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PHOTOGRAPHS OF

DUMBARTON POINT BRIDGE

and

NEWARK SLOUGH BRIDGE

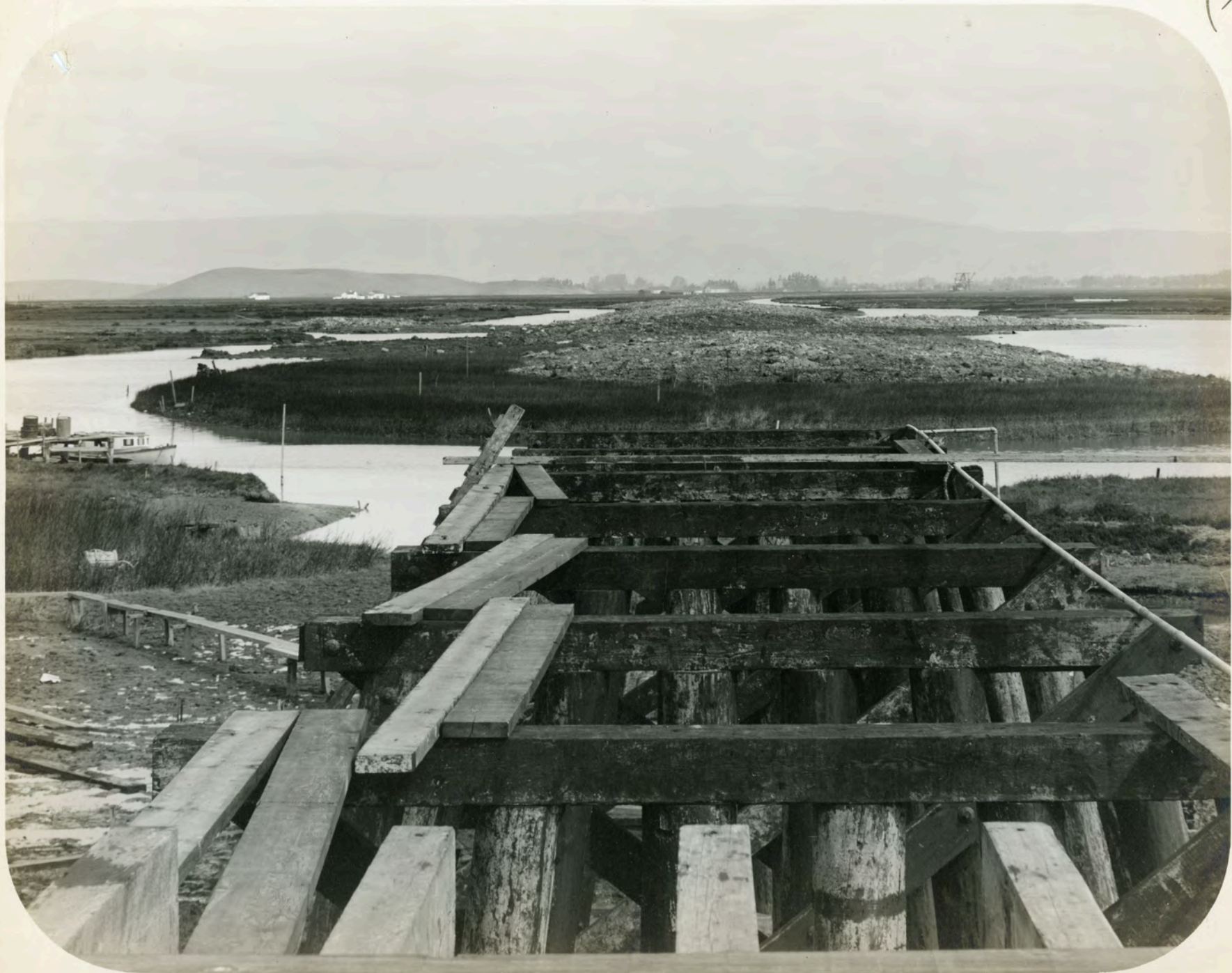
NOTE---Photographs Nos. 111, 112, 114 and 124 are missing.

