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THE GREAT EXPLOSION AT FAVERSHAM, 2 APRIL, 1916

ARTHUR PERCIVAL, M.B.E., B.A., F.S.A

At about one o'clock on Sunday, 2 April, 1916, families throughout the land were sitting down to lunch. Their peace was to be disturbed in a number of places in East Anglia and the South-East, including Norwich, Southend and – most of all – Faversham.

14-year-old Stephen Tuck was having lunch with his parents at their home in Trinity Street, about half-a-mile from the centre of Norwich, when a sash window which was slightly open began to rattle. He remembers looking up and seeing it shake violently for some time.¹ Roger Day, who was living in Surrey Street, Norwich, has similar recollections.² Nearby, William Stowers, a locomotive cleaner, working the night shift, heard the sound soon after being woken up at mid-day by his mother.³ Dorothy Smith, then quite young, was on a family outing to her aunt and uncle at St. Olave's, near Great Yarmouth, when there was a bang and the doors and windows rattled badly enough to alarm her father at the dinner-table.⁴ R.K. Took's father had a shop in the New Market at Beccles. Behind the shop, and separated from it by a large glass partition, was a parlour. The family were having their lunch when 'the whole place was shaken by a great explosion' and the glass partition rattled, making a lot of noise.⁵ Further south, in Essex, the Cross fell off the

¹ Personal communication, 30 May, 1984. By coincidence, Mr. Tuck's wife is a descendant of Giles Chapman Morgan (1795/6–1862), of Macknade, Faversham.

² Personal communication, 28 May, 1984.

³ Personal communication from his son, Victor Stowers, 28 May, 1984.

⁴ Personal communication, 29 May, 1984.

⁵ Personal communication, 15 August, 1984. This and the other East Anglian testimonies reached the author after he had written to the *Eastern Daily Press* asking whether any readers could bear out a contemporary report that the explosion was heard at Norwich. As he was careful not to mention at what time of day it occurred, the fact that almost all correspondents spontaneously stated that they were having lunch at

altar at St. Peter's, Shoebury, while in Southend windows were blown out and two large plate-glass shop-windows smashed.⁶

In Faversham Mrs. Browning remembered that Sunday vividly. 'I was dishing up potatoes – my hubby was home on leave. You couldn't hold anything – it was all of a quiver. And . . . it was dust – matter of fact, I had to take all my curtains down, they were so dusty'.⁷ At about the same time a local headmaster's daughter, Miss Melice Telfer, was about to go on duty as a V.A.D. nursing auxiliary. As she walked up Newton Road, close to the centre of Faversham, 'this very loud explosion happened; and people ran out of their houses wondering what in the world had happened . . . and realised that something very serious had happened'.⁸

What exactly had happened, thanks to efficient censorship, was one of the best-kept secrets of World War I. It was not until the following Wednesday, 5 April, that the Ministry of Munitions acknowledged (without naming the precise location) that 'during the week-end a serious fire broke out in a powder factory'⁹ in Kent which led to a series of explosions at the works'. The public were re-assured that the fire was 'purely accidental' (i.e., presumably, not the work of enemy action or saboteurs), but the scale of the disaster was implicit in the laconic estimate of the number of casualties as being about 200.¹⁰ Perhaps mostly injuries and few deaths? Alas, no. Enemy intelligence would have drawn its own conclusions about the setback to Britain's munitions output when *The Times* reported two days later

the time makes it as certain as possible that the shock they sensed was that of the Faversham explosion and not another they might now confuse with it, e.g. the munitions explosion at Silvertown (London) which occurred at 7 p.m. on 19 January, 1917, and in which 69 people were killed and 400 injured.

⁶ *Southend and Westcliff Graphic*, 7 April, 1916. However, the shock was not recorded on the two seismographs closest to Faversham (Kew and Guildford). Graham Neilson, of the British Geological Survey, comments that this need cause no surprise since such instruments were designed to record large, distant earthquakes and provided only very low magnification of the frequencies produced by a relatively local chemical explosion. Opinion varies as to why the shock of an explosion near Faversham was felt in Norwich (93 miles away as the crow flies) and nearby places. Dr. Browitt, of the British Geological Survey, considers that the sound waves were airborne and refracted downwards from the upper atmosphere. Concorde's sonic boom out in the Atlantic is often heard in Cardiff for the same reason. On the other hand, Stephen Tuck, one of the *Eastern Daily Press* respondents, points out that chalk underlies both Faversham and Norwich and suggests that the shock was transmitted along the bedrock. It should be added that the explosion is also said to have been heard in France (*Faversham Magazine*, Summer 1967, 12).

⁷ Recorded by Tom Robinson for the Faversham Society, 1963/4.

⁸ Recorded by Tom Robinson for the Faversham Society, 1963/4.

⁹ In fact a plant for filling bombs and shells with amatol, cf. *infra*.

¹⁰ *The Times*, 5 April, 1916.

THE EXPLOSION AT FAVERSHAM, 1916

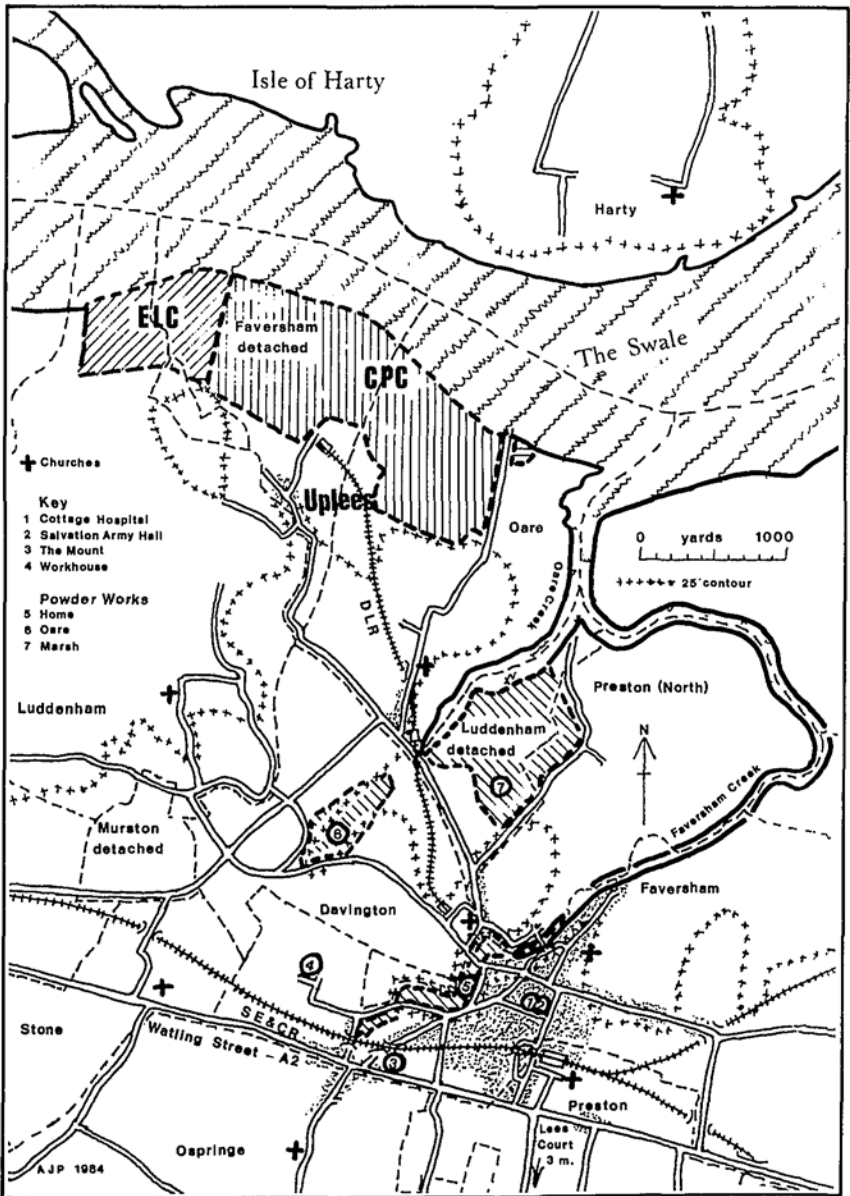


Fig.1. Faversham Explosives Factories: Location Plan.

that some of the victims were buried 'in one large grave'. Nearly three weeks later, following a Parliamentary Question, a fuller picture emerged.¹¹ Though in fact there had only been 172 casualties in all, 106 of the victims had lost their lives. Of those who had died, all but five (who belonged to the military guard) were employees. However, none were actually doing their normal work at the time: most were 'rendering assistance' and the rest (rather strangely, it may be thought) 'were present as spectators'. These had been warned to leave and would have had ample time to do so. Miraculously,¹² no women had been killed or injured. An official inquiry had taken place and its findings and recommendations would be brought to the attention of the explosives industry at large.

Two days later again the editor of a local paper reviewed the matter in a leading article. Though he recognised the need for censorship, he evidently felt hamstrung by the 'mystifying and ambiguous' reply to the Parliamentary Question. At least, he hoped, the fullest precautions would be taken to 'prevent another calamity of the kind'.¹³

What exactly was the nature of the 'calamity', in fact in terms of deaths the worst ever recorded, before or since, in the history of the U.K. explosives industry?¹⁴ The story, or at least some of it, can now be told on the basis of documentary, printed and oral evidence. The Kent Archaeological Society can perhaps take pride in the fact that one of the heroines of the occasion was a member who had joined in 1907.¹⁵

The story starts, in a sense, 330 years ago or more, when Faversham's first gunpowder factory was established.¹⁶ Output steadily grew and, by 1786, there were three such factories in and around the town. In 1846, the discovery of guncotton, the first high

¹¹ *The Times*, 27 April, 1916. In fact at least 108 people were killed, cf. *infra*.

¹² Though no women were employed in the factory where the explosion occurred, many worked at the adjacent Cotton Powder Company plant, and in fact of an aggregate workforce of about 1,500 about half were women – see Syd Twist, *Faversham 1900–1910*, Faversham Society, 1977 (cited hereafter as *Twist*), 19. However, women did not work Sunday shifts at the CPC (Eileen English, *Faversham 1900–1930*, Faversham Society, 1981, 13–14).

¹³ *East Kent Gazette* (Sittingbourne), 29 April, 1916.

¹⁴ *Report of H.M. Inspector of Explosives, No. CCXVII (Accident No. 110/116) 17 April 1916*, unpublished typescript in Health and Safety Executive Library, hereafter cited as *Report*; and personal communication, 14 August, 1984, from H.M. Deputy Chief Inspector of Explosives.

¹⁵ Mrs. Elizabeth Selby M.B.E. (cf. *infra*).

