopped, but over the border into Somerset, as the road climbed higher, we were in trouble. The ruts turned rogue, man-made in some stretches but following their own crazy pattern in others. Glistening lumps straddled them. We gradually learned the dodges, particularly to watch out for overhanging trees, for under them were the fiercest pot holes.

We stopped at an inn for a sandwich, and the baby was changed while the landlord's wife heated his food. We had done 68 miles in just over three hours. In Dorset the A30 had shrunk to a path 12 feet wide in places, and we had half an hour's wait because of one-way traffic. There were no temporary lights, and it was a bad spot.

Thirty cars were stuck in front, forty behind. How patient the drivers were. The baby was getting fretful and difficult, and we decided that we must find somewhere to stop soon.

Our convoy got going at last, and cars pointed the other way huddled miserably in icy laybys. Shaftesbury was ahead, and we determined to stop there, having done 26 miles in two hours. We found an hotel, and parked in a quadrangle.

Old coaching inns know how to greet their guests; from Alfred the Great's time they've heard many travellers' tales. Soon we were many, a Peugeot making for Totnes, an A55 for Bude, children everywhere. How is it your way? Dreadful to Salisbury. Hampshire OK; Hampshire's done a great job. Dorset gets a hammering, a little unfairly, for the road over this stretch goes as much through Somerset and Wiltshire.

Day Five (Monday). Salisbury was only 20 miles away, but it took all morning to get there. There was much heavy traffic on the roads, and we stuck five times because vans or lorries could not pass each other.

My wife was getting anxious. "Are we in Hampshire yet?" "Is this Hampshire?" Hampshire became the promised land. At one block she got out for a short stroll, and in the space of seven cars, three drivers offered her a lift! British reserve had melted, if not the snow.

At last we made Salisbury, and another motoring world began. Hampshire and Sussex had come to the rescue, with wide, clean-swept roads, and we covered the last 90 miles in 2 hours 40 minutes. Our homecoming could have been the last cruel straw. But one neighbour had cleared the drive; another, with whom we had left the key, had cleared an inch of soot from the rug in front of the sitting-room fire. JOHN SAMUEL.

2. In the North

January 21.

AN effort to reach Sheffield from Manchester—normally a pleasant 35-mile drive—succeeded this evening on the only road open, the A629 Huddersfield-Sheffield. In an earlier attempt a small new 10 h.p. car jibbed at a 1-in-11 hill on the A616 road.

Batteries of snowploughs, working round the clock, kept the A629 road open. In parts more than one foot of snow, drifting all the time in the high winds, had had to be moved to clear the road to half its normal width. Distance travelled: 83 miles. Time taken: six hours.

3 00 p.m.: Leave Manchester. Snow on the roads in the city well pounded and probably salted but some tricky ruts beneath the muck. A little light snowfall on the way north out of Manchester.

3 30. Littleborough, Lancashire. In Rochdale—an apparently deserted town—the snow has held its own against the vehicles and has not been mauled into slush. Vicious winds spume groping tendrils across the roads, catching unwary motorists by surprise and, combined with the slippery surface, causing at least one dangerous wobble. Hove to under an advertisement that never seemed more sensible: "Next time, go by train."

4 00. Hebden Bridge. Todmorden local authority has snowplough and gritting lorry in that town, apparently for the first time today. They are doing an effective job. A mighty Lancashire County Council sander out in this area, too. Traffic

quite heavy. First motor-cycle (of three) seen wobbling away. Road (A646) well cleared of a four-inch fall of snow last night; 30 m.p.h. not unsafe. Sky benevolently threatening, with a pink glow in its sombre cheek.

4 30. Halifax. Road into city maintains excellent standard. Road out to Huddersfield blotted out by driven snow, which makes driving like flying along the top of a cumulo-stratus cloud. One snowplough out, but road still covered with level, relatively safe snow. What a luxuriously quiet ride this gives. Wind rising. Lights on. Freezing hard. (Bring hand in quickly.)

5 00. New Mill (A616). Silent ride on frozen snow—the sort of road and scenery that ought to be leading to two weeks' skiing in Austria. No obvious attempts at clearing snow here. South-facing hills affected worst. Traffic at 1912 levels, so correcting swings and skids is an easy and leisurely business. Soon after this point the road climbed. Evidence of hard work by snowploughs increased, the drifts on each side of the narrow carriageway grew 6ft. high and looked very mean and unholiday-ish. Struggling through the snow, which gale-force winds whipped into impassable drifts as fast as snowploughs and mechanical shovel attacked them, I reached the hamlet of Victoria, 16 miles north of Sheffield, where Mr J. Quarmby, licensee of the Victoria Inn (serving a population of 20), said nothing but a tracked vehicle had been through all day. One car had tried to reach Huddersfield but, Mr. Quarmby said, even with everyone in the place helping, "it was a waste of good time and effort."

6 30. Talk about the terrible state of things. Walk back to car—talk to driver of mechanical shovel and decide to withdraw to New Mill, where can try the A629 road.

7 30. En route for Sheffield. Only occasional doubts about ultimate success.

9 00. Journey accomplished with the help of shovel and a scuttle full of coke (for putting under the wheels and—if this proved ineffective—writing HELP with in the snow).

JOHN O'CALLAGHAN

3. In the South-east

January 21

A SEMICIRCULAR drive from South London to Brighton and back (119 miles: 5hr. 35min.) proceeded without let or hindrance from the weather. Roads were for the most part clear, and though some were clearer than others none was hopeless and few were even unpleasantly treacherous.

2 30 p.m.: Backed out of garage into Pond Road, Blackheath, where skidded badly and required push to get under way—one and only humiliation of entire trip. Road south from Blackheath clear. Snowplough spotted and first casualty—little black car at roadside with AA van in attendance. Roads into and out of Bromley slushy and slightly skiddy. Main hazard: rain freezing on windscreen: like driving under water.

3 30 Sevenoaks. Accident black spot on A21 clear, apart from inevitable ribbon of slush along centre of road. Spot second snowplough, two more casualties; can't imagine what causes

- mishaps. Kent Weald like Christmas card. Slush on wind-screen: like driving through dripping.
- 4 10 Tunbridge Wells. Town virtually deserted, as were Seven-oaks and Tonbridge. Proceed on A26, direction Brighton, Crowborough to Uckfield, Sussex, worst stretch so far. This road never saw snowplough. Patches of frozen snow.
 - 4 40 Uckfield, and all well. Road good again. Minimum of traffic. Wonder how colleague in North is progressing? From Uckfield to Lewes at 40 m.p.h. Wave at police car. Wave not returned.
 - 5 00 Lewes. Street lights on. Fine fast drive to Brighton.
 - 5 25 Brighton. See the sea, buy provisions. Town a hive of inactivity. Take unintentional right on leaving and return to Lewes. Left turn at Lewes. Rural road to East Grinstead. Slight sleet falling. Slush on roads. (Sussex snowploughs less effective than Kent?) Headlights illuminate signs "BLUEBELL RAILWAY" and "STRAY ANIMALS." Stop to wipe slush of windscreen. A22 through East Grinstead to London: roads clearer in Surrey, traffic heavier. Spot London Transport bus.
 - 7 25 Purley. Simple stuff from here on. Slush round traffic island but road free. Croydon, Streatham, Forest Hill, Catford, Blackheath.
 - 8 05 Pond Road, Blackheath. Negotiate turning off road into garage by combination of luck and faith. MICHAEL KENYON.

The meals get through

January 24

"WE have got the meals out practically everywhere in terrible conditions. Everybody has helped—we've press-ganged the army, the marines and our husbands. As if the farmers hadn't enough on their hands we've asked to borrow tractors and Land-Rovers. The schoolchildren have been splendid, especially where we had to use sleighs. I don't know of anybody who didn't get the dinner they were waiting for."

