

INCLOSURE

No. 573 of Aug 26th 1874Report on Godown Fires, Mombasa.Official Enquiry held at Mombasa on the 12th, 13th & 15th November.

The circumstances attending these fires have been carefully investigated, and every person who was present in their early stages or immediately prior to the outbreaks that it has been possible to find has been examined. The owners of the property destroyed have, as far as possible, been examined, and also the Agents of the Insurance Companies concerned.

Kilindini Fire.

This occurred on October 26th, and the circumstances are briefly as follows:- On the day in question 6 native hanals in charge of an Arab clerk were unloading some 1400 bags of copra from a railway wagon into one of the godowns owned by Messrs. Besson. As the godown was practically full from roof to floor they were stacking the bags in a space near the door on the right hand side. At noon two of the men went away to buy food for themselves and the others, and the gang rested for a time. They stated that they rested on the loading bank outside the godown, but there seems to be some doubt about this, and the probability is that they rested inside the godown in the shade. There is no evidence that they were smoking: they strenuously deny it, but under the circumstances no great value is placed on their denial and, although examined separately, each man's story was identical, word for word, which showed that they had previously coached themselves as to the evidence they would give.

Somewhere

Somewhere about 1.0 p.m. work was resumed and about 1,100 out of the consignment of 1400 bags had been stored; a few minutes after 2.0 p.m. fire was observed inside. From the evidence given the fire was first seen on the top of the pile of produce on the right side, and from the start it burned with great intensity and spread with great rapidity.

About 2.30 the contents of the second godown to the east became ignited. The water from the Railway fire engine was turned on about 3.0 p.m., and shortly afterwards the Executive Engineer, Public Works Department, brought down hose and turned on the town water supply. The joint supply was, however, unable to do much more than prevent the spread of the fire to the adjoining godowns, and it continued to smoulder for some time afterwards. The Uganda Railway possesses two fire engines, but one of them, together with lengths of hose had, it is stated, been commandeered by the Marine Transport Officer, and there was something wrong, in the early part of the fire, with the one that was available. These fire engines were, however, provided for the protection of the Railway sheds and Customs godowns and not for dealing with fire in private godowns outside the Railway fence.

There is no fire engine for the extinction of fires in godowns; the hose lent by the Public Works Department was provided by Government for the protection of the Public Works Department stores. There are, however, town water standpipes along the line of godowns at intervals of 300 ft., and the pressure is quite good. Only one hydrant was used at the fire; two hoses were coupled out there was not enough hose to enable additional hydrants to be utilized.

There

There is no evidence of incendiarianism, but there is no doubt that both the godowns were over packed with produce of a kind that is inflammable, liable to generate heat, and spontaneously combust. The godown on the east side was, as far as we can learn, closely packed in a solid mass from floor to roof to the shape of the building, with cotton seed. This mass of cotton seed had been undisturbed for a period of ten months. No passages were left for ventilation and it was not possible to open the windows or doors, and even the ventilator in the roof was entirely filled. The west godown was similarly packed, except for a small space on the right side near the door which was being filled when the fire broke out. Some witnesses, however, stated that in this godown there was enough room for a man to pass along under the roof if he stooped; no passages had been left for ventilation. The west godown contained a mixed selection of produce, viz: cotton, copra, coffee, chillies, cotton seed, and matting bags. (Vide sketch plan attached.).

The pressure in such vast piles of produce would alone generate a certain amount of heat, and this added to the fermentation and natural heating which is liable to occur in cotton, cotton seed, and copra in a tropical climate, is bound to generate inflammable gases. We have no evidence as to what is the flash point of such gases, or at what stage actual fire is produced. It may, however, be produced without direct human intervention, or again the inflammable vapours may have been ignited by a cigarette lit by one of the labourers, but as explained above there is no evidence of this. At anyrate it appears clear to us that the over-loading of godowns with goods of this nature without allowing for passages for ventilation or inspection amounts to contributory negligence.

Further the absence of passage ways adds greatly to the difficulty of dealing with a fire and acts to the detriment of any salvage operations.

Further to allow a group of natives to work in a godown full of inflammable produce without the supervision of a responsible European appears to be tempting providence, and it is remarkable that immunity from fire has been enjoyed so long.

Messrs. Besson's godowns and the contents were insured with the North British Insurance Co., the Agents for which are Messrs. Besson themselves. Mr. Izac, Messrs. Besson's Agent, produced his Agency books and his firm's books, and also his insurance policies. There appeared to be nothing as far as we could see in the firm's stock books to show in what particular godowns the various portions of the stock was stored. It was a curious coincidence that the owner of the property should be the Insurance Agent, but we do not wish to impute any suspicion against the Agents on that account.

Our general conclusion, therefore, is that this fire was caused by spontaneous combustion, due to bad stowage and lack of ventilation. It appears probable that the combustible gases generated in the long stored mass of cotton seed in the Eastern godown, and being unable to freely reach the outer air through the roof ventilators they worked their way through the arches between the two godowns, and burst into flame at the top of the pile in the other godown. This premise is, however, incapable of proof, and once the fire broke out owing to the lack of passage ways it became impossible to localize it. Fortunately on the day in question there was not much wind or the whole block of godowns might have been destroyed.