¹⁶ Arthur Percival, *The Faversham Gunpowder Industry and its Development*, Faversham Society, 1967 (cited hereafter as *Percival*), 2.

explosive,¹⁷ was announced by Christian Schönbein, a German who was Professor of Chemistry at Basle.¹⁸ Under agreement with him, the first guncotton plant in the world opened at the Marsh Works, one of Faversham's three powder factories, later the same year. However, it was soon closed – after a disastrous explosion on 14 July, 1847, in which 18 staff were killed and a number injured. The report had been heard as far away as Maidstone and only 10 of the dead could be identified – the others were 'literally blown to atoms'.¹⁹

As the properties of guncotton became better understood, the manufacturing process was made safer, and commercial production was resumed. In Faversham, it was revived in 1873 when the Cotton Powder Co. Ltd. (CPC) built a factory on a virgin site on the Uplees marshes alongside the Swale (Fig. 1).²⁰ No doubt the site was chosen for its remoteness as well as its convenience for shipping: though in a detached portion of Faversham parish, it was three miles N.N.W., as the crow flies, of the town centre, and beyond the small village of Oare. It had disadvantages, though: reporting on an accidental explosion, or 'blow', in 1899, H.M. Chief Inspector of Explosives noted that, because the works had been built on saltings, it had so far been impossible to make either trees or shrubs grow – and trees were traditionally planted in explosives factories to screen buildings from blast likely to emanate from others nearby in the event of a 'blow'.²¹

Still, the 'Cotton Powder' (as it was known locally) prospered and expanded (Fig. 2) till in 1915 its premises occupied a 500-acre site and its range of products included, as well as guncotton, distress signals, detonators and such nitro-glycerine compounds as cordite, gelignite and dynamite.²² By then its staff came not just from Faversham and the immediate area but from places further afield, such as Herne Bay and Margate. They were attracted by the extra 2s. a week danger-money which was paid and, in the case of single men during the war, by exemption from military service. Indeed, there was alleged to be 'strong feeling' in Faversham about the 'hundreds' of young men 'hiding away at the local munitions works'; but, though protests were made to Lloyd George, as Minister of Munitions, they were brushed aside.²³

¹⁷ High explosives are used for their destructive effect, low explosives (like gunpowder) mainly as propellants.

¹⁸ G.W. MacDonald, *Historical Papers on Modern Explosives*, 1912, 10.

¹⁹ Percival, 13–14; MacDonald, *op. cit.*, 47 ff.

²⁰ Percival, 21.

²¹ *Report of H.M. Chief Inspector of Explosives, No. CXXXIII, 18 May 1899*, H.M.S.O., 1899, 4. There are still no trees, and few shrubs, on the site.

²² *Faversham Borough Annual & Directory 1915*; Twist, 12.

²³ *Faversham Times*, 26 January, 1984, and *Kentish Gazette*, 5 June, 1917.

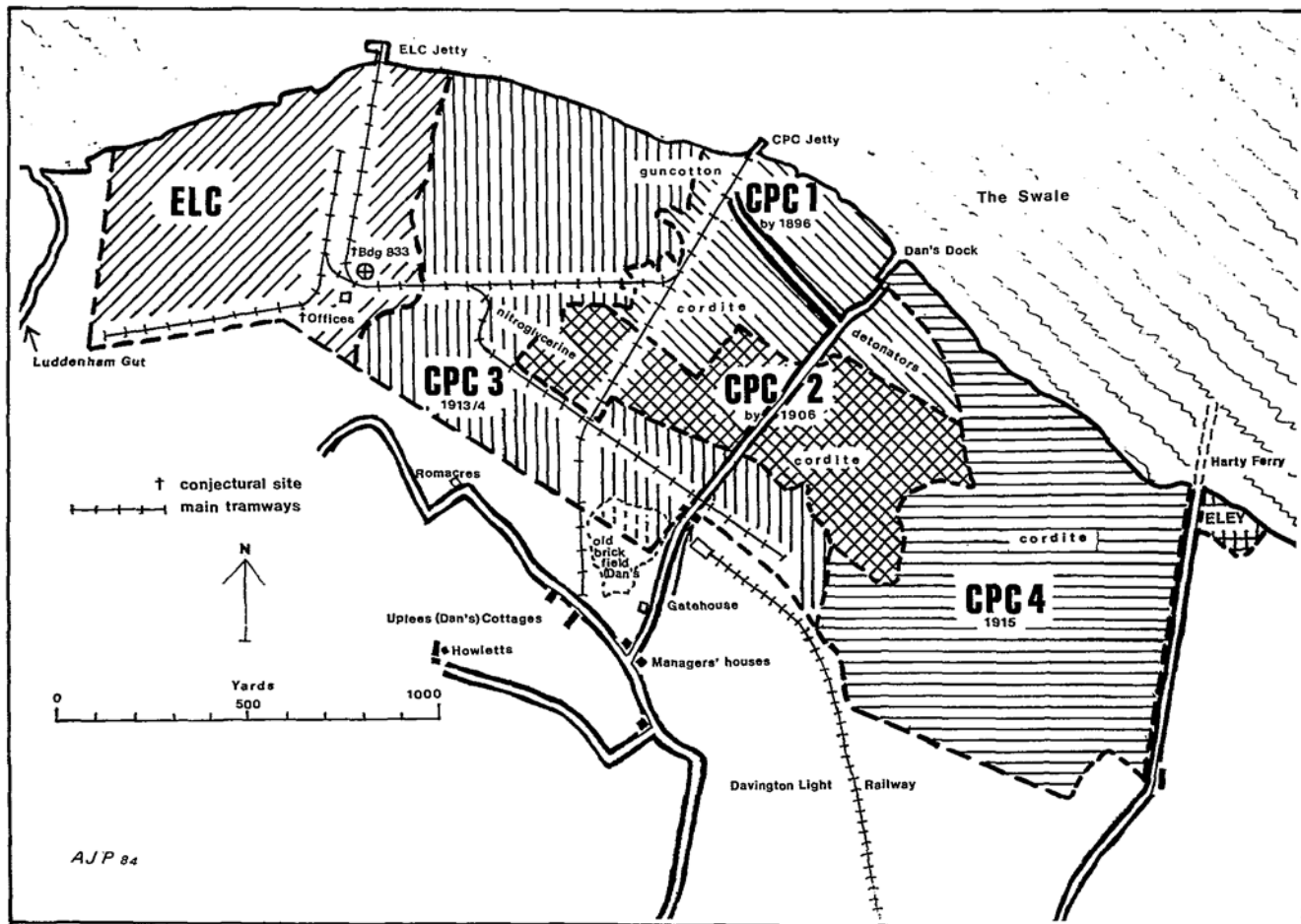


Fig. 2. Faversham Explosives Factories: Detailed Plan (see note 33; based partly on information supplied by Mr. Syd Twist.)

Even before war broke out, the availability of experienced personnel encouraged other explosives manufacturers to set up in business nearby, making Faversham for a few years one of the major centres, perhaps the main centre, of the U.K. industry. With all their sophisticated plant, the various works were in stark contrast with the traditional technology of the powder factories nearby. The CPC, for example, apart from all the complicated processing facilities of a chemicals factory (Plate Ia), had all the necessary infrastructure – its own coal-gas plant, electricity generators, boilers with mechanical coal-feed and fan-induced draught, compressors and an electric-powered, rail-mounted crane at its jetty. On the other hand, many water-borne cargoes came or left in sailing barges (Plate Ib); until late in 1915, the only three vehicles to the Company's name were horse-drawn (a waggonette for the Manager and two vans); and, until the completion of the short-lived Davington Light Railway²⁴ some time in 1916, most staff had to walk or cycle to work from their homes (if in the Faversham area) or Faversham Station (if further afield).²⁵

Among the newcomers attracted to the area was the Explosives Loading Company Ltd. (ELC), which in 1912 established a plant (Figs. 1 and 2) immediately west of the 'Cotton Powder' to compress TNT into charges for shells, torpedoes and mines. An amending licence for the purpose had been granted to the CPC²⁶ and, on this ground and on others, it seems likely that the two companies were closely related as well as adjacent.²⁷

TNT is expensive to produce, so during World War I the amatols were introduced. These 'stretched' the TNT by mixing with it ammonium nitrate (NH_4NO_3), a much cheaper substance, which also had the advantage of providing a built-in supply of the oxygen necessary for rapid combustion. Various proportions were used, ranging from 40/60 to 80/20, the first figure denoting the amount of ammonium nitrate and the second that of TNT, and 80/20 being most widely adopted.²⁸

Thus, from the outbreak of war, the ELC (Plate IIa) was required to fill shells and bombs with amatol.²⁹ Its factory was much smaller than that of the CPC, consisting of only about 30 buildings, almost all

²⁴ Cf. M. Minter Taylor, *The Davington Light Railway*, Oakwood Press, 1968 and *Twist*, 18–20.

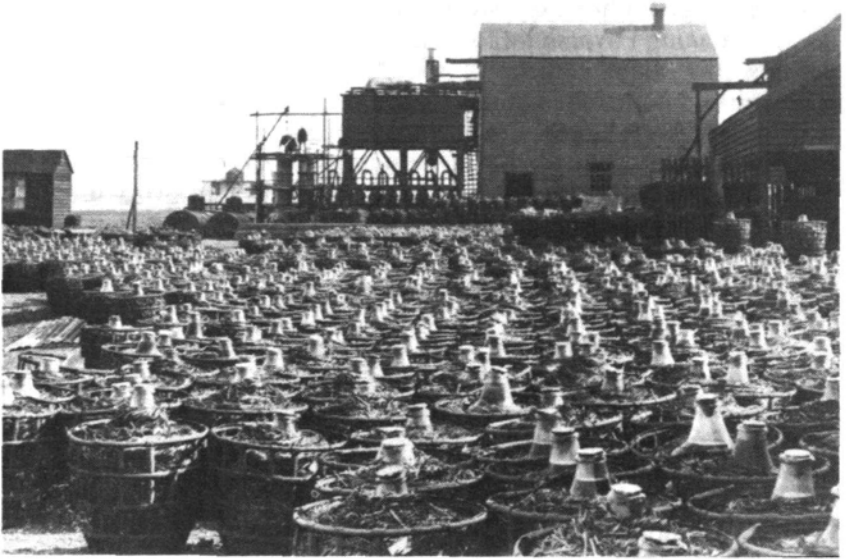
²⁵ *Twist*, 12–13 and 19.

²⁶ *Report*.

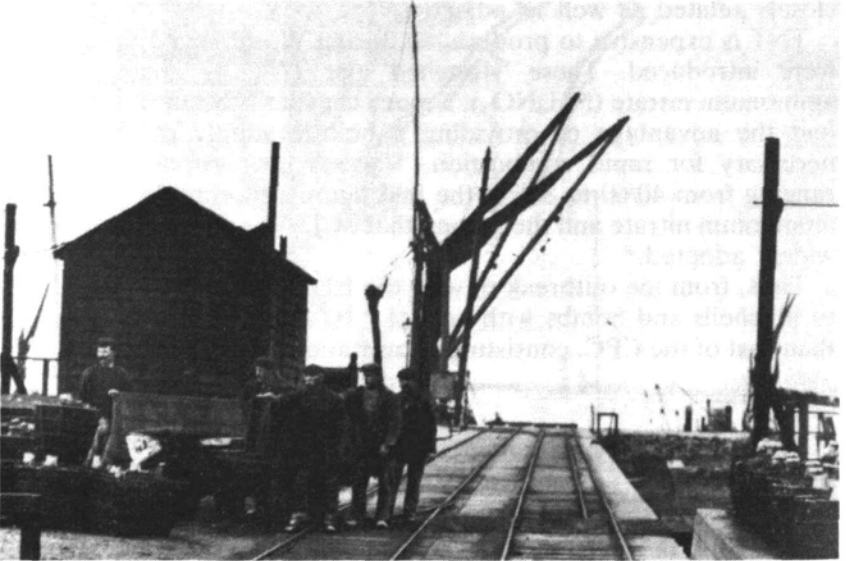
²⁷ Cf. *Twist*, 18 and 21.