FEB 17 1931

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CENTRAL CALIF. RY. Dumbarton Pt. Trestle. Driving piles at Sta. 543+. Aug. 14, 1907



CENT. CAL. RY. View looking east from east end of Dumbarton Pt. Trestle. Oct. 11, 1907



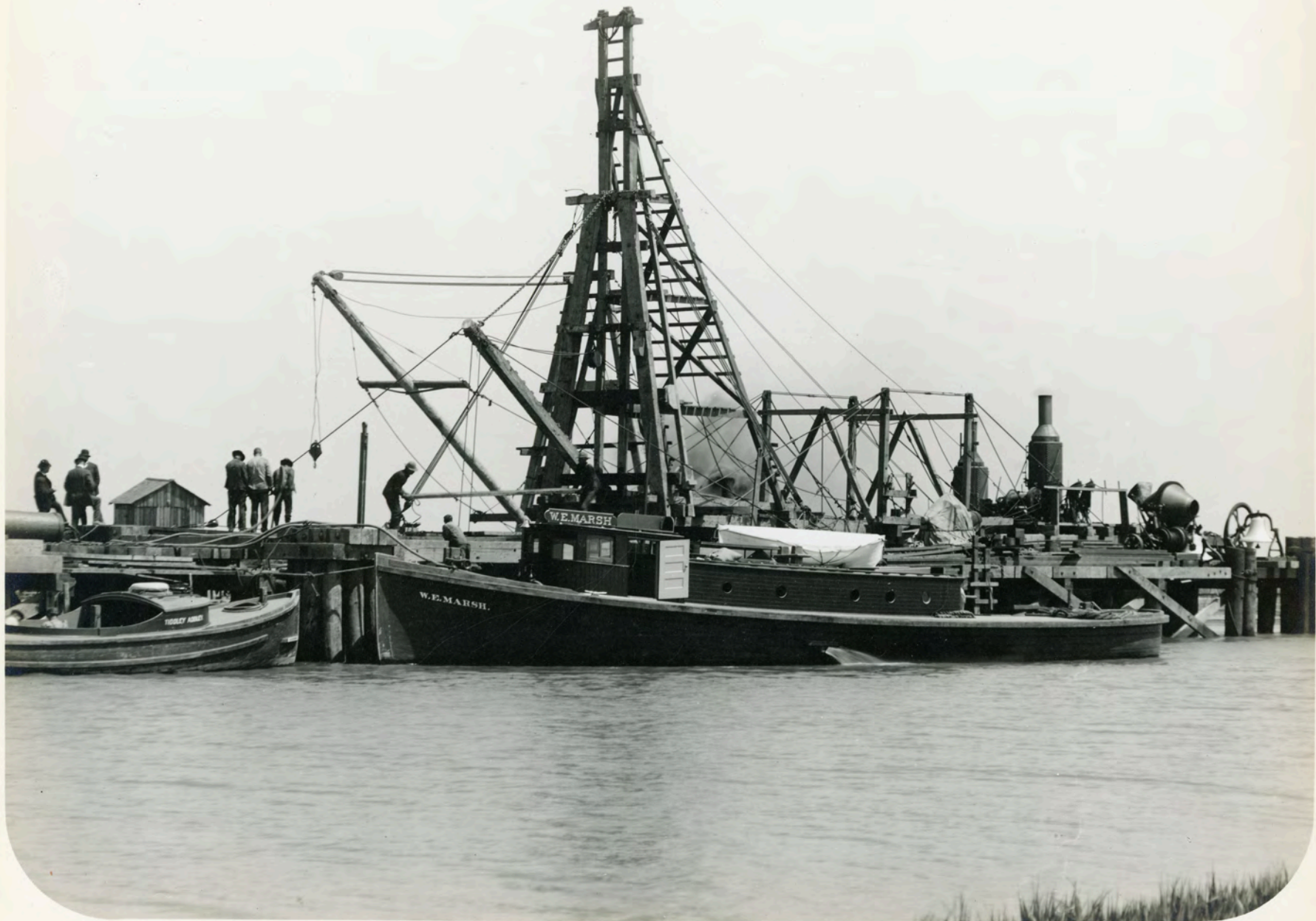
CENT. CAL. RY. Dredger "Garson," opposite west end of Dumbarton Pt. Trestle. Oct. 11, 1907



CEN. CAL. RY.