MONDASS FIRE.

This fire occurred on June 22nd, and broke out about 10.45 a.m. It broke out at the back of a block of buildings in the main road due north of the Government offices. As far as can be gathered no one was working there at the time, but it was not altogether satisfactory to have to enquire into the exact circumstances of this outbreak 4½ months after it occurred.

The facts as ascertained are as follows:- There is a small open space at the back of the Chemist's shop occupied by Messrs. Wardle and Co., and this space is bounded on the north by some thatched native huts and on the east by two godowns. In the open space about 1700 bales of cotton had been stacked for over a month, but 450 were removed a few days before the fire occurred, and they formed a high and solid pile which was covered by green canvas tarpaulins. The bales were placed on lumps of coral on the bare ground, which is composed of coral. The rainfall registered in May was considerable, viz: 7.97 inches, and from June 1st to 21st, 0.62 inches, so the bales were close to the damp ground, and one witness gave evidence that on one occasion the tarpaulins were removed to pour away the water which had collected on them.

The cotton belonged to the British Cotton Growing Association and the Bombay & Uganda Syndicate, Uganda Cotton Buying & Ginning Co. and was in the hands of the African Mercantile Co. for shipment. It is said to have been insured by through policies covering it from the ginning factory to its arrival in England, but no particulars are obtainable here.

About

About 10.45 on the day in question smoke was observed issuing from the stack; the tarpaulins, or what was left of them, were removed and some of the outer bales, and it is stated that the bales in the centre low down were red hot. The fire then rapidly spread, and eventually the godowns near by caught fire; one belonging to the African Mercantile Co. was entirely consumed with its contents, the other belonging to Frigerio & Co. was only partially burnt, and most of the property therein was removed.

The town water was turned on the fire by means of the Public works Department hose, and it was eventually subdued about 24 hours later.

A considerable quantity of the cotton was salvaged, and the amount salvaged realised £7000. Numbers of scorched bales were opened and the damaged cotton extracted and made up into fresh bales.

The African Mercantile godown and also Messrs. Frigerio's godown were insured with the Commercial Union.

There is no evidence of incendiarism, but the pile of cotton bales was in close proximity to two open verandahs in which natives are often sitting or passing along; in fact the upper verandah opens into a kitchen in which there is a stove, and it was quite possible for embers from the stove, or lighted cigarette ends, to have been thrown over the verandah. One witness belonging to the Agent's firm stated that he is certain that nothing of the kind occurred for he daily looked down on the pile from his rooms near by. In our opinion it was difficult to discover a more unsuitable place in which to store cotton, but in regard to this the African Mercantile Co. claim that they could obtain no other ground, and that

the cotton was only stored there temporarily pending shipment, owing to the cancellation of shipping orders. The cotton had, however, actually remained in this undesirable spot for about one month.

In the absence of any evidence of the application of any fire to the cotton, and in view of the European evidence to the effect that smoke was first seen issuing from the lower part of the stack of cotton, we are forced to the conclusion that this fire was caused by spontaneous combustion.

In the course of our enquiry we were struck by the fact that once a risk is accepted by an Insurance Company's Agent, the Agent appears to take but little further interest in the matter. For as far as we can learn no periodic inspection of the methods of storing produce or goods in godowns is carried out on behalf of the Insurance Co.

A description of the godown is apparently furnished to the Insurance Agent with the application for insurance. There is no evidence that information is sought with regard to the construction and nature of the surrounding buildings, or other details which appear to us to be very important. In fact, with reference to the Moocasa fire, goods were insured in godowns in close proximity to native thatched huts, and apparently without any extra premium. It is, however, believed that the occurrence of these fires, and the enquiry into the circumstances attending the outbreaks will, however, have a good effect and lead to more supervision.

On the last day of our enquiry we invited Mr. Shaw to give us his views. He is on a visit to this country as an Inspector for the Commercial Union Insurance Co.,

and

and as he is an insurance expert his views are of value, and a precis of his evidence and that of the Hon. Mr. P. H. Clarke, who accompanied him, as local Agent of the Commercial Union Insurance Company and as temporarily representing the North British Insurance Company, is attached to this Report. The evidence of these two gentlemen gives the point of view of the Insurance Companies.

In conclusion we desire to invite attention to the inadequacy of fire fighting appliances in Mombasa and the absence of a Fire Brigade. We would further respectfully urge upon Government the desirability of arranging for funds for the provision of adequate equipment to deal with fires, to arrange for its early supply, and also to authorize the formation of a local fire brigade.

Sd/- C. W. Hobley
Chairman.

Sd/- F. W. Major
Member.

Sd/- F. D. Tyssen
Member.

Official enquiry - Montasa godown fire

Mr. Shaw states:-

I represent the Commercial Union Insurance Co. and the Union Assurance Co.