²⁸ *Text Book of Explosives used in the Service*, H.M.S.O., 1938 (cited hereafter as *Text Book*), 16 and 139–40; cf. John Read, *Explosives*, Pelican, 1942, 124.

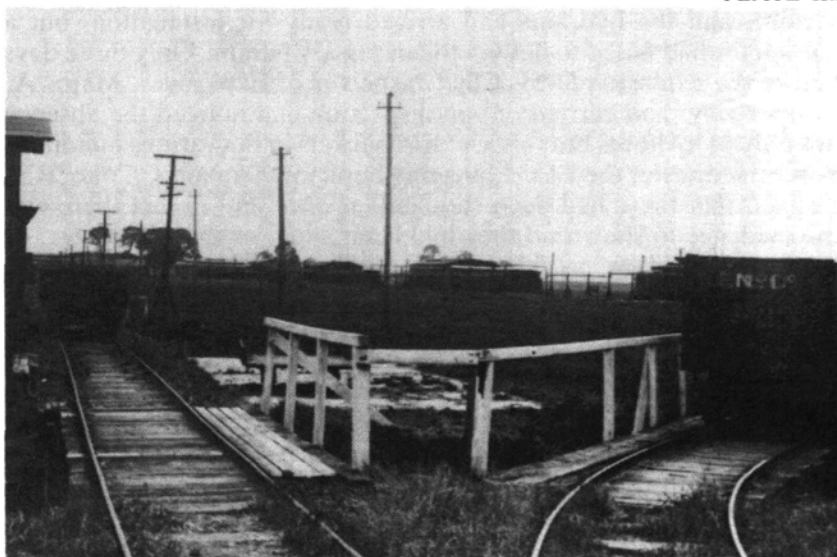
²⁹ *Report*.



Fleur de Lis Heritage Centre, Faversham
Cotton Powder Company, Faversham: Acid Plant alongside the Swale, looking East,
c. 1918.



Fleur de Lis Heritage Centre, Faversham
Cotton Powder Company, Faversham: Sailing Barges at the Jetty, looking North-east
to the Isle of Harty, c. 1918.



Fleur de Lis Heritage Centre, Faversham

Typical View at high Explosives Plant (probably the Explosives Loading Company), Faversham, c. 1918

lightly constructed of wood and well spaced out – about 60 or 70 yards from one another. This form of structure and layout ensured that, in the event of a ‘blow’ in one danger building, the minimum of damage was done to others nearby; and minimum distances between buildings were among the requirements prescribed by Orders in Council (Regulations) made under the 1875 Explosives Act. There were no artificial mounds or ‘traverses’ to screen buildings from one another, but these were only required by law in factories where there were constraints of space and structures were closer to one another. Security precautions were excellent, with a military guard 128 strong and 24 civilian patrolmen for the two adjacent factories.

However, fire-fighting facilities left more than a little to be desired. The CPC was quite well provided for, with its own part-time fire brigade, plenty of hydrants and hoses, and a pump always in steam to raise extra water, if required.³⁰ The ELC had to make do with a single four-man manual pump supplemented by over 100 chemical extinguishers and an uncertain number and probably inadequate supply of fire-buckets. Water was available from dykes, but there were no

³⁰ *Twist*, 15 and cf. *infra*.

hydrants. High-pressure mains had actually been laid up to the factory, and the hydrants had arrived ready for installation, but a contractor had failed to deliver the necessary pumps. Only three days before the explosion H.M. Chief Inspector of Explosives, Major A. Cooper-Key, had carried out an inspection and noticed the absence not only of hydrants but, also, of fire-buckets in the various buildings. After the disaster the ELC Managing Director, Captain J. Coke, RN, claimed that these had been supplied 'at once' but in fact there was 'no evidence to show that they had been filled, or that they were, or were not, in place' by 2 April. Regardless of this, 'the appliances available were totally inadequate', the ELC, despite the hazardous nature of its work, being no better equipped for fire-fighting than the average village.³¹ Outside the two factories, in Faversham itself, there were three fire brigades – the Volunteer, the Kent (maintained by the Kent Fire Office) and the Norwich Union – each with an engine which had to be harnessed to horses or a lorry before it could set off to attend a fire.³²

Building no. 833 at the ELC had been licensed for the storage of TNT.³³ It had matchboard walls and stood about 50 ft. from a boiler-house where there were three flues, each only 37 ft. high but equipped with spark-arresters. In order to keep pace with the needs of the armed forces,³⁴ the factory was working overtime, and vast quantities of TNT and ammonium nitrate had been delivered, no less than 250 tons arriving during March. Normal peace-time routines were virtually impossible to follow and, though strictly speaking it was illegal without a variation of the licence, Building no. 833 had been used for some time as a store for ammonium nitrate – of which on 2 April, 1916, it contained about 150 tons. It also contained about 15 tons of TNT, more cases of which were lying on the open ground outside it. Empty linen bags, which had been used for TNT and were awaiting return for re-filling, were also resting against the match-

³¹ *Report and Report of the Standing Committee into Explosions at Government and controlled factories (May 1916)* to the Minister of Munitions, David Lloyd George (PRO Munitions 5/158). Major Cooper-Key was a member of the five-man committee. Cited hereafter as *Standing Committee*, the Report was classified 'secret' at the time.

³² Cf. *Faversham Borough Annual and Directory 1903*.

³³ No large-scale plan of the ELC plant is known to survive and the exact position of the building is unknown. However, its approximate site, as indicated in Fig. 2 can be plotted from accounts of the accident and the 1914/1919 (3rd) revision of the 1 in. O.S. Map, which appears to be the only one to show the ELC plant.

³⁴ Particularly with those of the Royal Navy, probably: after the outbreak of War the Admiralty controlled the next-door CPC for a time and it also operated the Davington Light Railway, whose locomotives bore its insignia. Cf. *Twist*, 12, and M.M. Taylor, *op. cit.*, 4 and 13.

board walls. The boiler-house spark-arresters were not 100 per cent efficient and, on the night before the disaster, two of the patrolmen reported that sparks had started a small fire between the boiler-house and Building no. 833 which they had managed to put out.³⁵ March 1916 had been very wet in east Kent, but it ended with a short dry spell which lasted until 4 April.³⁶ The morning of Sunday, 2 April, was glorious,³⁷ with no hint of the tragedy that was to come. About 10 minutes after many of the staff had broken off for lunch at 12 noon, according to the only official account,³⁸ Mr. Underwood, clerk of works to the building contractors at the plant, noticed that some of the empty TNT bags stacked against the wooden wall of Building no. 833 had caught fire. He immediately gave the alarm at the office and the Assistant Manager, Mr. Palowker,³⁹ who was in charge while the Manager, Mr. George Evetts, was away at lunch, called out the works fire brigade with their manual engine.

To supplement their efforts, the CPC brigade was also called out.⁴⁰ One of the members on duty at the time was Steve Epps, a young Faversham man who had been married just three months. Till November 1914, he had been driving a horse-drawn dray for one of the town's two breweries, but for this he had earned only a pound or a guinea a week and he had moved to the 'Cotton Powder' because the money was so much better. By April 1916, he was a charge-hand, and between them the charge-hands served as the part-time fire brigade, wearing an 'F.B.' badge so that they could be immediately identified. Responding to the hooter, Epps abandoned his lunch and dashed off to the fire. By the time he and his colleagues arrived, 'the stuff inside the shed was already alight'. Whatever efforts had been made to nip the blaze in the bud had proved abortive, and a decision had to be made about the 'tons and tons of TNT' which Epps recalled were stacked round the shed in 56 lb. boxes.

At this point the Manager, George Evetts, arrived and decided that unless the boxes of TNT were moved away from the blazing shed the fire might spread to nearby buildings. So the order was given, and as many staff as possible mustered to carry it out – Steve Epps among

³⁵ *Report*, cf. *Standing Committee*.

³⁶ Records for Canterbury, held at the Meteorological Office.

³⁷ Steve Epps, B.E.M., recorded Summer 1966 by Dick Dadson for the Faversham Society, hereafter cited as *Epps*.

³⁸ *Report*.

³⁹ Who may have been killed in the disaster: an R.M.M. Palowkar (*sic*) was among those buried in the mass grave at Faversham Cemetery (cf. *infra*).

⁴⁰ *Twist*, 21.

^{40a} *Standing Committee*.

them. ‘We was chucking it to one side, handing it down – it kept falling all round about you. They were slamming it round, and one old chap – he could see I was a bit nervy – he said, “that won’t go off unless it’s detonated, old chap.” I said, “right, I feel safe enough”’. This task well under way, the 19 members of the CPC fire brigade available at the time resumed efforts to control the fire. All they had to begin with were buckets and, since there was no hydrant at the ELC, they had to form a chain to the nearest dyke. All told, a force of about 200 (drawn from the ELC, CPC and military) were eventually involved in efforts to stop the fire spreading, some helping to pass water from the dykes in buckets to supplement the efforts of the CPC Brigade, others moving boxes of TNT as far from the blaze as possible. Other employees arrived at the scene just to watch what was going on, taking no notice of repeated instructions to get out of harm’s way.⁴¹ Perhaps, in a sense, familiarity with explosives bred contempt for them. Small quantities of TNT, if set on fire, will only burn, and ammonium nitrate, though explosive in itself, is not easy to detonate.⁴² And, in any case, it was lunch-time and there was time to kill.⁴³

Meanwhile, since the fire was getting out of hand, the three Faversham fire brigades had been called out, but they could not hope to reach the ELC quickly along the narrow, ill-surfaced and rather indirect route, which consisted merely of a succession of country lanes. The last stretch, from Oare to the CPC gatehouse at Uplees, was only 12 ft. wide in places and surfaced with flint. By the winter of 1915, it had ruts in it 12 to 18 in. deep. More or less, the only mechanical transport ever seen using it were traction engines (which cannot have improved the surface) and a solitary bus brought into service by the CPC late in 1915 to ferry women workers to and from their plant.⁴⁴ And even when the town fire brigades had got as far as the CPC gatehouse, they had another half-mile to go.

All this time efforts were being made at the CPC to find enough hose to lay the 400 or 500 yds. from the nearest CPC hydrant to the ELC. Eventually, and while the town brigades were still on their way, enough hose was found to enable a single nozzle to be played on the

⁴¹ *Report, Epps and Major J.D. Sainsbury T.D., Honours and Awards arising from the Disastrous Explosion at the Explosives Loading Company's Works, Faversham, Kent, 2nd April 1916, in Orders and Medals, Summer 1979, a most valuable account and analysis hereafter cited as Sainsbury.*

⁴² *Text Book*, 30 and 64.