Top of Steel work for Pivot Pier, Newark Sl. Draw.

June 12, 1908



CEN. CAL. RY. Dredging Plant for Pivot Pier, Newark Sl. Draw. June 12, 1908



CEN. CAL. Ry. Dredging inside of Casing for Pivot Pier, Newark Sl. Draw. June 12, 1908



CEN. CAL. Ry. Dredging inside of Casing for Pivot Pier, Newark Sl. Draw. June 12, 1908

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CEN. CAL. RY. Driving Piles inside of Casing, Pivot Pier, Newark Slough Draw. June 24, 1908

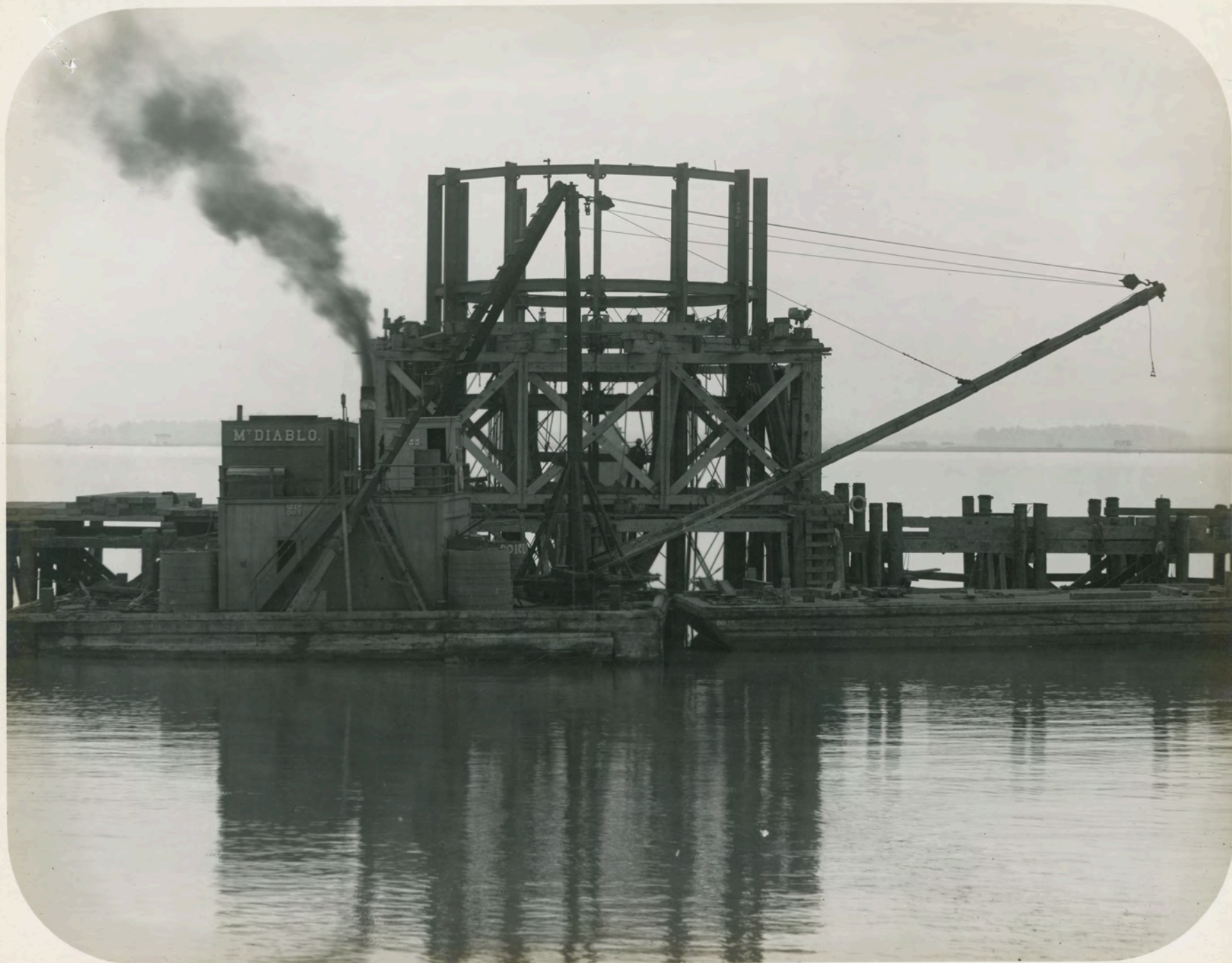