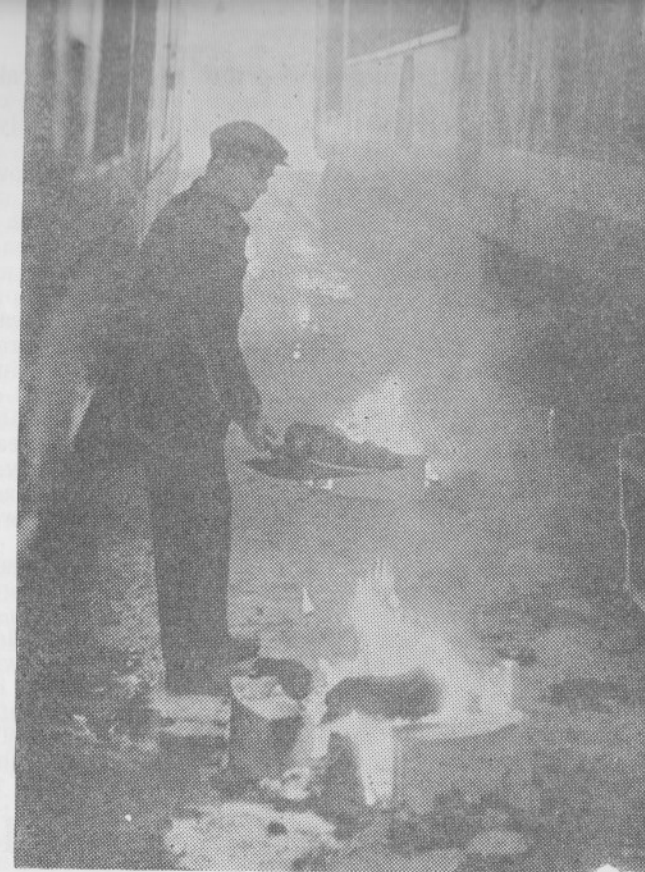
The WVS organiser was almost surprised at being asked if the hard weather had interfered with the meals-on-wheels service for the house-bound elderly. There was no question of default.

It has not only been in country districts that recent weeks have brought transport hazards. In Stepney, for instance, a much praised old people's welfare committee has been sending out about 200 hot dinners a day. The workers found the fog even more hazardous than the snow and ice—the riverside area gets more fog than elsewhere. Stepney is one of the few places where people are brought a meal five times a week, in contrast to several services which can only visit two or three times a week.

One of the unsolved questions, left to local discretion, is whether to concentrate on a smaller number of people and give them a hot meal each weekday or to spread the same total number of meals over a larger number of people. Stepney believes firmly in the former policy. It has two vans daily for ordinary meals and two for kosher.

In yesterday's cold the door was on the latch at the little house falling down behind Spitalfields. The woman downstairs

Deep Freeze precautions. Fires burning alongside a diesel engine in an attempt to keep things moving on the railways. January 25.
Graham Finlayson



leaves it so when she goes out to work so that the "dinner lady" can get in to Mr Elder upstairs, who is over 80 and never goes out. The wind whistled up the dark stairs (isn't there some law about landlords having to put lights on stairs?); the smell of cats and everything else was solid as a curtain blowing against one's face.

Mr Elder sat by the little fire, collar up, cap on, four cats round his feet. He was lucky he said, thinking about all those people with electric troubles. "Now I can't afford the electric, so I'm all right. Tried it once. Cost a shilling a day. I can't afford a shilling a day." He put the dinner carefully in the oven of the old range and turned up the gas jet a flicker to honour his visitors. He got fish and chips and rice pudding, for which the charge is 1s. 1d. a day, but discretion is allowed. The meal costs about 2s. 3d. without transport.

He is a very gentle, frail, old man, once a cabinet-maker of skill. He explained that it was too cold to send the cats out for any purpose and they stayed, purring undisturbed and greatly loved. Mr Thomas is very different. He was waiting yesterday in his room on the fourth floor of an ugly tenement with icy, open landings. He is an old soldier,

but the room looked tidy as a sailor's cabin. He could hardly breathe for bronchitis and was crouched over a pitiful smoking fire, huddled in a dressing-gown. His only visitor is the worker with the dinner.

Here was a proud old man, pulled down by sickness, almost to tears as he told about the coal. It was giving no heat at all. We raked through the old box which was the store—it was all slaty, useless. "Eleven and eight I had to pay for that hundredweight. Eleven and eight and it's no good. I remember when I got 2d. change out of 2s. 6d. for a hundredweight of coal. Now 11s. 8d., and I can't get warm."

Keeping warm was the common problem everywhere we went. They all took the dinner with careful thanks and then told you about the coal. The problem is part of a changing pattern. These people have never ordered coal—they wait till they hear a coalman shouting in the street and lean out to him. If he doesn't come, as has happened recently, there is a complete breakdown. Mrs. Smith, for instance, has a little card, shakily printed, "Coalman, please call here," which she puts in her imperceptible fourth floor window.

The coal has more to do with the meals on wheels than may be obvious. The value of this work is not measured in the calories delivered every day. The helpers observe as they serve. They must not let themselves be long delayed, for each one has about 40 dinners to deliver. But they will get a message to a coal merchant. They will even go back in the afternoon when they should be off duty with a sack of coal in the back of a car and carry it upstairs themselves. They will post a letter, phone a doctor. Sometimes they are the first to come upon the final, lonely passing. LENA JEGER.

Season of unemployment

January 25.

IS this to be another 1947? The January unemployment figures are much worse than anyone—even the Government—can have expected; but unless this cold spell ends soon there may be even worse to come. Frost and snow have forced a halt to most outdoor building and road work—two thirds of the rise in unemployment in the past month has been in the construction industry alone. But elsewhere in industry the full effects of fuel shortages and the delays to transport have probably still to be felt. The danger point will come if stocks are exhausted before the lines can be cleared sufficiently to bring in enough new supplies.

The bad weather has come at a time when unemployment was already high. That it is responsible for a large part of the recent rise in numbers out of work is evident from the way in which fresh unemployment is spread more or less evenly in all parts of the country. But one can go too far in making out the weather to be the sole scapegoat. The comparison with 1947 is in most respects a wildly misleading one. The economy then had barely begun to recover from the war, there was a real scarcity of all types of fuel, and stocks were virtually non-existent; a crisis would have been likely even without the misfortune of the prolonged cold spell. Now there is spare capacity

in almost all parts of the economy and there is no genuine shortage of fuel apart from the difficulty of transporting it.

Even when every allowance is made for the effects of the weather and other seasonal factors affecting employment, it seems clear that the rundown in the economy has continued during January. For this the Government must bear the blame. Ministers can hardly be expected to have foreseen such a cold spell as we have in fact suffered in recent weeks (though as a nation we are shortsighted in our lack of provision for extremes of weather). But the likelihood of increasing slackness in the economy was apparent to most outside observers long before the Government began to act. Mr Maudling must by now be bitterly regretting that he allowed himself to be intimidated by the advice of the Treasury last autumn, with the result that his expansionary moves came too late to combat the rising trend of winter unemployment. The weather has simply added to what was already a grave miscalculation of economic policy.

What action can be taken now to undo part of the damage? It may be that still further measures to bring about a general expansion in economic activity will be needed (the more especially if the Common Market negotiations finally prove to have failed). But nothing the Chancellor may attempt in the way of manipulating total demand can do much to ease the immediate effects of widespread unemployment. Ironically, the weather is adding to the delay in setting in motion new public works—roads, housing, schools, and so on—in the areas where improving public amenities seems the best remedy for persistent unemployment. This, however, is all the more reason why the Government should now be thinking of all means whereby it can help to bring short-term relief.

Why not, for a start, ask Parliament to push through without delay a short Act authorising payment of the increased unemployment benefits from the first week in February? The Government has itself just demonstrated that there is no valid administrative reason why a change in unemployment pay must wait for the adjustment of all other social benefits. Since jobs are better than benefits, it should look closely at all suggestions—however unorthodox—for putting men to work quickly. (Sir Mark Hodgson made the excellent proposal yesterday that a start could be made on clearing away the unsightly pit heaps and derelict industrial sites that disfigure large parts of the North of England.) Lastly, could the schools not be asked to take back all those pre-Christmas school-leavers who have still not found jobs? To lay on proper teaching might not be easy; but better that they should be in classrooms than waiting idly at home or on the street corners. LEADING ARTICLE.