⁴³ Cf. *Twist*, 22.

⁴⁴ *Twist*, 18–19.

flames, but by then it was too late.⁴⁵ 'We'd just got the water on it – and up she went', recorded Steve Epps. This was at 1.20 p.m., just 70 minutes (according to the only official record) after the fire had first been noticed.

George Goldfinch was another employee who, with a colleague, went to give what help he could. They were running alongside a dyke towards Building no. 833 when the explosion occurred. 'The next thing he remembered was finding himself on the other side of the water and seeing the other man quite near him with all his clothes blown off him, and just his shoes and socks, and his collar at a strange angle round his neck'. Goldfinch's own clothes were in tatters, he had a broken arm and other injuries, and he was to remain partially deaf for the rest of his life.⁴⁶

Since there were 150 tons of ammonium nitrate and 15 of TNT in the shed when the fire started, and the most efficient proportions for the making of amatol were considered to be 80/20, the building contained the makings of at least 75 tons of high explosive. Quite why the chemicals eventually exploded after simply burning for so long was not quite clear to H.M. Chief Inspector of Explosives when he undertook an immediate investigation. However, a similar type of explosion had occurred at Witten in Westphalia in 1906, when a fire had fused the two ingredients, and experts consulted by the Inspector suggested that, if the burning ammonium nitrate had resulted in a build-up of oxygen, this might have resulted in 'a reaction of unforeseen and exceptional violence', if it suddenly came into contact with the TNT.⁴⁷

Sydney Wilson, who was to serve as Town Clerk of Faversham from 1943 to 1957, was a member of the Volunteer Fire Brigade, which he had joined soon after the outbreak of War and the commencement of Zeppelin raids. 'Before we could get started, the first big explosion took place. We had an American-type petrol engine, horse-drawn, but on this occasion we had lashed it to the back of a Shepherd Neame's lorry, and I stood in the lorry looking over the bonnet, signalling to the fellow who was steering the engine behind. As we passed through Oare village and came up on the Uplees road overlooking the factories, a second terrific explosion occurred; and my only recollection of it really is seeing a fan of flame,

⁴⁵ *Twist*, 21.

⁴⁶ Personal communication from his niece, Mrs. Betty Bax, of Pluckley, 2 August, 1984.

⁴⁷ *Report, Epps and Sainsbury*.

the lorry momentarily pausing, and the engine coming behind cracking into it'.⁴⁸

In fact, it was not one explosion which occurred at about 1.20 p.m., just as the Volunteer Brigade was setting out, but three. When Building no. 833 blew up, another two process houses about 120 yds. away exploded in sympathy. These had only recently been built by the CPC, in the next-door factory, for the final washing and filtering of nitro-glycerine, considerable quantities of which each contained.⁴⁹ And, after the initial explosions, there were two more, not just the one recalled by Sydney Wilson. One of the buildings used by the ELC for moulding amatol charges exploded at about 1.40 p.m. and then, 20 minutes later, another one which had been set on fire by debris projected by the earlier explosions and which contained filled primers for naval mines.⁵⁰

Damage done by the explosions was severe and extensive. Of the five buildings blown up 'no trace was left', and the first explosion left a crater 150 ft. in diameter and 10 to 15 ft. deep. Within a 225-yard radius of this explosion every building of conventional light construction⁵¹ was destroyed, including six belonging to the CPC, though in one pre-war shell-filling building within the 'fatal ring' the reinforced concrete partitions were not even cracked. Outside this radius, damage was less severe. Of the CPC's many sheds, only five were left beyond repair, though between 150 and 200 suffered superficial damage. Rather oddly, however, some new magazines built by the CPC at the south-east extremity of their site, not far from the Coastguard Cottages on the road to Harty Ferry, were more

⁴⁸ Sydney Wilson (died 1966), recorded 1963/4 by Tom Robinson for the Faversham Society, hereafter cited as *Wilson*.

⁴⁹ 1,000 tons in all, according to Dr. Charles Evers in his MS. reminiscences (hereafter cited as *Evers*) of the disaster, written on 6 and 16 April, 1916, and presented to the Faversham Society by his grandson David in 1980. Evers, who was born in 1863 and died in 1957, was a remarkable, versatile person, who came to practise in Faversham in 1886. He was appointed Medical Officer of Health for the Borough of Faversham in May 1892 and did not retire until over 50 years later, in March 1945 (*Faversham News*, 8 September, 1942, and 29 November, 1957). Charles Cremer, a local brickmaker, proposed his appointment and also spoke when a presentation was made to him in 1942 to mark his 50 years of service. Long before the days of automated cameras, both Evers and Cremer were keen and talented amateur photographers and between them took many of the best surviving photographs of the Faversham area in the late nineteenth century. Some of Evers' negatives are now in the possession of Bob Ratcliffe, of Rochester, while many of Cremer's prints belong to Mrs. Betty Blake, of Sheldwich. Many of Evers' photographs are on permanent show at the Fleur de Lis Heritage Centre in Faversham.

⁵⁰ *Report*.

⁵¹ Cf. *supra*.

seriously damaged than most of the intervening buildings. The explanation for this, Major Cooper-Key suggested, might be that while most of the other buildings stood on a 'floating crust' above the marsh, the magazines had been built on 'practically the only solid ground in the area' and had therefore been affected not by the sound but by the earth wave generated by the explosions.⁵²

Damage would have been worse but for the courage displayed by the ELC Manager, George Evetts, and members of the fire brigades. When the first explosion occurred Evetts was about 40 yds. from the building concerned. He was knocked unconscious and his coat was torn off his back. When he came to, he discovered his offices were on fire and made an immediate attempt to save his books and papers. As he did so, the roof and walls fell in on him, but he was able to escape and ran to the main gate to summon medical assistance, which by now was badly needed. There he met William Bethell, Works Manager of the CPC, and together they returned to the site of the initial explosion to help rescue survivors. Narrowly escaping death or injury from the second and third explosions, they noticed that the roof of a nearby magazine containing 25 tons of TNT was on fire. By this time 'the scene was so terrible that they could get no-one else to follow them', so they alone climbed on the roof and put out the fire, thus averting a fourth major explosion.⁵³

The CPC Fire Brigade meanwhile were continuing their efforts, 'in circumstances of the greatest danger', to put out blazes which had started as a result of the series of explosions. Of the 19 members present, 7 were killed and several others injured, including young Steve Epps. The only survivor of a party of 7 who had been closest to Building no. 833, he was blown into a dyke, with a piece of timber on top of him. For a time, he was left for dead, but then when signs of life were noticed he was taken to hospital – where he was to stay for 19 weeks. 'When my wife came to the hospital the first time, she didn't recognise me. My sister went to the hospital that Sunday night – and the Monday and the Tuesday and the Wednesday – and she didn't recognise me either. She thought to herself, my brother's dead. Then she realised there was one who might be me, and she told my wife that the nurses wanted her to go to the hospital to make sure. So she went . . . Of course, I'd got a broken thigh-bone, a broken jaw, and four broken ribs, and I'd lost the use of my arm and hand on the side where my ribs had been broken. And my wife kept looking at

⁵² *Report.*

⁵³ *Report.* Other, relatively minor, explosions, though not recorded in *Report*, continued to occur during the afternoon (cf. *infra*).

me, and kept thinking "Is it Steve, or isn't it?" because she couldn't really recognise me properly. And then at last she looked again, and she said "Yes, that is him". And they said to her, "We're ever so sorry, but we haven't touched him yet, because we didn't expect him to live".⁵⁴

Three ELC staff – William Wallace, George Gilham and William Wiltshire (a serving soldier working at the factory by arrangement with his Commanding Officer) – showed particular courage, the first two working to control a fire while nearby explosives were removed, the third trying to prevent a building catching fire when it collapsed beneath him. Though severely shaken, he resumed work and 'rendered conspicuous service'.⁵⁵

The 29 members of the three Faversham brigades, when they arrived, also showed great gallantry. Summoned from the comfort and calm of a cold salmon lunch with his wife and three young children, Guy Tassell, Town Clerk and Captain of the Volunteer Brigade, worked with his team all afternoon in the danger zone, minor explosions continuing all the time. Present as Captain of the Kent Brigade, Charles Semark, a local engineer, helped remove more cases of TNT from threatened buildings and helped avert a fire at a magazine. Meanwhile James Goode, a local builder who was Captain of the Norwich Brigade, rolled hot shells into a dyke and prevented fire spreading to another TNT magazine. Sydney Wilson, as a member of the Volunteer Brigade, remembered staying till dusk to damp down any small outbreaks of fire but spending most of his time 'picking up whatever we could find to lead to the identification of the victims'. And when he and his colleagues finally returned to Faversham, they just had time to get something to eat before there was a Zeppelin alarm and they had to go on watch for most of the night.⁵⁶ Perhaps the most vivid measure of the importance of the fire-fighting work, and of the risks involved, is that according to one source there were 3,000 tons of guncotton in a store 'fairly close' to where the explosions occurred. 'If that had gone off, . . . it would have wiped out all the works, doctors, patients, soldiers, helpers and all'.⁵⁷

Rescue work went on at the same time as fire-fighting, and some of the most courageous and valuable was undertaken by two small military detachments. One group of ten soldiers, from the anti-

⁵⁴ *Sainsbury and Epps.*

⁵⁵ *Sainsbury*

⁵⁶ *Sainsbury, Wilson, Faversham Borough Annual and Directory 1916*, and personal communication from Bryan Tassell, Esq.

⁵⁷ *Evers.*

aircraft battery at Oare, were ordered to the ELC while the initial fire was still burning and arrived just as the first explosion occurred. Fortunately, none were injured and, under the leadership of Corporal C.T. Harris, they set about removing the injured to safety, throwing a makeshift bridge of hurdles and planks across a ditch. Two members of this contingent went looking for wounded in a burning building full of loaded mines and had just got clear when it blew up. The second, slightly smaller, detachment, was led by 2nd Lieut. J.M. Stebbings (2nd/3rd West Lancashire Brigade, RFA), who had commandeered a motor bus at 1.20 p.m. 'on information received'. It arrived 10 or 15 minutes later and immediately began rescue work, each victim having to be dug out of the mud and debris by hand. Both contingents also had to contend with the difficulty that many victims were on fire, so that their burning clothes had to be put out or torn off before they could be moved. And, at any moment, any of the rescuers themselves could have been killed by one of the minor explosions which followed the major ones.⁵⁸

The first doctors on the scene, both local GPs, were Charles Evers, from Faversham, and Prideaux George Selby, from Teynham, who both arrived soon after the second major explosion. Dr Evers had been warned by a telephone call, made from the Oare anti-aircraft battery after Corporal Harris's party had left, that there was a fire at the ELC and he might be needed. He was at lunch with his family and decided to carry on with his meal because 'there had been bad explosions on previous occasions and comparatively little damage done to life'. However, after a few minutes he and his family heard a loud explosion and, after ringing to check that he would be needed, he was driven off by his chauffeur, Amos, who had already, unbidden, gone to get the car.