CEN. CAL. RY. Driving piles for Protection of Bridge, Dumbarton Pt. Draw. Aug. 18, 1908.



CEN. CAL. RY. Placing Concrete in Pivot Pier, Newark Sl. Draw.

Aug. 31, 1908.



Gent. Cal. Ry. Erection of Guiding Frame for Pivot Pier Casing, Dumbarton Pt., Draw. Sept. 23, 1908.



CEN. CAL. RY.

Dumbarton Pt. Trestle.

Oct. 10, 1908.



CEN. CAL. RY. Driving Foundation Piles for Pivot Pier, Dumbarton Pt. Draw. Nov. 16, 1908.

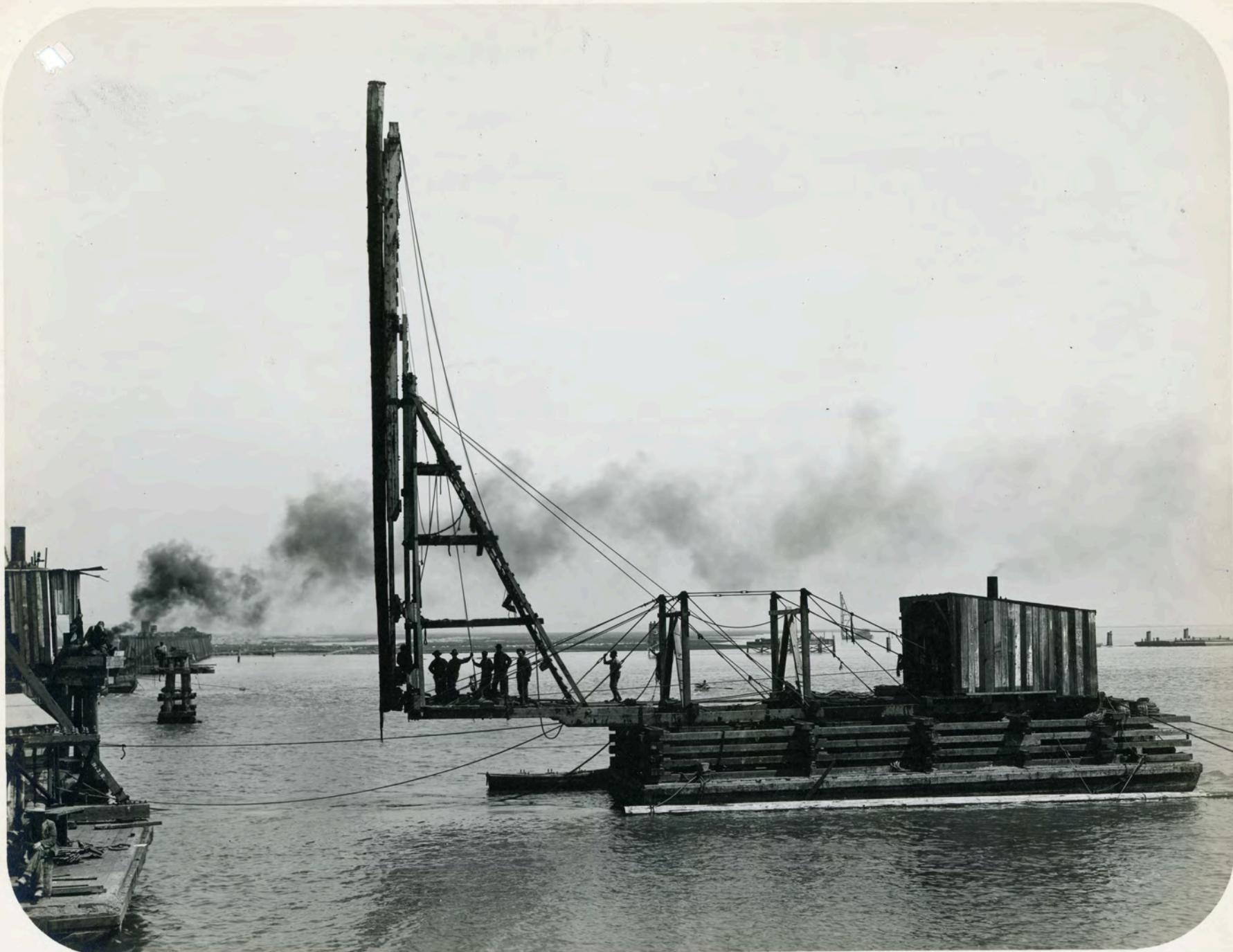
(48)



