Contraction of these guardrails will probably pull that installation loose in cold weather under normal conditions, and so you no longer have the anchorage that is shown. That would be my judgment.

Mr. CLEVELAND. Mr. Chairman, may I ask a question in this regard?

Mr. Johnson. Mr. Cleveland.

Mr. CLEVELAND. The concrete abutment with the mark on it, is that serving any functional purpose so far as the bridge is concerned?

Mr. Prisk. No. This is the principal weak point in the situation Mr. Linko is describing, the transition between the post guardrail and the rail you find on the bridge structure itself. In most cases that block of concrete could be cut off at its base and lifted away from the bridge and nothing would happen. The bridge would not fall down. It serves no real function except to ornament the bridge and to introduce an obstacle to a smooth transition between the approach protection afforded by the guardrail and the protection afforded by the rail on the bridge.

Mr. CLEVELAND. Mr. Prisk, actually what you are saying, then, the rails along the bridge should extend with the same material to the same height and same design into the guardrails that will be on the

edge of the road; is that not the answer?

Mr. Prisk. Not necessarily the same material, but you want smooth continuity in the traffic face of the rail, both on the approach and on

the bridge.

Mr. CLEVELAND. Let me ask you another question. With all due respect to my colleague from New York, Mr. McCarthy, who put in a word for the concrete people, let me put in a word for the forest products industry.

Would it not be safer if that particular installation we are looking at were made of wood? Would that not give at least the traveler a

fighting chance if it would break off?

Mr. Prisk. I think I would like to pass on that. Wood can be pretty

solid, too. I think it is inappropriate for this use.

Mr. CLEVELAND. Are there any studies on this, the advantage of steel and concrete as opposed to wood? In some parts of the country we do use wood with just metal shields for guardrails. Is there a reason for this?

Mr. Prisk. I was talking about the end wall of the parapet on the structure itself. The abutment is directly underneath that block of concrete as it stands between the approach guardrail and the rail on the bridge. I never have seen a modern bridge construction—that is, concrete or steel bridge—where wood has been used at that location.

Mr. Cramer. Could I ask, Mr. Prisk, what are those four concrete stanchions (fig. 1-88) supposed to accomplish at the end of the bridge

railing?

Mr. Prisk. The block?

Mr. Cramer. The block of concrete. Not one block but all four of them—lines on one, or whatever it is. What is it supposed to accomplish?

Mr. Prisk. You mean these four panels?

Mr. Cramer. Yes.

Mr. Prisk. That is all poured as one monolithic structure. It is one solid wall, with panel ornamentation by the bridge engineer and the