Chaos on the railways

January 25.

THE railway system was in chaos yesterday after the intense cold of Wednesday night and yesterday morning. A British Railways London Midland Region spokesman said last night: "It has been very bad and the outlook for tomorrow is not very hopeful." The mechanism and fuel of diesel stock

was frozen, carriages were immovable, points and water-troughs iced up.

Widespread cancellations and delays are expected again today after a day in which trains to London from Manchester were up to four hours late and trains from London ran up to eight hours late. "A long chapter of accidents," a BR spokesman said.

A serious shortage of locomotives and carriages developed at terminal stations and no overnight trains leaving London last night had sleeping cars. Many long-distance expresses were cancelled or combined last night and the pattern is expected to be repeated today. Main line train services between Wolverhampton, Birmingham, and London have been drastically reduced until weather conditions improve. Today five express services in each direction between Wolverhampton and Paddington via Birmingham are cancelled. Long-distance trains into Birmingham were up to five or six hours late yesterday and suburban trains delayed by anything up to thirty minutes. Nearly a hundred extra coal trains will be brought into action at the weekend in the West Midlands to accelerate coal supplies.

The London Midland Region announced yesterday that the express service was being "severely curtailed" in the region because of adverse weather conditions and the urgent need to maintain public utility and other essential supplies. Intending long-distance travellers were advised to make inquiries before travelling. On the Southern Region electric supply reductions made nonsense of timetables. Station staffs worked in candle-light in some areas and at Cannon Street engineers worked the points by hand after the power had failed. Western Region reported more cuts in suburban services, including the busy diesel service between Paddington and Reading.

British Railways yesterday issued a "log" of the journey by Wednesday night's Mancunian express, which arrived in Manchester at 4 52 a.m., seven hours late. Here is the log, with explanatory notes:

7 2 p.m. Leave Euston 48 minutes late (train had to wait for an available engine); further 20 minutes' delay while train was steam heated; 58 minutes lost between Watford and Bletchley because train had got behind the Birmingham train.

9 5 p.m. app. Arrive Bletchley; 90 minutes' wait in station while engine was detached and went to sheds for water and coal. (Coal was frozen in tender and all water in troughs and columns along the line frozen); 37 minutes' delay at Rugby to take on coal and water; 5 minutes' delay at Nuneaton because of signals failure; 23 minutes' delay at Rugeley because another train was ahead taking on water; 4 minutes lost between Milford and Stafford while train ahead took on water.

1 45 a.m. app. Arrive Stafford; 64 minutes' delay for coal and water: 6 minutes lost between Stafford and Crewe because of engineering works.

2 55 a.m. app. Arrive Crewe; 52 minutes' delay while steam engine, which now broke down, was replaced by an electric locomotive; 4 minutes lost between Crewe and Manchester for a special stop at Stockport to let passengers off.

4 52 a.m. Arrive Manchester (British Railways apportioned nine minutes of total delay to "weather," type and effect unspecified). PETER ECKERSLEY and ARTHUR HOPCRAFT.

A month in isolation

January 28.

FOR a month an impassable hill and three miles of ice-packed road have cut us off from the relatively open road which leads, four miles farther on, to town. With Christmas guests still with us (their stay was scheduled for five days), it has been curiously dramatic, as if one were living one of those Agatha Christie mysteries which begin by isolating a group of characters in a country house.

It was cold in the towns, we knew, and sleety in the cities, but here in the country we were—and are—living in a silent, all-white world. The fields are white with snow, the river is white with ice, the trees are white with frost. The sheep strung out along a line of fodder on the opposite bank are merely a white which somebody's mother has not washed in —, whereas the swans, gliding in the ever-narrowing channel of open water, have managed to add brightness to their whiteness.

We normally only have buses to town on two days a week and those haven't reached us at all since the first fall; all our links with the outside world hang on the thread of the kindness of the folk who live at the farm on top of the hill. Groceries, bread, and the meat are left there and hauled the rest of the way by sledge. The cars of those of our small-valley community who had to get to town were helped up there by tractor and stay snug beside the hay in the lee of the dutch barn. On the day ours refused to start, a neighbour spent a precious morning of his winter leave struggling with us in the biting wind, swinging and choking and cleaning plugs and trying, and trying, and trying again.

School holidays were extended for a week and even now half the children can't get to the nearest spot the school buses can reach.

The most intrepid member of our community meets the postwoman each morning at the farm to save her the agony of trudging down and back up again, when there are so many more icy miles for her to go, rags wrapped round her Wellingtons to give her some sort of a grip.

This neighbour then has to start water-carrying, for the pump of her well froze early and she has been washing in melted snow ever since, bringing drinking water in cans from those of us "on the mains."

Perhaps the greatest irony was that the new house with oil-fired central heating, waiting for their tank to be nearly empty so they could have a full load delivered, ran out when the first flakes fell.

Of course, the dustbins haven't been emptied, but that is not nearly the tragedy it would be in town; we have always burnt everything combustible; vegetable waste goes on to the compost heap, ashes have been sprinkled on the drive in the hope of giving it a better gripping surface, leaving only tins and bottles.

And living away from shops, we are trained in a way for siege conditions. There is the sack of potatoes in the cellar, a hundred or more jars of jam and fruit in the larder, even

don't know of a case where no effort has been made, given the chance," says Mr Osborne. "It's all very well to say that heavy snow should have been cleared immediately, before the ice formed, but after two feet fell at Fulham it froze overnight. There was never any chance of clearing it before it froze again. Here we have no protection. The wind sweeps in from the river. Tottenham are better off: they have high stands all round the ground. Brighton and Portsmouth have the salt from the sea air to help keep the frost out. Other matches have been played that had no right to go on."

Even a thaw will not see football entirely out of the wood, and any further extension to the season will only aggravate the problem. Mr J. R. Escritt, assistant director of the Sports Turf Research Institute, points out that pitches normally are half bare by the end of April and in immediate need of reseeding if they are to be made playable again by mid-August. Two and a half months is considered the minimum period for the grass to grow strongly again, and a hot, dry summer would seriously aggravate things. The answer, according to Fulham, may be to sow before the season ends and risk a good deal being kicked up. JOHN SAMUEL.