Mr. P. H. Clarke (of Messrs Boustead & Clarke) states:-

We are acting for the moment as agents for North British Insurance Co. in replacement of Besson & Cie. We also represent the Commercial Union Insurance Co. I got instructions by cable a few days ago and Besson & Cie. did also, instructing me to act for North British Co. in the Kilindini fire and I represent the Commercial Union in the Kibekoni fire.

Mr. Shaw states:-

At time of insurance the agent is expected to review the proposal before forwarding it and to oppose if is necessary. It is obligatory on applicant to provide correct information, the contract is founded on "good faith". If godown was partially surrounded by thatched huts &c. an intelligent Agent would impose extra premium. It depends rather on how exhaustive is the proposal form as to whether an inspection of the premises and surroundings would be made.

Generally speaking, inspection of risks is at Agents' discretion; practice of various Offices vary. There is an implied obligation on the insurers to inform the Company of any alteration affecting the risks. In this case (Kilindini fire) there was no alteration to structures or alteration of conditions in vicinity; the bad feature was the congestion of storage;

storage; but, in the absence of a special stipulation in the contract, the condition of congestion would not come under the head of a material mis-description. The Agents are expected to exercise their discretion and if a position of congestion comes to their notice they can, if they deem it wise, cancel the policy if the condition is not altered for the better. In absence of inspection by agent or obligation on insured to notify, the Agent would be ignorant in many cases of the condition of congestion until the fire occurred.

I consider storage in solid mass extremely dangerous. The contributory factors to spontaneous combustion are "damp", "pressure", "high local temperature" and "absence of ventilation". A light (naked flame) is not necessary to start the conflagration. Stacking of bales of cotton on damp ground, if stack sufficiently large and heart of stock not sufficiently ventilated might lead to combustion. In my opinion all vegetable fibres, and cotton seed and copra, would be liable, under conditions, to spontaneous combustion. Mixed stacking of the above would not accentuate the liability. A solid stack of cotton seed undisturbed for 10 months would be very liable to spontaneous combustion. In the case of a stack of 1800 bales cotton 50 feet high, on damp ground, combustion might occur in as little time as a month.

...the
Kibokoni
fire

In case of policy you put before me if it is definitely proved the combustion that ensued was due to fermentation the loss would ^{be} not covered by the policy (No. 11483218 of Commercial Union Co.) in question.

I consider that, after recent experience, it is in the province of Insurance Co. or their Agent to make representations to the insurer with a view to reducing the risk to minimum, i.e. by objecting to mixed storage, insisting on periodical inspection &c. This Company's rate in proportion to the local conditions, improvement of conditions reaps the reward of lower rates. Companies cannot compel obedience to their recommendations but can penalise negligence &c. by higher rates.

(Re Kibokoni
Fire)

I do not consider the place at back of Wardle & Co a suitable place to stack cotton.

Where fire occurs in one of several godowns insured by the one insurer does not keep books showing the stock in each godown, he might be at a disadvantage, but he could find the stock by deducting the stock checked or counted in the other godowns, or he could make a sworn statement, he would in fact have to prove his loss to the satisfaction of the Company.

Mr. P.H. Clarke states:-

I agree with all that Mr. Shaw says. I should like to add that in a small place like this the Agent would know all the buildings and surroundings and would not require to inspect. but where we did not know the building or surroundings we should require to inspect first. Personally I rather doubt that copra was subject to separate combustion, at any rate to same extent as cotton. I noticed when I got to the fire that the roof of the cotton seed godown had been resting on the bales.

As far as congestion is concerned, I reported to my own Insurance Co. the congestion at Kilindini some months ago. But I don't think there was any onus on the Agent to make a specific inspection, but should he chance to see it, it would be his duty to report matters to his Company. We have no instructions from our Company to make inspections after the risk has been accepted.

Mr. Shaw states:-

I would urge upon the Commission the desirability of classifying and segregating goods as far as possible. I also consider passages at intervals between the bales are absolutely necessary, and louvres in the roof of godowns.

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Ans'd 54299

~~to~~

DRAFT.

The Chairman
B. C. G. A.

26 November 1918

Sir

MINUTE.

- Mr. Beards, 23 Nov.
- Mr. Robins, 23/11
- Mr. [unclear]
- Mr. [unclear]
- Mr. [unclear]
- Sir H. [unclear]
- Sir G. [unclear]
- Mr. [unclear]
- Mr. [unclear]

[Handwritten signature]

I am in compliance with the
 he has now received from the
 a report of the Committee of the
 the local port to investigate the
 causes of the outbreaks of fire at
 Mombasa on the 22nd of June & the
 26th of Oct. 1917. The general
 conclusions reached by the Committee
 were that there was no person to
 suspect incendiarism in either case,
 but that both fires were caused
 by spontaneous combustion, ^{in consequence}
 upon bad stowage & lack of
 ventilation in the second case
 to the stacking of a large quantity
 bales upon damp & unsuitable
 ground in the first case

H. J. [unclear]