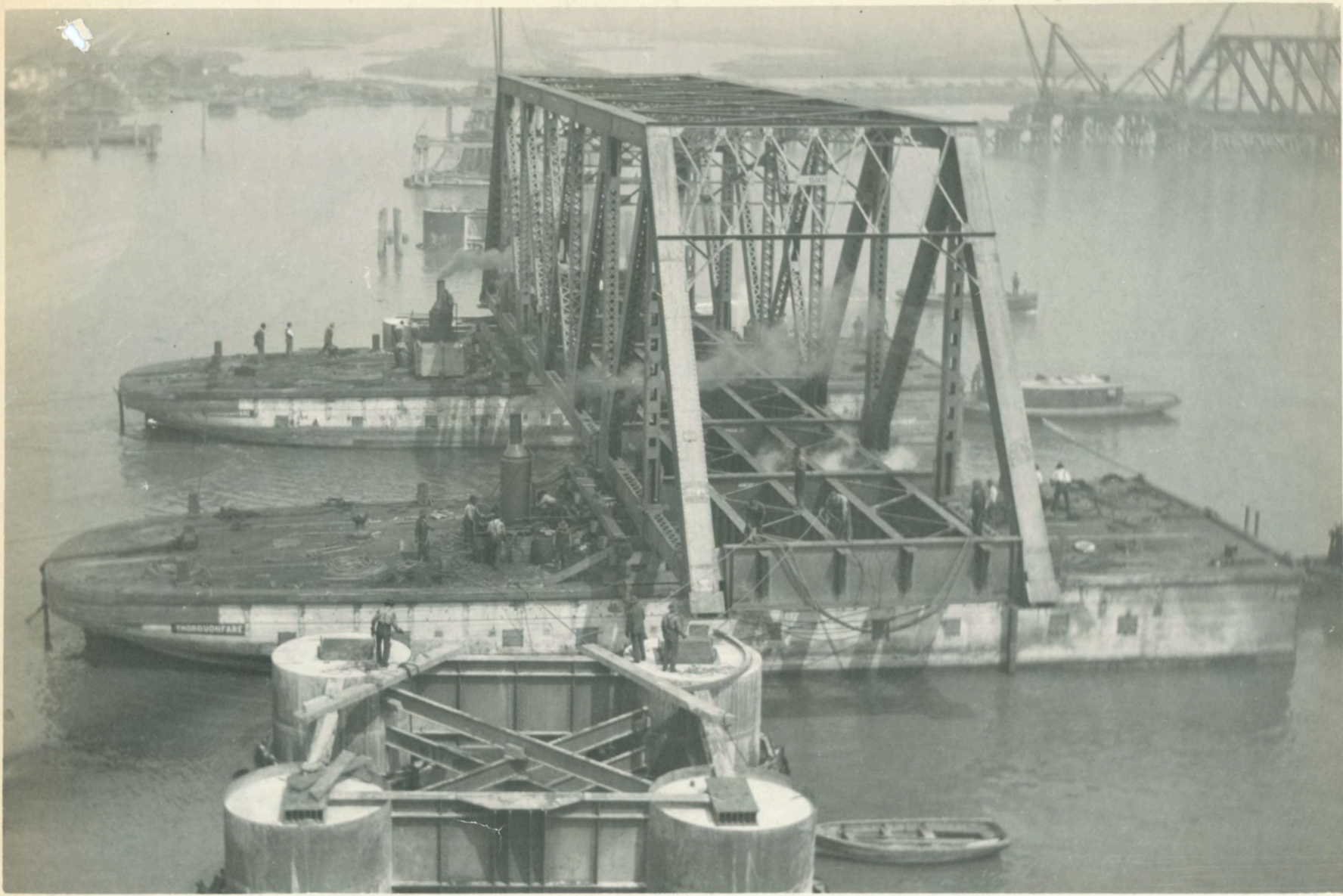
CEN. CAL. RY.