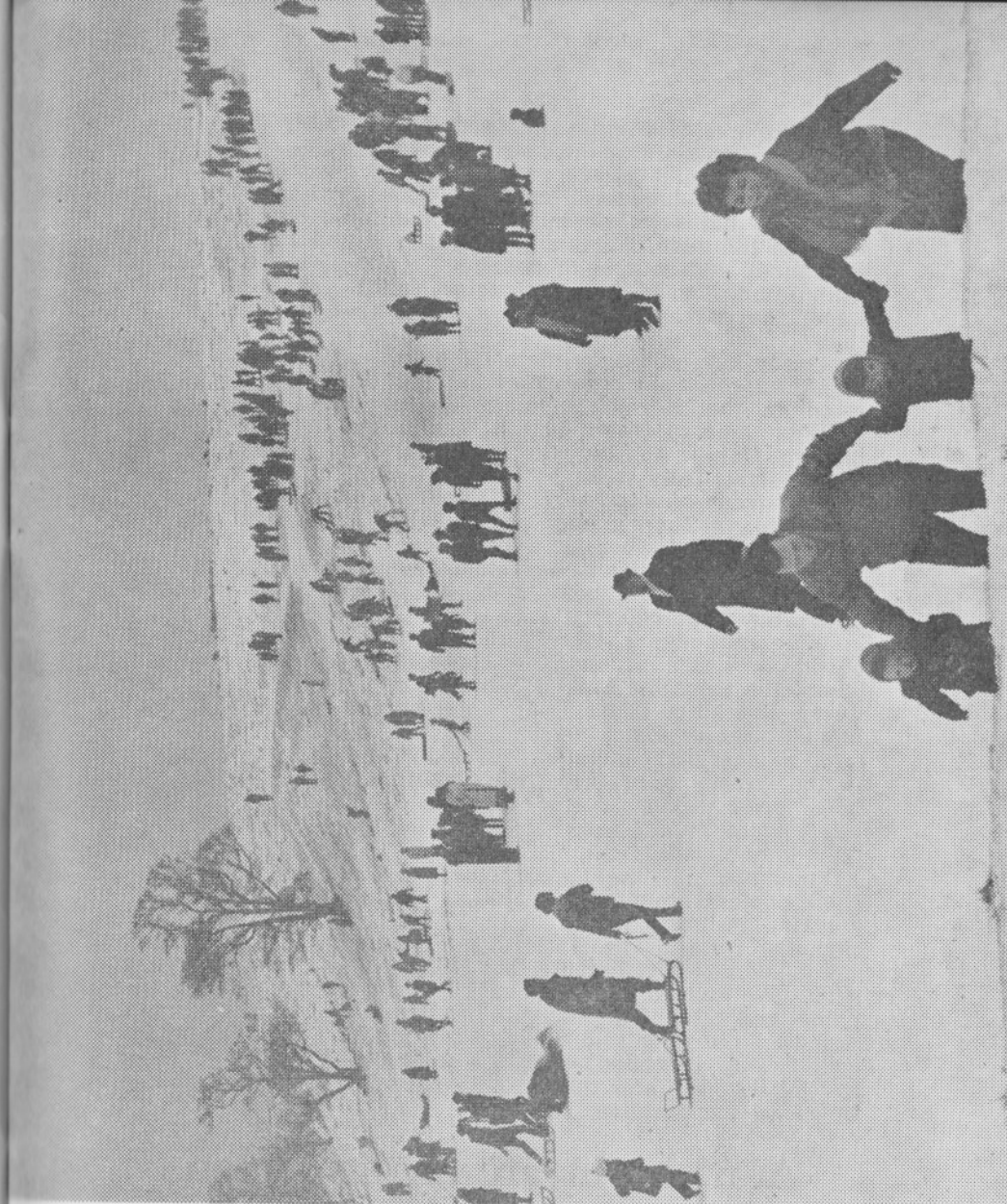
When the washing had to stop

February 13.

THERE was a gurgling noise at four o'clock in the afternoon. "Water," someone shouted, and with the excitement and longing of desert travellers sighting an oasis, there was a rush upstairs to the bathroom. The bath tap spluttered and gasped, then out it came—a rush of rust-coloured water. We tried the lavatory. For three weeks and a day there had been nothing but an angry, empty, rattling as the chain was pulled by habit, but now it flushed with a swishing, heady enthusiasm.

The temperature had been above freezing-point for two days before the day the water stopped. This in itself had seemed ample proof that if the pipes had not frozen during the weeks of heavy frost they could not have frozen during a thaw. And so began the dialogue with the Water Board—a dialogue to be continued day by day for three, long, waterless weeks. It could only be carried on against almost insuperable difficulties, for the emergency telephone number for our particular district was, day after day, night after night, engaged nine times out of ten. What, one wondered, would one do if the main had burst in the street outside the house?

The man at the other end of the telephone was always patient, polite, and painstaking, but as the days wore on his voice became hoarser and his manner more pitying. "I am really terribly sorry to worry you again; you must be awfully busy and tired," I would begin, in the hope that the voice would not cease to treat me as a rather spoiled and silly child and explode into unrestrained fury. "They can't be frozen, because it stopped after the thaw," I'd bleat in those early days and gently suggest that perhaps the men who had mended the main had done something to our connecting pipe. Nor, I would add, could I understand why our house alone should be waterless when those on either side had enough



After Breughel. Sledgers on the slopes of Lyme Park, Cheshire. February 3.
Tom Stuttard

and to spare. The voice admitted it was rather odd. Could we prove the pipes in the house were not frozen, he asked.

A diversionary attack on all the local plumbers—which is another story—produced one after some days who gave an assurance that there was no water coming into the house. “It must be the pipe between your stop-cock and the main,” he announced with a note of relief. “You’ll have to get on to the Water Board.” An inspector called. “You’re frozen under the pavement,” he said, “you’ll have to wait for the thaw.”

Many days and even more telephone calls later there was a loud knock on the door in the early morning. Two workmen stood in the morning cold. “You frozen?” they asked. “We’ve come to thaw you out.” It was a day of hope and activity. They dug up the pavement before three houses in the street. By dark they were standing shivering by the hole in front of our house. “We haven’t got a blow-lamp,” they said. “There’s only one between two gangs and the others pinched it when we were at tea.” By nightfall the hole was filled in and the paving stones replaced. There was no water. “We did our best,” they said. “You must be frozen under the front doorstep.”

The next day a lorry with a generator on board stood outside a house around the corner. “We’ll unfreeze you later,” the inspector said. “What’s your number?” He produced a scrap of paper. “It is not on our list. You haven’t any children or a sick person,” he said accusingly.

The next night there was the sound of a generator running in the street. Four men, including those who had dug our hole, stood looking at an enormous hole from which water was gushing out. I asked if I could have the generator when they were finished with it. “It’s not a generator, mate, it’s a compressor.” They were clearly unhappy men. “They stuck a pick through the main,” a woman in the dairy said.

Had we put a heater in the cellar under the front doorstep, the voice at the Water Board asked one day. We had, but it had gone out because they had run out of paraffin in the shop. We queued at other shops and heated the cellar again. “The generator will be with you tomorrow and that’s a promise,” the voice said a day or two later. A weekend in the country was cancelled so that someone could open the door and let the generator man in. He never came. The next day we heard the gurgling. MICHAEL WALL.

A night in an English igloo

February 15

TO be frank, said Mr Tony Jennett, it was not a very well made igloo; not by Eskimo standards, as set out in the reference books, anyway. But he thought it was not bad for a first effort, considering the quality of suburban snow, and it was all right for the odd night’s stay.

Mr Jennett and three boys from the Ernest Bailey Grammar School, Matlock, where he is a physical training teacher, had knocked it up—quarried, cut and put together

were the terms Mr Jennett used—in about two hours; so the chinks between the snow blocks were surprisingly few under the circumstances. Since the igloo is roughly circular and the blocks of snow, for reasons of rapid preparation, are necessarily cubes, there is a problem of joining corners.

Preparing for an Arctic expedition naturally has its rigours, and a night in the igloo was one of them. Mr. Jennett is one of the four men who are to sail a catamaran from the Thames, north of the Arctic Circle to East Greenland under the leadership of Dr. David Lewis. A number of Greenland’s icy mountains are also to be assailed, and Mr. Jennett, who is in charge of the mountaineering side of the expedition, wants to be ready for every contingency.

The team is paring its equipment to the limit and Mr. Jennett proposes to erect igloos on the overland sections, rather than carry tents. A night in his igloo on the edge of Matlock Moor, about fifteen minutes’ walk from his home in Bent Lane, proved “very comfortable, really.” There was complete protection from the wind and he was quite warm in his down sleeping bag.

It was useful to know, he said, whether an igloo would withstand a thaw, since the expedition might want to use the same “lodgings” on the way back. Yesterday, after a week, the igloo had a couple of internal icicles, but there was remarkably little crumbling. Matlock Moor had made a good job of simulating East Greenland.

The only materials required for making an igloo are a common or garden English trowel and plenty of hard snow, preferably of the frosted variety which adheres hoarily to wool. Not that this adhesion is of any use; it is simply an aid to identification. The trowel chops up hard snow very efficiently. Blocks of 24 inches-by-twelve-by-nine are a handy size. Mrs. Jennett is enthusiastic about her husband’s expedition, but has not spent a night in the igloo with him because she felt her place was at home with the youngster.

Mr. Jennett has also spent a night on Matlock Moor in a snow cave cut into a big drift, wearing a quilted survival suit and with his feet in a rucksack. There comes a point, however, even with the utterly committed enthusiast, when he sees himself as the world might see him. Yesterday, quilted inside his igloo half a mile from the french windows of his semi-detached, he suffered just such a moment. “Bloomin’ Nanook,” he said, “wearing a tie.” ARTHUR HOPCRAFT.

Birds die of cold

February 16.

BRITAIN’S wild birds, both native and migrant, have died in what may well be unprecedented numbers this winter. A survey of the regional offices of the Nature Conservancy yesterday produced much the same report from every part of England and Wales.

