

233. *Captain Blackburne.*] Can you detect that by the hand?—Not on the outside of the bale. You would if it lay there for a month.

234. Mr. BurrIDGE seemed to think that twenty-four hours would be sufficient to indicate by the hand?—It all depends on the degree of dampness. Slips wool would increase much quicker than scoured. It would show itself much quicker where it pressed on another bale; but if you had, say, one, it would take a longer time to detect it by the hand, but where two bales were lying on top of one another, remove them and put your hand in, you would detect it, say, within forty-eight hours, but I do not think you would detect that in any other part of the bale exposed to the air.

235. With regard to the bales that have been sent back to you that you were speaking of, what temperature do you suppose they got up to?—My own wools?

236. The bales that have come under your notice that had been wet in transit in the railway or wagons?—I think the temperature would be getting on to 180°—you could not bear the hand in it.

237. That would have been in a comparatively short time?—Rapidly going to pieces. I should say it crumbles, but I cannot believe that it would blaze—it would disappear in dust.

238. And unless it was in contact with jute or flax?—Just so. I do not know that it might not in that case.

239. *Mr. Foster.*] Do you think, after wool reached a temperature of 170° to 180°, if it was maintained at that temperature—do you think that it would not then fire?—I do not think so. It would rot just like dung, and shrink to ashes.

240. Has it ever come under your notice that in a grass fire the wool along the bellies of sheep is very much burned? There, of course, it hangs where the air can get amongst it?—Where it has been exposed to the sun and got very dry?

241. Yes, that is approaching the degree it would be at in 180°?—It would be moist as well as hot in the bale. In the bale it would not become so bone-dry as when exposed to the sun in the field.

242. But would it not be the case that if it was still a little bit damp at 170° it would go on until all the moisture was exhausted—evaporation?—I suppose so.

243. And then at the highest point it might catch: Might it not be inflammable then?—I cannot say—I have never known of it. I have seen wool almost disappear by its own spontaneous shrinking—that is what you call spontaneous combustion—no flame. If you put a heap of wool out in a paddock piled up and left it there to do as it liked, it would gradually shrink and shrink to nothing—go to dust on the surface. You must have seen also on the stations heavy fleeces go to almost nothing—in fact, the sheep as well, and the carcase, too.

244. Rotted on the ground?—Rotted away to almost nothing. A sheep that would weigh 120 lb. has simply melted away to nothing, only the bones and a little sign of wool left.

245. Might it not be the case that in regard to fleeces of wool, you apply a flame to it—it looks fibrous, but it will not burn until it has become solid—is not that the case?—Yes.

246. Could you see the condition of the temperature that is on the outside of the woolpack that would come to that condition?—I think you would reach the temperature, dissolving the fibre first.

247. On the inside; but what about the outside edges where it was in contact with the wool-packs?—Well, I cannot say; it might be able to ignite. I do not know at what temperature that would ignite.

248. From your experience with regard to heated bales, the outside of the bale has been in contact with the air all round it?—Yes.

249. But under altered conditions—a ship's hold, for instance—where there is comparatively no circulation and where the temperature gets up to a high degree, can you imagine this outside wool-bale getting so hot as to burst into flames?—I can certainly imagine it setting fire to the pack—the hemp and the packs.

250. Have you ever had a quantity of old wool-bales heated—saturated with grease, and found any heat at all?—Yes, only when there is moisture—grease only would not do it.

251. *Captain Blackburne.*] Or any piece of oily jute?—Yes, damp with water as well. I do not think jute and oil alone would generate heat.

252. *Mr. Foster.*] I think it has been demonstrated that jute sacks saturated with grease will fire spontaneously?—Without moisture?

253. Well, I have seen that, without moisture—for instance, fires in boiling-down establishments have been traced to that—leaving sacks on one side in a heap. An expert opinion has been given [Exhibit 3]: “Instances are known of olive-oil igniting upon sawdust; of greasy rags from butter, heaped together, taking fire within a period of twenty-four hours”?—Butter contains a considerable amount of water—that is not pure fat.

254. Then, again, “instances are known of olive-oil igniting upon sawdust” [Exhibit 3]?—The sawdust might be damp.

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WELLINGTON, WEDNESDAY, 15TH AUGUST, 1906.

The Commission sat in the Upper Court, Magistrate's Courthouse, Wellington, at 10.30 a.m.

GEORGE HERBERT SCALES sworn and examined. (No. 5.)

1. *The Chairman.*] What are you, Mr. Scales?—I am a ship-charterer.

2. You have had considerable experience in connection with the shipping of wool, flax, and other produce?—Yes, some years. About ten years. Most of the ships I have loaded have been with wool cargoes, although some portions have been flax and tow, but mainly wool.

3. Have you supervised these loadings yourself?—Yes, I always do.