Erection of Drawspan, Newark Slough

Feb. 26, 1909.



CEN. CAL. Ry. Skid Pile Driver on scow, with pile cut-off in gins. E. Abut. Dum. Pt. Draw. April 16, 1909



CEN CAL RY Floating Span No 3. into Position at Dumbarton Point Sept. 16, 1909.



CEN. CAL. RY. Floating Span No 2 into position, 9.46 a.m. Sept. 26, 1909



CEN. CAL. RY. Spans Nos 2 and 3 and Drawspan at Dumbarton Pt. 10:15 a.m. Sept. 26, 1909



CEN. CAL. RY. Floating Span No 5 into position. 8:27 a.m. Nov. 7, 1909



CEN. CAL. RY.

Floating Span No 7 into position 9:27 a.m.

Dec. 11, 1909



CEN. CAL. RY.

Dumbarton Pt. Drawspan.

Feb 21, 1910

*O'Neil's
Photos*

DUMBARTON BRIDGE

shortening the western approach trestle to 5317 feet. The approach trestle is 1005 feet long. The steel portion of the Southern Pacific's bridge across San Francisco bay at Dumbarton point was constructed between 1907 and 1910 inclusive, entirely by Southern Pacific Company forces at an estimated cost of approximately \$1,500,000. It was placed in operation September 12, 1910, and is used almost exclusively by freight trains. No regular passenger trains are scheduled to cross it.

The Dumbarton Cutoff, of which the bridge is a key part, saves time in handling freight cars between San Francisco peninsula and the East Bay area which is gateway to the San Joaquin valley, the East and North. It relieves the heavily used route through San Jose and Santa Clara of a large amount of traffic which otherwise would have to be handled over the longer route around the lower end of the bay. Western end of the cutoff connects with the Coast Route of Southern Pacific at Redwood Junction just south of Redwood City, and eastern end connects

at Niles Junction with the line extending eastward through Niles Canyon
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with the

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whereby shortening the west approach timber trestle to 5317 feet. The east approach trestle is 1005 feet long. The steel portion of the crossing consisting of through riveted truss spans is all double tracked, and includes a swing span 310 feet long (which provides for two 125-foot clear channel openings for navigation) with three stationary 180-foot spans on each end of the swing span. All of the spans rest on piers consisting of cylindrical steel shells enclosing Oregon fir piles surrounded by concrete. The swing span pier, or pivot pier, is 40 feet in diameter and its shell is 71 feet 5 inches in height, enclosing 140 foundation piles, the longest of which extends to a distance of 123 feet below top of railroad ties supporting the track rails. The depth of the water below mean low tide at the pivot pier is 51 feet.

The swing span (center bearing) was erected on its protection work in a position at right angles to the line of tracks. It was erected complete, ready for riveting in 14 days.

The six approach spans were floated into position from falsework at Dumbarton Point. The old steamer "Thoroughfare", which for many years had been used to ferry freight cars across San Francisco bay, was cut in two and bulkheaded to make the two barges used in floating the spans.