In the words of the South-western regional officer, the long cold spell has been “calamitous for some species.” Waders have been badly affected, particularly redshanks, but there have

also been heavy losses among the curlew and snipe. Where river mud has frozen the surface feeders such as teal and widgeon have died of starvation. In South Wales a man collected 120 dead coot on a reservoir. Their stomachs were full and it must be assumed that they simply died of cold.

Songbirds, such as thrushes and blackbirds, have suffered very heavily. A field worker in Hampshire counted, in a small area, 262 dead birds belonging to 45 species. In South Wales very large numbers of skylarks and woodcock have perished. In East Anglia the birds of the shore have had to face the added hazard of oil, which is at the moment affecting the whole Suffolk coast. On the South Coast a Lyme Regis newspaper published a picture of muscovy duck in another sort of plight—long icicles had formed on their tail feathers making them look like rather ungainly lyre birds.

On the marshes of the Thames estuary, teal, shoveller duck, and mallard have dropped to about a tenth of the numbers normally to be found there at this time of the year. These tend to feed in ditches which have been frozen for weeks. Shelduck, on the other hand, which feed on the tidal mud, frost-free in that area, are present in greater numbers than usual, though many of the birds are virtually without flesh.

The search for food has driven migrant birds to visit new places. Playing fields at Swansea have been dotted with white-fronted geese and redwings have invaded the gardens of Ealing.

Ringed birds are providing evidence that conditions in Scandinavia, Finland, and Russia have been severe enough to cause a secondary migration. Mr Robert Spencer, ringing officer to the British Trust for Ornithology, to whose office in the Natural History Museum rings addressed to the British Museum are passed, said that between 50 and 60 rings are reaching him every week, compared to the usual 20 or 30.

For a wild bird to come near human habitation—near enough to be caught and the ring examined—denotes desperate hunger. Mr Spencer had had a charming report from a lady in Northern Ireland, who had found a ringed blackbird frozen to the ground. Food and warmth revived the bird and she freed it, only to find that it returned again and again to her windowsill.

Animals generally do not seem to have done too badly. Apart from hares being found dead in East Anglia, mortality does not seem to have been abnormal, although there are signs in various places of hare and rabbit having to turn to furze and bark for food. Foxes have been spurred to feats of boldness here and there but generally the weakened birds have been easy enough prey for them and the carrion eaters such as crows and ravens. An official at Wareham reported a battle between a fox and a badger over food—a combat so unusual that it must be attributed to extreme hunger.

A strange side effect of the hard winter has been observed in the deaths of fish. Congers have been found above the tide-mark near Swansea and at Poole. At Poole, there was the spectacle of millions of dead ragworms floating out on the ebb tide and festooning the chains of the ferry. Razor shells, cockles, and other molluscs have all had their casualties.

IAN LOW.

COUNTRY DIARIES

Somerset, January 20.

JANUARY, 1963, will long be remembered by everyone, but none more than the farming community struggling daily to keep their stock alive. The frozen streams may look beautiful, but ice must be continually broken for animals to drink. Even the chickens' bowl is solid with icicles gleaming in the sun. Only our dogs are in a carefree mood, bounding in the snow to show their joy, knowing full well the comforts of a warm hearth await them in the evening. On Dartmoor, which I visited a few days ago, conditions are terrible. A white world with the famous Haytor rocks standing out from the vast, bleak expanse of snow. The wild grandeur of Dartmoor in its most forbidding, frightening mood, where one feels the insignificance of man as one does on a high mountain. Haytor commands a view north, south, east and west and away to scores of other Tors, and below to the wooded combs leading to the sea. Today they too are white, adding to the remoteness. Never before have I seen it in such a cruel mood; even the road has vanished where snow has blown across in drifts. It is always a strange moor, where the sun can beat down mercilessly on these shadeless wastes, or the wind penetrate your body through and through, or where on a rainy day the white mist suddenly comes and obliterates all landmarks, when the danger of falling into a mire is very real but outweighed by the fear of being lost. G. A. F.

Somerset, February 3.

ON December 30 I started writing about snow! Now it's February and there is still only the one topic as I look out over the white landscape at the fast falling snow coming in eddies against the window panes. We listen to the oft-repeated news saying the worst conditions are in the West Country, where farmers are once more isolated and helicopters are taking cattle fodder. But I wondered if the words "on the farms life goes on, snow or no snow" conveyed all it really means. The philosophical way the true farm worker takes it all in his day's work: full of cheer, cracking a joke and laughing over mishaps. "Us don't order the weather, we must take what comes!"

February—the Roman festival marked an annual time of clearing up in home, in business, and in the State. A month one thinks of when the world is waking up: the joy of white and green snowdrops, or, to give them their other names, of February Fair Maids or Candlemas Bells. Surely it cannot be long before we shall see their lovely slender stalks swaying in the orchard grass or find the Gallow Catkins, often called Goslings, because their soft texture and yellow-green colour are just like the newly hatched goose chicks. In February we think of and long for these first signs of spring; only the poor lambs are here to remind us this year. I have not even dared to order the chicks or goslings; how could they stay alive in weather such as this? G. A. F.

Westmorland, February 15

MORE snow is forecast for tonight—on top of a dozen falls in recent weeks—and once again the road men are out in the darkness, struggling against the blizzards to keep the high passes open. Up there in the biting cold it is often hard to tell whether it is snowing or not, for on most nights this winter the wind has come scourging out of the north-east, whipping the snow off the fells in a blinding fury and swirling it into the roads. So that as fast as one bit of road is cleared it is all blown over again, and the road men have been denied even the satisfaction of a job well done.

These are the real heroes of the storm—these and the road scouts—and the lorry-drivers, regretfully, are sometimes the villains. Their tradition, to get through at all costs, sounds noble enough, but too often the clumsy articulated vehicles prove unable to cope with the snow or ice, and the road may be blocked for hours to traffic which otherwise could have got through. Strict compliance with police notices would avoid this trouble, but some lorry-drivers are only prepared to stop when their wheels refuse to grip. How many more winters of traffic chaos on these fell roads we are to endure one cannot say, but there are confident rumours that next week the line of the new motorway will be announced. No doubt the projected highway will seek to avoid the worst perils of winter by taking a more sheltered route at an easier gradient, but no matter how they take it across the windswept fells there will be criticism, and it is difficult to see how the problem will ever be really satisfactorily tackled. Tunnelling could be the answer, but the cost would be fantastic. A. H. G.

CORRESPONDENCE

January 4

Sir,—I was amused and interested to read in yesterday's London Letter of your colleague who lives in Chelsea and his new friendships made because of the snow. If his area is anything like the one I live in, yesterday will in retrospect appear as a mad dream, and he will have lost all his new friends.

I have lived here for over two years and know absolutely no one in the house I live in, most of them not even by sight and no one in any of the neighbouring houses. Yesterday, however, my experience with regard to communal car-pushing and snow-sweeping was exactly the same as your colleague's, ending up with cups of hot tea all round! Today we are back to normal non-recognition of neighbours.

Once I fell noisily down the main stairs, and by the smells and noises coming from behind the closed front doors was well aware that the inmates were settling down to supper, and, unless they were eating popcorn, could not have failed to hear me! One woman, I have learnt only several months after the events, was not only pregnant but also had her baby in the house, and has since moved. All events might have happened in Australia for all I knew, and I suppose cared. No wonder newcomers to London, foreigners and students, are miserable and depressed when they live in one of London's un-neighbourly areas.—Yours sincerely,

Cherry Meade.

33 Lennox Gardens, London SW 1.

January 21.

Sir,—My wife and I between us have tried (unsuccessfully) to buy these goods during the last week or ten days: gas heaters, electric heaters, pure wool socks, a kind of ladies' underwear widely advertised in the national press, insulators for windows and doors, blocks of salt, coal, candles. In one shop I was told: "How d'you expect these things when everyone is after them?" In another, when I inquired when they are likely to have the next lot of warm socks in, I was informed: "Certainly not before our stocktaking, early February."