Dr. Selby was accompanied by his wife Elizabeth, who was Commandant of Glovers VAD Hospital at Sittingbourne – of which he himself was Medical Officer throughout the war.⁵⁹ Mrs. Selby, the member of the Kent Archaeological Society already referred to, immediately set to work, first attending the injured from the first explosion and then going on to the scene of the second, where she

⁵⁸ *Sainsbury*.

⁵⁹ *Evers* and P.G. Selby, O.B.E., *The Faversham Farmers' Club and its Members 1727–1927*, Faversham, Voile and Robertson, 1927, (cited hereafter as *Selby*), 127–9. This is the oldest surviving club in the country and Selby's valuable book was written to mark its bicentenary. Mrs. Selby later wrote an equally valuable study of *Teynham Manor and Hundred (798–1935)*, first published in 1935 by Headley Brothers of Ashford and recently re-issued in facsimile with additional material by Meresborough Books of Rainham.

was when the third occurred. Thinking there might be some women who had been wounded, 'she went right into the area of the explosion without consideration of the risks she ran and remained on the scene for over two hours till all the injured had been evacuated'. In fact, apart from Mrs. Selby, there were no women on the site at the time.⁶⁰

More than 30 of those involved in fire-fighting and rescue work received awards, and Mrs. Selby was the first to do so, being invested with the silver life-saving medal of the Order of St. John of Jerusalem at a Chapter-General held on 28 July, 1916, within four months of the tragedy. Recognition by the nation took a little longer, partly because of war conditions and partly because of protocol problems. The *London Gazette* of 16 March, 1917, announced the award of the Edward Medal (2nd Class) – a civilian decoration – to the two factory managers, Evetts of the ELC and Bethell of the CPC; to Urbane Beech, John Harrison and John Sears, three members of the CPC Fire Brigade chosen by their fellow-survivors to be representative – since intimation had been given that no more than three nominations would be accepted;⁶¹ and to the three ELC staff already mentioned as having shown special courage in their fire-fighting efforts, Wallace, Gilham and Wiltshire.

The Mayor of Faversham (Dr. Sidney Alexander, another local GP who had been called out to Uplees and had helped treat the casualties)⁶² recommended decorations for all 29 members of the Faversham brigades, which had attended but, on the basis that only three had been allocated, on a representative basis, to the CPC Brigade, only the three Captains, Tassell, Semark and Goode, were honoured. In common with most other non-military, non-industrial firemen, they had to wait over 4 years for their awards, of the Medal of the Order of the British Empire,⁶³ to be gazetted on 7 July, 1920.

⁶⁰ *Sainsbury*.

⁶¹ *Sainsbury*. The CPC had a special silver medal struck to mark the official award to three members of its brigade. One, presented to the Faversham Society's collection at the Fleur de Lis Heritage Centre by Mrs. E.C. Page, of Russell Close, Bexleyheath, on 21 September, 1974 (accession no. 1974/194), is inscribed on one side 'to commemorate the Presentation by His Majesty King George of three Edward Medals to the Cotton Powder Co.'s fire brigade for their gallant conduct on April 2nd 1916 when seven of their number lost their lives in the execution of their duty' and on the other 'presented to Fireman Fred Manser by the Directors of the Cotton Powder Co. Ltd. in recognition of his services on April 2nd 1916'. If, as seems probable, similar medals were awarded to other members of the brigade, it was a neat way of 'sharing' the representative honours (cf. *Sainsbury*). An F. Manser was among those killed in the disaster, but it is not known whether he was Frederick and therefore this medal was awarded posthumously, or whether there was an Alfred Manser who was the recipient.

⁶² *Evers*.

⁶³ Known as the British Empire Medal after December 1922.

At the same time, at the suggestion of the CPC management, similar awards were made to three further members of the CPC Brigade, Steve Epps,⁶⁴ Herbert Foley and Stephen Sayewell.

Corporal Harris and all 9 members of his party from the Oare anti-aircraft battery were awarded the Meritorious Service Medal on 12 March, 1917. 7 members of the rescue contingent led by Lieut. Stebbings were similarly honoured on 12 December, 1917, but, for complicated protocol reasons, Stebbings' own gallantry was not recognised until 22 April, 1918, when he was awarded the Edward Medal, for which by now military personnel involved in rescue work at civilian disasters were eligible. At the same time, two members of his detachment and two of Corporal Harris's were similarly honoured.⁶⁵

Ultimately, Mrs. Selby's courage also achieved national recognition when she was appointed an M.B.E.⁶⁶ A similar award, made in the 1920 New Year Honours to Mrs. Myra Banner, the ELC Welfare Supervisor, probably reflects work she did for the suffering, widowed and orphaned after the disaster.⁶⁷ Other awards made at about the same time may have taken into account services rendered following the explosions. Dr. Selby received the O.B.E.,⁶⁸ partly no doubt in recognition of his work at the Sittingbourne VAD Hospital; Bethell, the CPC Works Manager, was appointed M.B.E. in the 1918 Birthday Honours;⁶⁹ and Dr. Alexander, who having been elected Mayor in 1910 went on to serve longer – till 1920 – than any of his predecessors or successors was honoured with a Knighthood.

As far as is known, there survive no detailed impressions nor any photographs or other illustrations of the devastation wrought by the explosions.⁷⁰ Certainly, as already noted, the interests of national security dictated that contemporary newspaper reports should be as brief and oblique as possible. Therefore, there are no vivid (even lurid) accounts such as survive for the 1847 guncotton disaster at Faversham's Marsh Works.⁷¹ However, writing four days later, Dr. Evers recorded that once he had got beyond Oare (after the first explosion but before the second) he could see 'a tremendous volume

⁶⁴ Cf. *supra*.

⁶⁵ *Sainsbury*.

⁶⁶ *Selby*.

⁶⁷ *Sainsbury*.

⁶⁸ *Selby*.

⁶⁹ *Sainsbury*.

⁷⁰ The report of the Coroner's inquest may include some impressions, but is still embargoed.

⁷¹ Cf. *supra*.

of . . . flames and smoke', which fortunately was being carried away from the works, presumably by a breeze in some southern quarter. Just as his car was nearing the factory gates, round which a big crowd was gathering, there was a 'tremendous burst of flame, followed by, at what seemed ages long, an appalling report', and the crowd 'fled for their lives'. He and his driver did not seem to feel the shock (or were too on edge to register it, perhaps) and were allowed to drive on. 'A continuous stream of injured men were dribbling in – pitiable objects. Some had been blown into dykes and were wringing wet and shivering with shock; many were shaking all over. Some were brought on trolleys,⁷² some carried, some helped along. One man cheerfully proclaimed that he had a broken leg, which I set Amos on to put up (it was not compound). Others were bleeding and some had half their clothes torn off or burnt off – an awful procession. . . . Even then we did not realise the full extent of the disaster, as we had not penetrated to the heart of things and could do no more than attend to those who kept coming up faster than we could deal with them. We had not time to realise that behind that curtain were the worst stricken men, who could only be moved very slowly, and a number that need never be moved at all, for no help could restore them. . . . Five of the national reserves who were on guard were killed instantly: of one, nothing but his rifle was ever found. . . . The vagaries of the explosion were many: two men side by side – one killed instantly, the other hardly hurt; a number of men between 30 and 40 yards away from the explosion unharmed, while men 100 yards away were blown to pieces . . . ; men had all their clothes blown off them and were yet unhurt'.⁷³

Then, as now, Faversham had only one very small general hospital, the Cottage Hospital in Stone Street, in the town centre. There were only 10 beds and, though in normal circumstances, these might have been enough to meet the needs of a small town of 10,000 people and the outlying areas,⁷⁴ they could not be expected to cope with a major disaster. Fortunately, however, some other facilities existed. There was an infirmary at the Workhouse⁷⁵ in Lower Road, about a mile west of the town centre; and two local mansions were in use as temporary military hospitals – The Mount, an eighteenth-century house just east of Ospringe on the London Road,⁷⁶ and Lees Court,

⁷² Perhaps a reference to the 'bogies', or small narrow-gauge railway vans, that were operated on the factories' extensive goods tramway system.

⁷³ *Evers*.

⁷⁴ *Faversham Borough Annual and Directory 1916*.

⁷⁵ Now Bensted House Hospital and old people's home.

⁷⁶ Now converted into Council flats.

the big house built at Sheldwich for Sir George Sondes in 1652 in a Renaissance style remarkably full-blooded for its date.⁷⁷ Before he left for the ELC, Dr. Evers had rung both the Cottage Hospital and The Mount to warn them that as many beds as possible would be needed. As Medical Officer at The Mount,⁷⁸ he also gave instructions that accommodation outside the hospital should be found for any military patients who could be moved. The staff turned up trumps and offered twice as many beds as were needed. Lees Court Hospital was also alerted and no doubt the Workhouse infirmary, too. It spoke well for the spirit of Faversham, Dr. Evers noted, 'when one considers that at one o'clock there were about 25 empty hospital beds in the place, . . . that by five o'clock about 100 cases had been treated and accommodated in hospital and not at all in makeshift manner.'⁷⁹

Meanwhile at the ELC ambulances, lorries and service personnel began to arrive, first in a stream and then in a flood, to tend the injured and ferry them to the hospitals. Some patients were even taken by barge to Sheerness. Dr. Evers decided that he could be more use back in Faversham and since he could not find his chauffeur, who was no doubt continuing to tend the wounded, drove himself back with one of the injured propped up in the back seat by a soldier – 'otherwise he would have sat down in a heap on the bottom'. The journey back along that 'narrow, bumpy road' was a 'nightmare', with an 'avalanche' of traffic coming in the opposite direction. In the town, a particular hazard was the narrow, blind T-junction (since progressively eased) which Tanners Street made with West Street, on the western edge of the area then built-up. 'Traffic was coming into the town, and the lorries and cars from Chatham were coming through Tanners Street'. This was long before the days of traffic police or wardens 'and the situation looked dangerous until A. Clements, who worked at CPC and lived in Tanners Street, took over traffic control at this point for the rest of the afternoon, doing a splendid job'.⁸⁰

Faversham, when Dr. Evers arrived, was 'a sea of faces', with no-one gladder to see him than his wife, Annie, who had been worried in case her husband had been killed or injured. She was hard at work at the Cottage Hospital, where 20 patients had been admitted although at mid-day there had been only 6 empty beds. Dr. Alexander's wife was equally busy, having commandeered the nearby

⁷⁷ Now converted into private flats. For a good account of the house by Christopher Hussey, see *Country Life*, 12 and 19 August, 1922.

⁷⁸ *Faversham News*, 29 November, 1957.

⁷⁹ *Evers*.

⁸⁰ *Twist*, 22.

Salvation Army Hall and taken only 60 minutes to convert it into a temporary 16-bed ward: 'people came running up from all parts of the town with beds, bedding, hot water bottles and anything they could lay their hands on, and patients were soon as well off there as in the other hospitals'. Other patients had been taken to Lees Court, the Workhouse Infirmary and The Mount, where, as Medical Officer, Dr. Evers felt it his duty to go. 'The scene there was awful – every bed was full, and still they came. We put down mattresses in the lounge. We had about 20 empty beds and took in 36. . . . Doctors and helpers kept turning up from all directions – Canterbury, Margate, Ramsgate, Maidstone, Ashford, Sittingbourne, Herne Bay, Whitstable – there was work for everyone. . . . At last the rush ceased and we began to tackle the poor men in earnest'.