As I should hate to seem to be unfair to British industry and commerce, I should like to state in all fairness that there is no shortage of parasols, sun glasses, deck chairs, cooling drinks, and fans.—Yours faithfully,

George Mikes.

24 St John's Wood Court, London.

January 24.

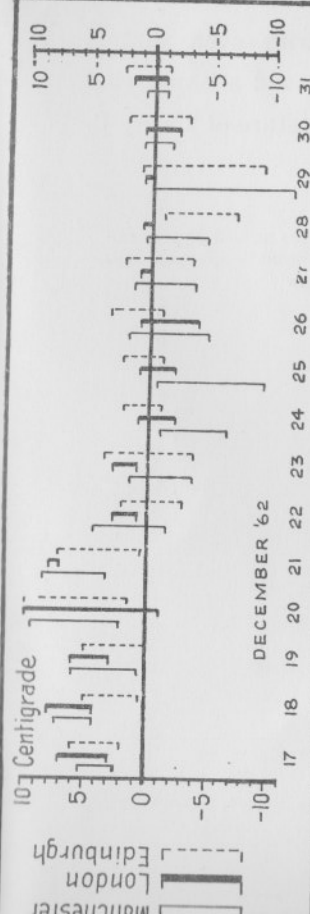
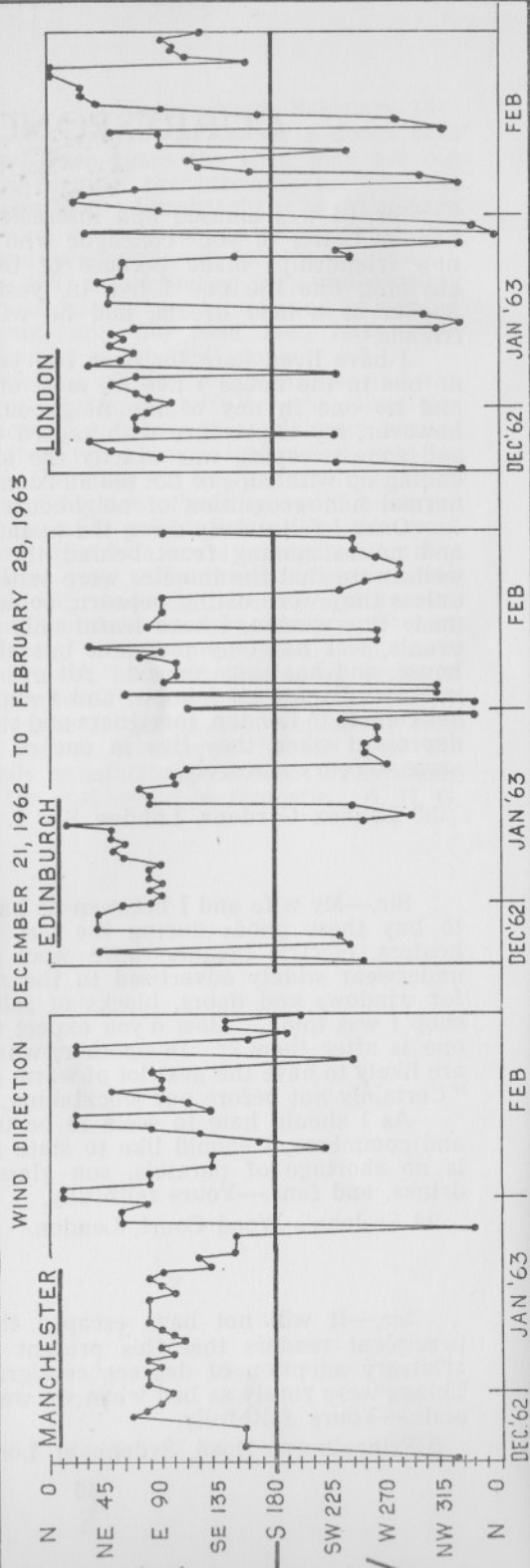
Sir,—It will not have escaped the notice of your more percipient readers that this present Arctic spell follows the arbitrary adoption of degrees centigrade by the weathermen. Things were rarely as bad when we were on the old Fahrenheit scale.—Yours faithfully,

J. M. Winterbottom.

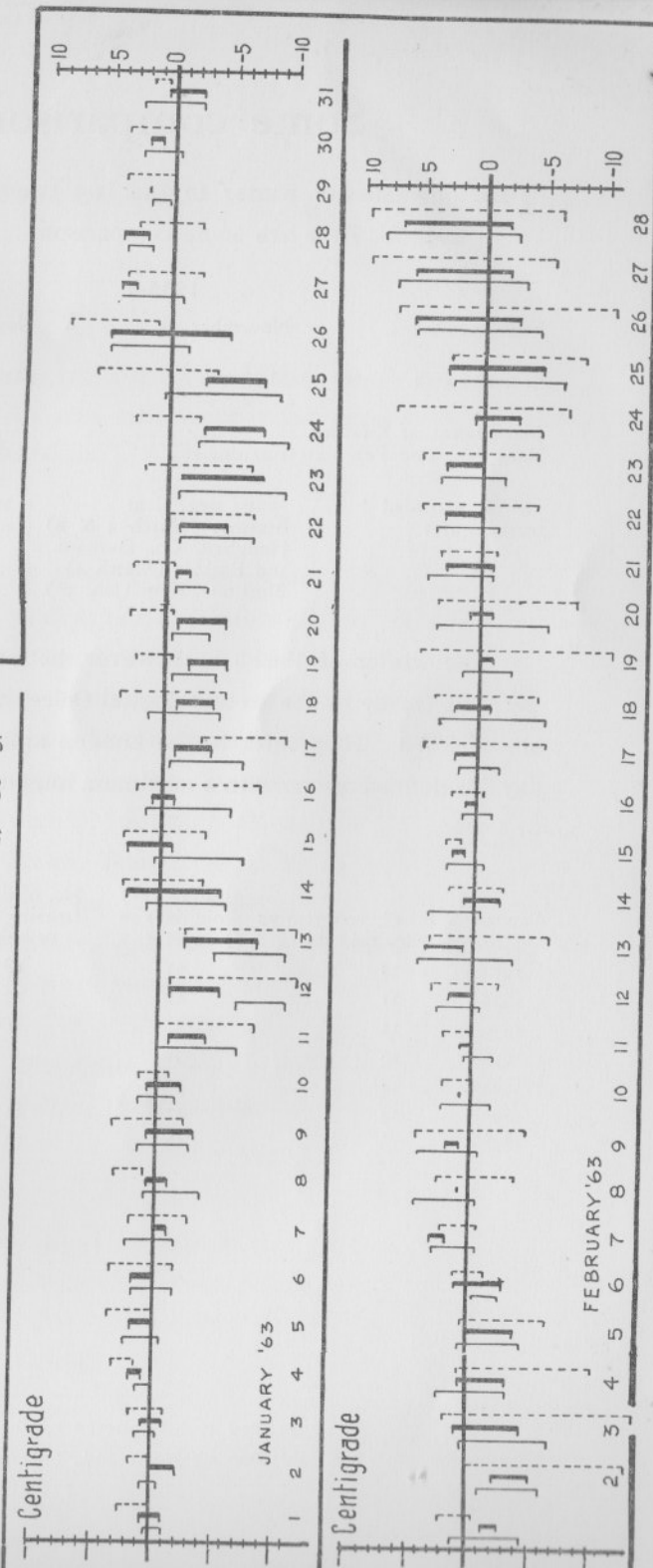
5 Princethorpe Road, Sydenham, London SE 26.

Temperature and wind

The persistence of easterly winds is shown in these graphs of wind directions. They were recorded at 9 a.m. each day at Manchester weather centre and Edinburgh Airport, and at noon at the Kew Meteorological Office in London.



The maximum and minimum temperatures recorded each day in London, Manchester, and Edinburgh from December 17 to February 28.



Some comparisons

THE only similar winter in the last twenty years was that of 1946-7. Here are some comparisons:

	1946-7	1962-3
First snowfall	November 15	November 17
Last snowfall	March 10	February 23
Mean temp. at Kew for Dec., Jan. and Feb.	1.27 deg. C.	.7 deg. C
Lowest recorded temperatures	-21.1 deg. C at Braemar (March 4 & 8) Houghall, Co. Durham and Peebles (March 4) Elmstone, Kent (Jan. 30)	-22.6 deg. C at Braemar (Jan. 18)

The winter of 1962-3 is, however, better assessed by comparisons (made by the Meteorological Office) with severe winters since 1878-9. They refer to the London area and a "very cold day" is defined as one with a maximum temperature of 2.7deg. C. or lower.

Winter	No. of consecutive very cold days	No. of very cold days in winter	No. of days at freezing point or below	Longest run of such days
1962-3	35	53	18	9
1946-7	21	42	17	8
1939-40	12	37	9	3
1916-17	20	31	6	2
1894-5	24	30	11	7
1890-1	24	42	21	7
1878-9	16	46	14	5

The Guardian Daily 4d.

If you have enjoyed this pamphlet and if you are not a regular reader of the "Guardian", why not try it?

Its news is thorough and lively. Its comment is fair and informed. It takes a pride in good writing. Its readers are served by a corps of specialists—among them Clare Hollingworth (winner of the 1962 award to the "woman journalist of the year"), Alistair Cooke in the United States, Francis Boyd in Parliament, John Cole on labour affairs, John Maddox on science, and Victor Zorza on the Communist world. Its columnists include R. H. S. Crossman MP, and Lord Altrincham; its critics Phillip Hope-Wallace, Eric Newton and Neville Cardus.

It is now printed simultaneously in London and Manchester. It is available for breakfast delivery almost everywhere.

The power crisis

Sitting in the candlelight

AFTER talks lasting 15 hours the electricity supply pay negotiations broke down early this morning and the unions decided to recommend an official work-to-rule in all power stations from Wednesday of next week. The recommendation will be considered at a meeting on Monday. If the decision is endorsed the 120,000 workers will perform only minimum duties and a widespread dislocation of electricity supplies may be expected.

A spokesman for the Electricity Council said that a work-to-rule would "make things creepingly worse." He explained that in winter time the power stations were working to the limit, even if there was no trouble. A lot of overtime was needed if they were to operate properly, but under a work-to-rule the men would refuse it. The employers made two alternative offers yesterday, each of which would have given a wage increase of more than 4 per cent from April 1, but these were refused. When the employers suggested arbitration the union negotiators left the table. The spokesman added that they would not expect a crisis immediately, but the work-to-rule would produce chaos in time.

While yesterday's talks were going on there had been power failures lasting up to three-and-a-half hours in parts of East and South-east London because of the unofficial work-to-rule campaign, called by shop stewards. The failure came when Barking Power Station had to start shedding load at 6.20 p.m. Thousands of consumers in East and West Ham, parts of Barking, Dagenham, Romford, Lewisham and Norwood were affected by the go-slow. Householders besieged local shops in search of candles. Motorists had to turn on their headlights when street lighting went out. At Streatham Police Station staff carried on with the aid of candles and torches.

Mr. Jules Wallis, a tenant of a block of flats at Streatham, said: "We're all having to sit in the candlelight, talking to keep ourselves warm. We can't even watch television." Other tenants put on heavy cardigans and coats to keep warm. At the Barking Assembly Hall during a performance of the pantomime "Sleeping Beauty," Princess Christable said to the Prince, "So this is the underworld, what a murky place!" At this point the lights went out. The audience embarked on community singing. Even when restored, much of the power was on a low voltage. Lights were dimmer and television showed a smaller picture than usual. A spokesman for the Central Electricity Generating Board explained that the failure in supply was the result of "unconstitutional action" at Barking Power Station.

The spokesman said that workers were reporting sick without warning, not turning up, or refusing to do work to replace colleagues who were sick. He said that Mr J. E. Harvey, Conservative MP for Walthamstow East, had already told him that he would ask questions in the House about the

incident, referring particularly to the effect on the accident rate and on old people's homes, hospitals, and similar institutions. The board had already been bringing in as much power as it could from other areas to meet the Barking deficiency, and it had to get the station running again. JOHN COLE.

The cold that kills

January 14.

PEOPLE are dying in Britain now because of the cold even if the baby at Wanstead was not among them. Some old men and women have hearts that simply will not stand low temperatures, and they are often least able to help themselves if their means of keeping warm fail.

Whatever the rights and wrongs of the electricity workers' pay claim, however long and patiently they have waited for a settlement, however propitious a moment this may seem tactically, does not humanity demand that they wait a week or two longer, until the weather is more normal, before they take action that may contribute, in however small a degree, to further deaths? LEADING ARTICLE.

Blackout in the South-east

January 18.

THERE were massive power disconnections throughout the South-east last night as the continued cold raised the demand for electricity to an unprecedented point. The decision to continue the unofficial work-to-rule, at least until Sunday, in spite of Wednesday's pay settlement combined with the cold to bring what a generating board spokesman described as "the worst night we have had so far."

Potential demand for electricity—"that is, that part of the demand which we cannot supply"—was the biggest they had ever experienced. "The situation will not be greatly improved tomorrow," he said. Stage 4 disconnections, which he said were "massive," were in operation in London, the Home Counties and on the South Coast, the first time that they had been necessary over such a wide area. Cuts were "widespread and drastic."

In London the cuts affected both sides of the Thames. Wimbledon was without power for 2½ hours. Southern Region and Underground stations were blacked out, and several people were hurt when they fell on the stairs. Other areas to suffer included Putney, Highgate and Richmond. Warnings went out to hospitals. At Shoreham a baby was delivered by candlelight—without complications. At Folkestone a 25-minute cut came just after work had finished in the operating theatre. Thousands of homes in the eastern part of Brighton went without light and heat for more than two hours; much of Ipswich had a cut lasting 80 minutes; more than 16,000 homes were blacked out for up to an hour in Luton, and in other parts of Bedfordshire the situation was said to be "very serious," with groups of villages without power.

Two statements last night on Wednesday's official pay agreement reflected official and unofficial union reaction. First,

the Electrical Trades Union said: "The official overtime ban is still on, and no meeting of the executive is planned for the immediate future to reconsider it." Then Mr. Charles Doyle, leader of the unofficial work-to-rule campaign, who had earlier described the pay settlement as "diabolical," issued a statement calling for a continuation of the work-to-rule and overtime ban until midnight on Sunday.

The statement is being circulated to power stations and depots by the unofficial National Shop Stewards Committee for the Electricity Supply Industry. It refers to "capitulation" by the union negotiators who were parties to the agreement on Wednesday. The committee will convene a conference of power workers to determine what course should be taken. It says there should be a public inquiry "into this affair," covering the electricity council, Government interference in industrial negotiations, and "the sordid role of some newspapers."

Mr. Doyle said later: "There's been a good response today to our call for a work-to-rule—in fact we've heard that men at several stations who have been obeying the official union line have now joined us. "We'll get the lads to sort it out tomorrow," was his comment when told that at Hams Hall, the biggest generating station in the West Midlands, about 1,000 men had voted to end the work-to-rule and overtime ban—although they had passed a resolution of no confidence in their national negotiating officers. Mr. Doyle added: "There's no doubt that this industry is in a bit of a shambles—and we figure that it's time all of us got down to talk about it seriously and decide what should be done to put things right."

Mr. J. F. Eccles, secretary of the trade union side of the Joint Council for electricity supply, has written to Mr John Hare, Minister of Labour, suggesting a meeting of both sides to examine the question of whether the Joint Council was a free negotiating body unfettered by Governmental interference. The unions suggest that Mr. Hare should preside at the meeting.

Under the terms of the agreement the five unions involved accepted the Electricity Council's offer of 2½d. an hour increase for each of the three years starting on February 1. In addition, the 128,000 men will receive a productivity bonus which will be worth about 4s 6d a week. Originally the unions had asked for a flat increase of 4d. an hour.

NORMAN CROSSLAND.

The general situation

Suddenly, a silent London

December 31.