They 'were dirty, wet, cold, bleeding, groaning, insensible, and every bed and linen was immediately of course stained the minute they were placed in them. . . . Their clothes had simply been thrown out into the garden: those of the 8 men in Ward 2 would not have made one decent suit amongst them'. While Dr. Evers injected morphia and strychnine where necessary, the Faversham VADs, later augmented by most of the Whitstable detachment with their Commandant, dressed and bandaged wounds. They 'set to work like professionals, and did *anything*, and did it well and coolly'.⁸¹ The stories they heard, too, were extraordinary: 'one man had been blown through a window, clean through a window, and Mrs. Andrews, the [Borough] Surveyor's wife, spent practically the whole afternoon taking small pieces of glass out of his face. [With] others we were told to do just whatever we could. We took our scissors and slit up their clothes to get them out. One man had been thrown straight into water, so you had to get him out of his very wet clothes, in which he was shivering. . . . We were given more or less *carte blanche* to do whatever we could for them, . . . and we were just busy, oh, until quite late at night.'⁸²

By about 6 p.m. most urgent work at The Mount was complete and Dr. Evers (who had been joined by his wife) felt that he could take a quick break for supper at home.⁸³ After returning to the hospital to find 'system and order being gradually installed', he finally went to bed, only to be woken by the air raid siren soon after 11.30. While his wife got up and dressed, he decided to chance it and stay in bed. Fortunately, the only other disturbance that night in Faversham was

⁸¹ *Evers*.

⁸² Miss Melice Telfer, recorded by Tom Robinson for the Faversham Society, 1963/4.

⁸³ 1 Albion Terrace, South Road, now 11 South Road.

the sound of the 'All Clear'. However, in Doddington an ambulance-man who had helped with the dead was so horrified that he went home, laid awake all night, got up on Monday morning and then hanged himself.⁸⁴

The disaster continued to take its toll in Faversham, too. When Dr. Evers started his hospital rounds at 9 o'clock on Monday morning he found that six of the casualties had died during the night, one at The Mount, two at the Cottage Hospital, and three at the Salvation Army Hall. However, enough of those with minor injuries had been discharged to make it possible to close the temporary ward at the Salvation Army Hall and transfer its remaining patients to proper accommodation elsewhere – two to The Mount and ten to the Workhouse Infirmary.

Now, recalled Dr. Evers, 'the great business was answering the poor relatives who were hunting for their husbands, fathers, sons and brothers – most heart-rending! People [were] going from one hospital to another, tramping about for hours in search of those whom they might never find – and some have not been found at all'. Difficulties were compounded by the fact that many of the victims lived 20 or 30 miles away and that the factory personnel records were not comprehensive.⁸⁵ Eventually, after a lot of difficulty most of the hospital patients were identified and a list was posted at the front gate of The Mount. 'But as long as there remained one man not named, of course people kept asking to see that man, in case he was the one they were in search of. Now and then someone found what they wanted and departed joyfully if he was not too bad'.

Syd Twist, a 17-year-old apprentice fitter and turner with the CPC, visited the site of the explosions the same morning. 'The bodies . . . were on wattle gates, filling the cycle shed, with others in Dan's old tile works.⁸⁶ At dinner time I walked over to the ELC. . . . The boiler-house had disappeared, one boiler lying on its side just outside where the boiler house had stood and the other lying in the dyke about 25 to 30 yards away'.⁸⁷

⁸⁴ Evers.

⁸⁵ Syd Twist, reported in *Faversham Times*, 26 January, 1984.

⁸⁶ Just outside the CPC gate, on the east side of the approach road. From about 1860, Samuel Dan operated a brickfield on the opposite side of the road (see Fig. 2) and this and the tileworks closed in 1906. The site, or most of it, was acquired by the CPC, but the brick-making shed and tileworks buildings remained standing till 1918. The main track leading down from Uplees through the CPC to the Swale had been built by Dan as a tramway to the dock he built and which, though now long derelict, still bears his name (see Fig. 2). See Syd Twist, *Stock Bricks of Swale*, Sittingbourne Society, 1984, 15, and *Twist*, 11.

⁸⁷ *Twist*, 22.

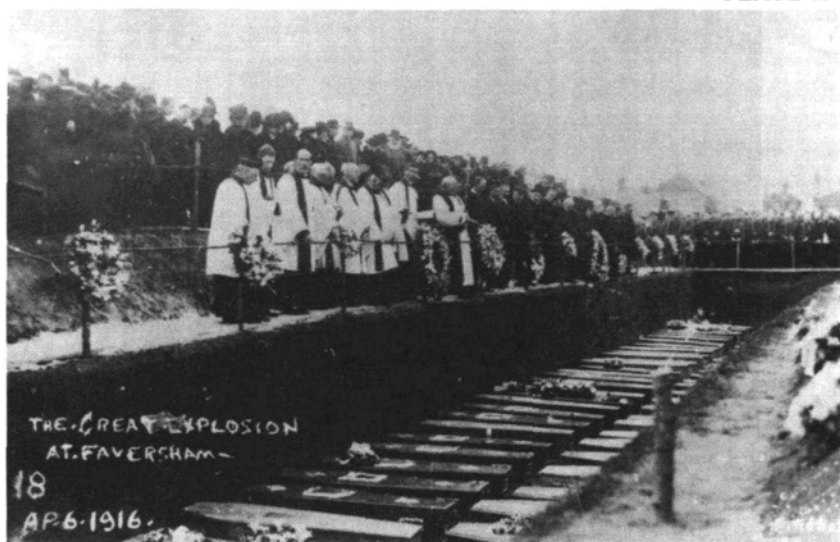
During the day official visitors began to arrive. First, with welcome offers of help, were representatives of the county authorities. Then came representatives of the Army and Munitions Board – Sir Leslie Rundle, Chief of Eastern Command, and Major-General Sir Stanley von Donop, K.C.B., Master-General of the Ordnance. All were sympathetic and full of admiration for what had been achieved to care for the injured. At about tea-time Dr. Evers's own son, Norman,⁸⁸ arrived, and was very relieved to find that things were not far worse. He was living well outside the area and had heard rumours that half the town had been wrecked. His fears had hardly been allayed when he had tried to put a telephone call through to his parents but had been told that no long-distance Faversham calls could be accepted. So he had taken a train down to find out for himself. He was thankful to find the town intact, 'but with mournful groups of people about the streets and a general air of something very serious having happened'. He left again at about 6.30 p.m. after meeting his parents at The Mount.

On Tuesday, 4 April, there was one more death at The Mount, but this was to be the last caused by the disaster of which Dr. Evers knew when he completed his account on Sunday, 16 April. From then on all the injured made a steady improvement. The inquest began on Wednesday and was completed on the following Thursday (11 April), but Dr. Evers was not asked to attend and, of course, saw no report of it in the local papers, because none was published. Indeed, the Coroner's report is still embargoed, nearly 70 years later, but it is known that the jury returned a verdict of 'accidental death caused by shock and injuries received in an explosion due to an accidental fire, cause unknown', and added a number of riders.⁸⁹

Even allowing for the fact that 40 of the dead were buried elsewhere, there were so many to be buried in Faversham that a vast mass grave – for 69 coffins – had to be dug at the cemetery in Love Lane. Joining in the solemn procession from the Market Place on the afternoon of Thursday, 6 April, were the Mayor (Dr. Alexander), Corporation and military guards of honour. The service, attended by about 400 private mourners, was conducted by the Archbishop of Canterbury, Dr. Randall Davidson. Unusually for the period but understandably in the circumstances, it was interdenominational, and every local minister took part (Plate IIb). After the ceremony, Dr. Davidson visited all the local hospitals, speaking to every patient and being 'exceedingly nice'. On the following Friday and Saturday,

⁸⁸ 1887–1974 – information from his nephew, David Evers.

⁸⁹ The Coroner's report is still embargoed. For the verdict, see Faversham Police Station Incident Book (held at the County Record Office), F1193/16.



Fleur de Lis Heritage Centre, Faversham

Faversham Cemetery: Burial of Victims of the Great Explosion in the Mass Grave, 6 April 1916.

another 6 victims were buried in private graves at the cemetery. All 75 were explosives factory employees and had died on the day of the explosions. A week after the main funeral, another body was found in a ditch near the scene of the main explosion and buried in the same mass grave. Two ambulance-men were also killed and Dr. Evers attended the funeral of one, at Doddington, on the Friday.⁹⁰

If Dr. Evers is correct in saying (two weeks after the event) that 40 of the dead were buried elsewhere, then *The Times*, in reporting (more than three weeks afterwards)⁹¹ that 106 people had lost their lives, underestimated the toll. Probably, the exact number of dead will never be known for certain, but if to Dr. Evers's 40 are added the 75 who all died on the day of the explosions, and the one who was found later and buried in the mass grave, then the total is 116. This takes no account of the two ambulance-men (at least one of whom was probably included in Dr. Evers's 40), five members of the military guard⁹² or one casualty known to have died in hospital on

⁹⁰ *Evers; The Times*, 7 April, 1916; Sydney Wilson, brief duplicated *History of Oare* in the possession of the Faversham Society.

⁹¹ 27 April, 1916.

⁹² *The Times*, 27 April, 1916.



Arthur Percival

Faversham Cemetery: Memorial over the Mass Grave of Victims of the Great Explosion of 2 April 1916, 1984

Monday night. However, the best estimate is afforded by the memorial in Faversham Cemetery, which records 73 victims as having been buried in the mass grave and 35 as being interred elsewhere, making a total of 108.⁹³

The Cemetery Register⁹⁴ reflects just how gruesome the catastrophe was. Of the 69 dead buried in the mass grave on 6 April, 1916, only half (34) could then be definitely recorded by name. The other half (35) could not be individually identified, though 5 are tentatively named. The Register – signed in each case by the Registrar, Guy Tassell, who as Captain of the Volunteer Fire Brigade had served at the scene – simply records in each case ‘a male person unknown’. The two youngest victims were both aged 17, the oldest 61, and nearly

⁹³ This means that in fact four other victims were buried in the mass grave after the main burial on 6 April.