ONE really heavy fall of snow does strange things to London. The most noticeable and the most welcome is the sudden imposition of a rare and blissful silence. It is only on a day such as this, when with some eight inches of snow in Central London there is hardly a vehicle on the move, that it is possible to realise how accustomed we have become to a continuous background of noise. Even those who believed themselves to be living in quiet streets suddenly find that they miss the distant hum of traffic. The sounds that break the silence—the scrape of shovels against doorsteps and pavements and the excited shrieks from children revelling in throwing really white snowballs at each other and at unamused pedestrians—are strange to Londoners' ears. The snow may bring to the city the look of the countryside, obliterating its grey mantle of grime—but it is shortlived. To-night the main roads are dirty brown and inches deep in wet slush.

Few of the motorists who leave their cars outside their houses and blocks of flats have been able to move. Although the roads are passable, the few yards from the pavement's edge to the crest can be negotiated only with the aid of a spade or sacks. And these are two things which flat-dwellers and householders without gardens do not possess. Fireside shovels, dustpans, and newspapers make poor substitutes. The alternative is a band of pushers. A colleague, who in the five months he has lived in a Chelsea street has rarely seen and never spoken to a neighbour, met them all this morning in the communal effort of car pushing and snow sweeping. A blizzard has its compensations. LONDON LETTER.

The farmers face disaster

January 2.

MANY farmers in the South-west, especially those in exposed places like Dartmoor and Exmoor, are facing potential disaster as a result of the present weather conditions. Although it is too early to make full assessments, many farmers claim hundreds of pounds' worth of damage, and the cost to the industry and the country must be worked out in thousands of pounds. Sheep and livestock are still trapped in deep snowdrifts, and many are feared lost. The reappearance of more snow yesterday made rescue operations almost impossible.

There was widespread talk of Government assistance last night, but the divisional headquarters of the Ministry of Agriculture at Bristol reported that the only help being given at present was the "ad hoc assistance" provided by the RAF. Countless helicopter journeys were made from RAF Chivenor, near Barnstaple, throughout the day with supplies of hay and straw for the more seriously affected areas of Dartmoor. A spokesman explained that as soon as one bale was dropped for

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December 31.

ONE really heavy fall of snow does strange things to London. The most noticeable and the most welcome is the sudden imposition of a rare and blissful silence. It is only on a day such as this, when with some eight inches of snow in Central London there is hardly a vehicle on the move, that it is possible to realise how accustomed we have become to a continuous background of noise. Even those who believed themselves to be living in quiet streets suddenly find that they miss the distant hum of traffic. The sounds that break the silence—the scrape of shovels against doorsteps and pavements and the excited shrieks from children revelling in throwing really white snowballs at each other and at unamused pedestrians—are strange to Londoners' ears. The snow may bring to the city the look of the countryside, obliterating its grey mantle of grime—but it is shortlived. To-night the main roads are dirty brown and inches deep in wet slush.

Few of the motorists who leave their cars outside their houses and blocks of flats have been able to move. Although the roads are passable, the few yards from the pavement's edge to the crest can be negotiated only with the aid of a spade or sacks. And these are two things which flat-dwellers and householders without gardens do not possess. Fireside shovels, dustpans, and newspapers make poor substitutes. The alternative is a band of pushers. A colleague, who in the five months he has lived in a Chelsea street has rarely seen and never spoken to a neighbour, met them all this morning in the communal effort of car pushing and snow sweeping. A blizzard has its compensations. LONDON LETTER.

The farmers face disaster

January 2.

MANY farmers in the South-west, especially those in exposed places like Dartmoor and Exmoor, are facing potential disaster as a result of the present weather conditions. Although it is too early to make full assessments, many farmers claim hundreds of pounds' worth of damage, and the cost to the industry and the country must be worked out in thousands of pounds. Sheep and livestock are still trapped in deep snowdrifts, and many are feared lost. The reappearance of more snow yesterday made rescue operations almost impossible.

There was widespread talk of Government assistance last night, but the divisional headquarters of the Ministry of Agriculture at Bristol reported that the only help being given at present was the "ad hoc assistance" provided by the RAF. Countless helicopter journeys were made from RAF Chivenor, near Barnstaple, throughout the day with supplies of hay and straw for the more seriously affected areas of Dartmoor. A spokesman explained that as soon as one bale was dropped for

one farmer, his next-door neighbour telephoned for assistance. "We are just about stretched to the limit."

The opinion of most farmers seems to be that apart from the helicopter service, there is precious little modern science can do at the moment to relieve their burden. An airlift has been suggested but one farmer near Okehampton pointed out that dropping supplies from an aircraft was "an inaccurate business." The helicopters stood a much better chance of finding the right spot.

A farmer on the east side of Dartmoor who has still to find more than a hundred sheep was perturbed about the "exaggerated publicity" given to the weather. Bad weather was just one of the hazards of farming, he suggested. "I'd rather do this than go down a coalmine."

In Devon generally where, according to the NFU at Exeter, there are one and a quarter million sheep and 500,000 head of cattle, conditions have never been so difficult. If Monday's slow thaw had continued "all would have been well"—as one Haytor farmer put it. As it is, work has been put back by at least a month. In other parts of the South-west, notably in West Dorset, Somerset and Gloucestershire, the situation is much the same. Some farms on Exmoor and the Cotswolds have been cut off for three days, and at one place near Wootton-under-Edge in Gloucestershire nearly 400 sheep were buried in deep drifts.

The secretary of the Dorset Farmers' Union, Mr R. Mitchell, said yesterday afternoon that the county was in a "chaotic state." The only agricultural sign of life was a tractor pulling a churn of milk or a bale of hay. Farmers in Dorset threw away 250,000 gallons of milk in the last three days because lorries had been unable to reach the collecting points. Fortunately, as Dorset is primarily a milk-producing county, most of the cattle are under cover for the winter. Nevertheless, about 500 farms in the county have been unable to get their milk away. The most pressing need in the next few days, said Mr Mitchell, was more foodstuffs unless the weather changed. "The weather's certainly caught us a clout in the pants this time."

KEITH HARPER.

Aids to survival

January 4.

AT the Medical Research Council's centre in Hampstead, London, physiologists are seeking new solutions to a problem that has suddenly become of vital concern to half Britain—how to survive in blizzards and conditions of extreme cold.

Thousands of outdoor workers, including railway staff, deliverymen, postmen, and farmers, even motorists stuck in snowdrifts, are daily risking the effects of severe exposure, or worse, with no more than a rudimentary, and often false, notion of how to prevent or cure them. Survival, if it is thought about at all, is by rule of thumb, and some victims of the near-Arctic weather have died.

Britain faces its cruellest winter for years with dangerous equanimity. Outside the medical world, only professional mountaineers, specialists units of the Services, such as the RAF



The Thames is frozen at Oxford—and the driver of a pre-war Austin Seven takes a short cut to work.

January 22.

Mountain Rescue squads, and the team now surveying Antarctica, have any thorough knowledge of fighting the cold.

The Services themselves lean heavily on the MRC's work, and the army, for example, has its own medically qualified officer permanently attached to the Hampstead centre so that he can give detailed advice to troops being posted to cold climates.

At Hampstead experiments are carried out by subjecting people and clothing to conditions inside a "climatic chamber," where temperatures can be reduced to -40°C . centigrade with a 20 to 30 m.p.h. wind. The results of the experiments are passed on, through improved kit and instructions, to Service units and expeditions, but so far the snow-bound public has heard little about them.

Technically, there are two kinds of cold—"wet cold" and "dry cold." In the first, the temperature ranges from 10°C to -5°C . centigrade, with high humidity, snow, sleet, rain, and possibly fog, and usually with high winds. In the second, the temperature is below -5°C , with no thaw and usually low humidity. As far as the Services and civilians are concerned, especially in this country, "wet cold" is by far the most common and dangerous, because of the presence of water in normal clothing.

Lieutenant-Colonel J. M. Adam, the army's adviser on acclimatisation, explained yesterday that a pound of water, which might come from rain, snow, or simply from the sweat of a person walking or stumbling along, needed 270 kilo-calories to evaporate it. This amounted to the heat produced by a man's body during more than three hours of sleep, or during one hour of hard work, with none left over for human survival.

This, he pointed out, was a serious state of affairs and was of direct concern to people struggling against the winds and