⁹⁴ Held at the Swale Borough Council’s Faversham District Office at the Alexander Centre, Preston Street. The Centre comprises offices and a magistrates’ court housed in what was once a private house (Gatefield House) and a hall built on the former garden. The Centre was named after Sir Sidney Alexander (cf. *supra*), who lived in the house for many years, including the duration of the 1914/1918 War.

half in their 30s or 40s – a pretty severe blow to family life, if these figures are representative.⁹⁵

Over the mass grave was erected a memorial (Plate IIIa) comprising a long raised lawn bounded by a granite plinth, with low steps at each end and a granite cross 12 ft. 6 in. high in the centre. The overall length is 103 ft. 4 in. and breadth 14 ft. 5 in. The memorial was dedicated on Thursday, 27 September, 1917, at a service attended by all the male staff of the CPC and ELC and 24 representative women staff.⁹⁶ Inscribed on the face of the cross at its base are the words:

SACRED TO THE
MEMORY OF THE MEN
WHO DIED IN THE SERVICE OF THEIR
COUNTRY 2nd APRIL 1916
'FATHER IN THY GRACIOUS KEEPING
LEAVE WE NOW THY SERVANTS SLEEPING'

The complete list of those buried in the grave is recorded on the plinth. The names are as follows:⁹⁷

Appleton, W.
Ashby, A.
Baker, Edward (18)
Beach, Henry George (18)
Beale, John William (19)

Beer, Frederick John (25)^{97a}
Beesley, Arthur William (35)
Butler, Matthew (55)
Catlow, Private William (46)⁹⁸
Chambers, Thomas (52)

Chandler, Alfred Henry (24)
Chantler, W.
Chidwick, A.G.
Clements, S.S.
Clubb, S.H.

⁹⁵ Ages are recorded in the Register only in cases where the dead could definitely be identified. These figures take into account the six burials on 7 and 8 April as well as the 34 named ones on 6 April.

⁹⁶ Information from Mrs. Elsie Summers, the author's next-door neighbour, who joined the CPC staff in 1917.

⁹⁷ They are given in apparently random order on the plinth but have been put in alphabetical order in this list. Christian names and ages have been added where the information is available in the Cemetery Register (cf. *supra*) or from other sources (cf. references 99, 101 and 102).

^{97a} Of 76 Ospringe Road, Faversham (*Faversham News*, 15 April, 1916).

⁹⁸ Recorded as 'Callow otherwise Adams' in the Cemetery Register.

A. PERCIVAL

Collins, J.
Court, Private Edward (49)
Cox, Sidney Herbert (33)
Crawford, James (49)
Davy, Ernest George (32)

Dowsett, Private
Dray, Henry Thomas (57)
Faircloth, W.
Farthing, E.J.
Freestone, Arthur Lindley (52)

Garland, Charles Timothy (23)
Gilbert, F.W.
Goatham, Archibald William (30)⁹⁹
Goodwin, Arthur (41)
Goord, L.F.

Hall, George (33)
Harding, Private John (46)
Hoare, J.
Holbourn, Sydney William (38)
Jarman, J.R.J.
Jarrett, Frederick Thomas (17)
Jarvis, Private William Edward (40)
Lane, T.
Lloyd, L.H.
Lloyd, Sidney (26)

Lyons, B.A.
Manser, F.
Morris, J.W.
Morris, W.T.
Palowkar, Rickman Mannery Moore (31)^{99a}

Penning, E.R.
Phillips, A.
Philpott, A.J.
Reader, Robert Daniel Pierce (37)
Robus, G.F.

Saddington, J.
Selmes, William Charles (20)
Singer, George (61)¹⁰⁰

⁹⁹ Of 8 St. Paul's Street, Milton Regis (*East Kent Gazette*, 15 April, 1916).

^{99a} Of Edith Road, Faversham (*Faversham News*, 15 April, 1916).

¹⁰⁰ Recorded as 'Linzer' in the Cemetery Register.

THE EXPLOSION AT FAVERSHAM, 1916

Skinner, H.
Spillett, J.

Stacey, T.
Stickels, Charles James Stephen (18)
Stickens, William John (27)¹⁰¹
Stock, R.
Terry, Harry (27)¹⁰²

Turner, W.
Wade, Philip George (20)
Walker, Henry Charles (52)
Waller, W.T.
Warren, C.J.

Warren, E.J.
Wellard, Monti Alfred (43)
Wellfare, Walter James (41)
West, Edward (56)
Wiles, Frank (45)

Williams, J.
Wood, Herbert (26)
Wood, W.H.A.

Also recorded on a single stone slab in front of the cross are the names of those 'who lost their lives on the same occasion and are buried elsewhere at the request of their relatives and friends'.¹⁰³

Anderson, E.
Bartlett, J.E.
Beaney, W.
Bleackley, T.H.
Bushell, E.

Chadwick, William Ellis (35)
Clarke, T.A.
Coe, F.
Cole, A.E.
Cornwell, G.

¹⁰¹ *East Kent Gazette*, 15 April, 1916.

¹⁰² *East Kent Gazette*, 22 April, 1916.

¹⁰³ These also are given in apparently random order in the inscription. Five are actually listed in the Cemetery Register as having been buried in the mass grave but, presumably, they were mis-identified at the time. For these five, it is therefore possible to give Christian names and ages.

A. PERCIVAL

Dawkins, Edwin James (34)^{103a}
Driscoll, A.
Fedarb, Albert Leslie (17)^{103b}
Godden, W.J.
Jarvis, H.G.

Kerrison, C.W.
Kittle, G.
Legg, E.
Maley, W.S.
Mills, William (59)

Perryman, A.J.
Pilcher, H.
Powell, George John (31)^{103c}
Randall, T.W.
Richards, N.G.

Scrogie, W.
Southam, G.
Sutton, J.
Taylor, C.M.
Taylor, F.L.

Taylor, H.B.
Vincent, S.C.
Webb, C.A.
Wright, L.S.
Wyles, Frederick George (25)

Not all those buried in the mass grave came from the Faversham area¹⁰⁴ and, indeed, many of the great Faversham families seem to have suffered no bereavement. Certainly among the victims there are an Anderson, Baker, Chambers, Clements, Coe, Godden, Mills, Philpott, Spillett, Wood and Wyles, but there are none of the name of Dane, Ely, Epps, Gregory, Hawkins, Hills, Hogben, Jemmett, Luckhurst, Mannooch, Marsh, Page, Pepper, Ralph, Rogers and Swan. The impression is that many of the victims, even if they lived in the area, did not have local roots. Possibly, they had been recruited from other industries outside the area to swell the war-time workforce at the ELC factory. There is some evidence that in the

^{103a} Of 27 Kingsnorth Road, Faversham (*Faversham News*, 15 April 1916).

^{103b} Of 12 St Mary's Road, Faversham (*Faversham News*, 15 April 1916).

^{103c} Of 14 Abbey Street, Faversham (*Faversham News*, 15 April 1916).

¹⁰⁴ Cf. reference 99 *supra*.

explosives industry, as in others, skills tended to be handed down from father to son, and so on, but whether any of the Faversham 'explosives' dynasties lost any of their members in 1916 is impossible to say at present. It may just be worth noting, since a Sutton and a Webb were among the victims, that two of the first name and three of the second were among 178 employees at one of the Faversham gunpowder factories listed in a return made to the Board of Ordnance on 29 February, 1796.¹⁰⁵

What caused this great disaster? As ever in cases of this kind since the 1875 Explosives Act had come into force a Government Inspector, in this case Major A. Cooper-Key, C.B., H.M. Chief Inspector of Explosives, undertook an inquiry. He completed his report very promptly – on 17 April, 1916. Normally, it would have been published but in war-time it was not: however, a copy is lodged in the Library of the Health and Safety Executive at Bootle. Usually, as in this case, it was impossible to be 100 per cent certain about the cause of an accident, and the Inspectors then adopted the 'Holmesian' technique (though they had developed it before Sherlock Holmes was created) of listing all possible causes and systematically eliminating those that seemed least likely, till the most probable was left.

In this case, Major Cooper-Key identified four possible ways in which the empty TNT bags outside Building no. 833 could have caught fire. Somebody could have thrown a cigarette-end or glowing match on the heap; the bags could have ignited spontaneously; somebody could have deliberately put a match to them; or a spark from the nearby boiler-house could have been responsible. The first three possibilities he discounted one by one. Employees were not allowed to bring matches into the factory and they could smoke only in mess-rooms.¹⁰⁶ Particularly as the importance of this rule had recently 'been emphasised by prosecution and fine' and because the fire had first been noticed 'just *before* the dinner hour'¹⁰⁷ (i.e. some time before any workman could have emerged from a mess-room smoking a cigarette he had forgotten to stub), Major Cooper-Key thought it unlikely that a discarded cigarette-end was the culprit.

¹⁰⁵ PRO Supply 5/72.

¹⁰⁶ Cf. *General and Special Rules of the Cotton Powder Co. Ltd.* (6.12.1916) in the Faversham Society's collection at the Fleur de Lis Heritage Centre. Though issued after the 2 April explosions such provisions were common form, as required by the 1875 Explosives Act and ancillary regulations, and so doubtless were in force for many years prior to the disaster. Equally though these Rules were those of the CPC, it can be assumed that similar ones were in force at the ELC.

¹⁰⁷ Though this is not precisely correct, if the staff broke for lunch at 12 noon and the fire was first noticed at about 12.10 p.m. – cf. *supra*.

Spontaneous ignition he also felt an improbable explanation, if only because flames were first seen 'low down at one corner'. As to the possibility of a deliberate act, 'an unsupported surmise of this nature amounts at most to the vaguest suspicion': with a military guard 128 strong and 28 civilian patrolmen (though not all, of course, simultaneously on duty) it would have been difficult for any intruder to go unchallenged; no employee should have been carrying matches and, if he had brought any, would have had them taken away when searched on arrival at the factory gates; and, in any case, 'no-one could have foreseen that the ignition of these bags would have had such serious consequences'. This left the final possibility – of a spark from the boiler-house having started the fire which led to the explosion. Especially since two patrolmen¹⁰⁸ had reported that such sparks had started a small fire on the night before, this seemed 'by far the most probable explanation of the fire'. In view of the fact that the fire might not have led to an explosion in Building no. 833, if it had not contained both TNT and ammonium nitrate, Major Cooper-Key went on to recommend that in future these two materials should be stored 'in different buildings so situated that even in case of a fire involving both they cannot come into contact with one another'. He notes that, in returning their verdict of accidental death on all victims at the end of the inquest on 11 April, the jury acquitted the management of all blame and added a rider suggesting that the Home Office should require the provision of more efficient fire appliances in explosives factories.¹⁰⁹

It is possible, though perhaps not very fruitful, to question the Inspector's interpretation of the evidence. For example, though the successful prosecution for breach of the factory rules on smoking and matches could have proved an extra deterrent, as he argues, it also indicates that the rules *were* being infringed, and in war-time with the need for rapid staff recruitment standards of conduct may have declined. Equally though the Inspector concedes (obliquely) that a member of staff (rather than an intruder) could have started the fire deliberately, he does not speculate on the possibilities that the motive could have been a grudge of some kind or that an employee whose mental balance was disturbed could have been responsible.¹¹⁰ And the

¹⁰⁸ Cf. *supra*.

¹⁰⁹ *Report*.

¹¹⁰ Twice, within two years, there were explosions at glazing houses at the Marsh Gunpowder Works, Faversham (on 21 February, 1879, and 11 December, 1880). H.M. Chief Inspector of Explosives seriously considered temporary insanity as a possible cause of the first and reluctantly concluded that the second was 'wilfully brought about by some evil disposed person' (published *Reports* dated 17 March, 1879, and 21 February, 1881, H.M.S.O. references C.-2298 and C.-2864 respectively).



Fleur de Lis Heritage Centre, Faversham

Cotton Powder Company, Faversham: Staff starting their Journey Home up the Track from Dan's Dock (looking North to the Isle of Harty), c. 1918.

fact that 'no-one could have foreseen that the ignition of these bags would have had such serious consequences' is not necessarily an argument against a deliberate act. A remote possibility is that the cause was not one of those listed by the Inspector. Melice Telfer recalled that in Faversham in the morning before the explosion 'we had noticed smells . . . which told us that there was a large turf fire'. Sydney Wilson also remembered that 'there had been a fire there [sc. at the ELC] during the morning, but not a great deal of importance had been attached to it; but it was getting out of control and so they sent into the town for the fire brigades'. These testimonies date from 1963/4,¹¹¹ nearly 50 years after the event, so memories could be at fault. However, the two accounts were recorded independently of one another and the two witnesses' other recollections of the event accord accurately with other evidence.

All accounts are perhaps best reconciled by Syd Twist,¹¹² who was at work at the CPC that morning – Sundays were busy for maintenance staff. 'As early as 9 o'clock I heard there was a fire at the ELC

¹¹¹ Recorded by Tom Robinson for the Faversham Society.

¹¹² There were rumours at the time that a German spy had started the fire, but there was no evidence of this, and the late Charles Cook, of Birchington, who was employed at the CPC from 1914 to 1917, had read Syd Twist's account and thought it 'probably correct' (personal communication, 20 April, 1981).

and, going upstairs in the fitting shop, could see the smoke at the end of a building. At that time TNT was not considered dangerous unless detonated by another explosive and it was thought that it would only burn. They put the fire out with buckets (or thought they had) and left it. About 10.30 to 11.00 it suddenly flared up, catching the side of the store. They fought the fire for a time but about 11.30 sent an SOS to the Guncotton fire brigade. I had managed to get off at 12 o'clock and, as I was walking to the gate, which meant passing the cordite ranges, I saw the firemen laying the hose from the hydrant nearest the ELC – a distance of 400 to 500 yards. They collected the hoses from all over the factory and by about 12.15 to 12.20 had laid enough for one nozzle. I had got home by cycle and was just washing, about 12.30, when we heard and felt the explosion. . . . What apparently had happened was that by the time the firemen had got water there, the fire had spread all over the stores building, melting the outer boxes of TNT and causing sufficient heat inside to create spontaneous combustion.¹¹³

David Lloyd George, as Minister of Munitions, had formed a five-man Standing Committee 'to enquire into the causes of explosions at Government and controlled factories' and this promptly met to consider the Faversham disaster and the report on it by Major Cooper-Key, one of its own members. Its own report, submitted to the Minister some time in May 1916 and classified 'Secret' at the time, endorses Cooper-Key's diagnosis of the cause of the fire which led to the first explosion and adds that the Committee were of opinion that there was no evidence of, or reason to suspect, malice or design.

The members were clearly appalled by the number of oversights and shortcomings which the explosion had revealed, but stopped short of actually accusing anyone of misjudgement or negligence. They could not fail to be aware that war-time conditions were difficult and that 'when the maximum output of every factory is essential, when there is a shortage of labour, and when the labour there is not in every case efficient, it is very difficult to carry on work in the same careful and methodical manner as in normal times.' And though they admired the 'bravery and energy' of George Evetts, the ELC Works Manager, they clearly had some doubts about the wisdom of his

¹¹³ *Twist*, 21–22. Though the precise times do not exactly accord with those noted by Major Cooper Key in his official report, the sequence of events sounds very plausible and Mr. Twist was on the site until not long before the first explosion occurred. Though small quantities of TNT will only burn if ignited, larger ones will burn more and more fiercely and often finally explode: 'heat is evolved more rapidly than it can be dissipated, raising the temperature of the explosive until it eventually explodes by reason of the energy imparted to it' (*Text Book*, 30).

decision (made, it should be added in fairness, in a tense situation) to handle boxes of TNT while a fire was burning close at hand. 'It is difficult, as circumstances must vary greatly, to lay down very definite instructions as to the course to be pursued. . . . If, however, a prompt use of fire buckets and of hydrants, if they are immediately available, does not succeed in at once extinguishing the fire, then, in our opinion, everyone should be withdrawn to a safe distance.'

This, in fact, was their eighth and final recommendation. The other seven, which they urged should be passed on to all Government and controlled munitions factories, called for:

- * boiler-houses to be kept as far away as possible from danger buildings;
- * plenty of buckets filled with water to be available always in all buildings and proper fire hydrants to be provided where possible;
- * part-time works fire brigades to be formed, and trained by a qualified fireman in the use of the various appliances at their disposal;
- * accumulations of empty boxes, bags, refuse or any inflammable substances to be forbidden;
- * stocks of explosives or their ingredients for which proper storage was not available but which had to be kept on site to be placed as far away as possible from other buildings;
- * TNT and ammonium nitrate never to be stored together in the same building; and
- * all conditions and terms of licences to be strictly adhered to.¹¹⁴

Though the ELC factory had been devastated by the explosions it was soon rebuilt and back in full production. In 1918, there was another explosion at Uplees, this time at the CPC, and though this did widespread damage the buildings were not reinstated as the end of the War was in sight. The need for retrenchment after the War had already been foreseen and, in November 1918, after negotiations between the various firms, a holding company, Explosives Trades Ltd., with an authorised capital of £18m., was formed and took over most of the major businesses in the industry, including in Faversham not only the ELC and CPC but also Curtis's and Harvey Ltd., who by then owned the three local gunpowder factories, and Eley Brothers Ltd., which had a small works at Harty Ferry. The merger was carried through by Sir Harry (later Lord) McGowan, Managing Director of the largest firm involved, Nobel's Explosives Company

¹¹⁴ *Standing Committee.*

Ltd., who became the first Chairman and Managing Director of the new holding company. In fact, Nobel's had already acquired interests in the CPC (in 1911) and the ELC (at its formation in 1912). In 1920, not long after the merger, Explosives Trades Ltd. was renamed Nobel Industries Ltd., but all this time, as it was only a holding company, the individual concerns retained their individual names.

Following the amalgamation there was a rapid process of rationalisation. Almost all production ceased at the three Swale-side factories (ELC, CPC and Eley Brothers), the ELC moving to Denaby, near Doncaster, and the CPC to Ardeer in Ayrshire. Most of the buildings were of light, softwood-frame construction, and were either burnt (if irretrievably contaminated with explosives and therefore dangerous to re-use) or (if not) dismantled and sold off for re-erection for alternative purposes locally. From 1925 to 1930, the ELC used a few of its surviving sheds, and employed about 20 people, filling shells. Meanwhile, in 1926, Nobel Industries Ltd. was amalgamated with other interests controlled by Sir Alfred Mond (later Lord Melchett) to form Imperial Chemical Industries Ltd. (ICI) and two of the remaining Faversham gunpowder factories (the Oare and the Marsh Works) were modernised. However, in 1934, ICI decided to close all three and transfer production to Ardeer. The few surviving works buildings at Uplees saw their last operative use in 1934–36, when two magazines, the gate lodge and a small corrugated iron laboratory were occupied by 15 to 20 staff packing and despatching the residual stocks of powder.¹¹⁵

What had once been the scene of a major disaster – as well as a showpiece of contemporary technology – quickly reverted to pasture (Plates IIIb, IVa and b). Today most of the area is one of idyllic, if breezy, calm, with larks overhead and only the odd rabbit to provide a touch of excitement as it scampers among the grazing cattle or sheep. A magazine or two, some low earthworks, a scattering of concrete foundations, the remains of a dock and jetty, and a couple of artesian wells (the one at Eley Brothers still gushing and much patronised by yachtsmen) are all that afford a clue to the area's quite recent past. The east end of the CPC site was worked for gravel until not long ago, but the grading plant now stands derelict and, apart from one pond used for angling, the disused pits and some of the CPC earthworks built into the ridge to the south are being steadily submerged by a strange tide of foam and rubber discarded from cars being recovered for scrap by the Sheerness Steel Company Ltd.

¹¹⁵ *Percival*, 24–25; *Twist*, 20; evidence presented at a public inquiry on 20 May, 1969, into an appeal against refusal of planning application NK/9/68/114/9840.

THE EXPLOSION AT FAVERSHAM, 1916

PLATE IVa



Arthur Percival
Cotton Powder Company Site, Faversham: the Track to Dan's Dock (looking North-east to the Isle of Harty), 1984.

PLATE IVb



Arthur Percival
Sites of Explosives Loading Company (right, foreground) and Cotton Powder Company (right of dyke), 1984 (looking East): the Swale at high Tide, the Isle of Harty on the left, and the Blean in the Distance.

Even cartographers make mistakes, however, and notwithstanding that to all intents and purposes use of the area for explosives manufacture and processing had ceased by 1920, the site continued to appear as 'Powder Works' on a well-known and popular commercial map of Kent till the early 1970s. Possibly, it was this which first encouraged a business consortium to put forward proposals for a large-scale marina on part of the site in the mid-1960s. Certainly, at the public inquiry held into the scheme, it appeared that they had thought the site had only recently fallen out of industrial use and that therefore they would be doing the community a favour by 'redeeming' it for organised leisure purposes. However, by then the area had so far reverted to nature that it had become important for its wild-life and was well on the way to being formally recognised as a wetland site of international importance. The Kent County Council, the Faversham Society, and the Nature Conservancy Council put up spirited and compelling opposition to the scheme and, in October 1965, it was rejected by the Minister of Housing and Local Government. More recently, part of the area has passed into the ownership of Mr. Michael Nightingale, O.B.E., F.S.A., a distinguished member and former Vice-President of the Kent Archaeological Society, whose wish is that its existing character should be retained.

On 8 September, 1914, Earl Kitchener, recently appointed Secretary of State for War, wrote to the management of the CPC (and no doubt in similar terms to that of the ELC) asking it to impress on its workforce 'the importance of the Government work upon which they are engaged.' 'I should like all engaged by your Company to know that it is fully recognised that they, in carrying out the great work of supplying munitions of war, are doing their duty for their King and Country equally with those who have joined the Army for active service in the field'.¹¹⁶ How equally they shared that duty, and sacrifice, became apparent, if it had not done so before, on 2 April, 1916.

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¹¹⁶ Contemporary typed copy in the Faversham Society's collections at the Fleur de Lis Heritage Centre.

Fire Brigade Museum); Colonel Stuart Cornfoot; John Coulter (*Faversham Times*); David Evers; Derek Finlayson; Mark Gardner (*Faversham News*); Lady Rosemary Goldsmith; H.M. Deputy Chief Inspector of Explosives; Mike Jay; Mrs. Sue Jolley (The Southend Society); Malcolm McLaren (Royal Armament Research and Development Establishment); Bruce Robinson (Eastern Daily Press); Mrs. Blanche Rogers (Fleur de Lis Heritage Centre, Faversham); Mrs. K. Street (Companies Registration Office); Bryan Tassell; Bernard Thomas (Kent County Record Office); Mr. Willis (Imperial War Museum); and H.H.K. Woodman (Faversham Municipal Charities).