The bridge was constructed between 1907 and 1910 and was placed in operation on September 12, 1910.

ERLE REATH

the U.S. Army. For the accommodation of post office inspectors and troops, each special train will have two standard sleeping cars and one dining car. Our Passenger Traffic Department is taking care of arrangements for this part of the service.

It is expected that each special train of six cars, as above, will leave Third & Townsend St. Station at San Francisco about 6 AM, operate on Southern Pacific via Redwood Jct., Dumbarton Bridge, Tracy, Roseville and Ogden, thence Union Pacific, on schedule providing for arrival at Denver about 8 PM first night after day of departure from San Francisco.

I know nothing about arrangements for unloading these cars at Denver, beyond the fact that it has been stated the cars will be unloaded immediately upon arrival and the cars will be released by early morning first after arrival.

Three cars of this valuable mail will be minimum operated in any one train. We have been promised every possible cooperation by officers of the U.S. Treasury and Post Office Departments towards increasing this number of cars in each train operated every third day. They express the hope that after the first train, they will probably be able to load four, five, or perhaps six cars every third day.

Southern Pacific will assign to this movement such of its 60 ft. six-wheeled, 60,000 lbs. capacity regular mail storage cars as may be necessary. Some of these particular mail storage cars will be taken out of regular service and for the period of 60 to 90 days during which these special train movements are going on, the 60 ft. mail storage cars will be replaced in our regular trains with 60 ft. baggage cars of 45,000 lbs. capacity. We will not strip the interior of such cars. I have had an agreement with Railway Mail Service officers that they will continue allowing us regular 60 ft. rates on these 60 ft. cars and will make no deduction for interior fixtures. I have a further agreement that care will be exercised so as not to overload these cars in temporary use beyond the 45,000 lbs. carrying capacity.

Each 60 ft. storage car used in this service will have special staple and hasp applied on the inside to four side and two end doors. Post Office authorities will equip these devices with their own rotary registering locks. We also have agreed to provide one chair in each of the 60 ft. cars for accommodation of the postal clerk on duty.

After discussion on the ground today, it has been decided to use track No. 3 in Third & Townsend St. passenger station at San Francisco. Each train will be made up complete (except road engine) and placed on Track 3 so as to be available for loading by 7 PM on movement dates. During the time this cargo is being loaded, track No. 2 will not be used for any service. The U.S. Mint people and the Post Office people will arrange their own affairs in preparing this gold for shipment as U.S. mail. So far as concerns the loading, they plan to use a fleet of six automobile trucks between the U.S. mint building at San Francisco and the three 60 ft. cars on track No. 3 at our station. Each automobile truck will have loaded into it two dollies, and each dolly will have loaded on it 15 pouches

averaging 80 lbs. each, or a total of 1,200 lbs. This makes total weight of each dolly (including tare) about 1,500 lbs., and weight of the total automobile truck delivery for one truck of 3,000 lbs. Post Office Department contemplate moving these six automobile trucks in one fleet from the mint building to our cars, unloading and returning for another load continuously during the night. They will provide six board ramps to be placed on our platform opposite each car door on which the motor trucks will back up against car doors so as to facilitate unloading of the dollies.

It will be responsibility of the Post Office Department to pull these dollies from their own automobile trucks into the car doors. It will be responsibility of the Southern Pacific to take these dollies inside the car door, move them within each car, and unload from the dollies to car floor the 15 pouches on each dolly. This unloading must be by lifting and placing, as under no circumstances should these mail pouches be dragged. The mail pouches are to be placed upon the car floor according to a distribution scheme which will be furnished to Superintendent of our Coast Division. We will probably arrange that car floors be chalked and lettered in squares and the mail pouches will be labeled according to the squares to which they are assigned in each car.

General program of the Post Office Department is to load about 48,000 lbs. in each car. This load may vary two or three thousand pounds, either way. It is a responsibility of the Southern Pacific to make certain that under no circumstances is any car to be loaded beyond its carrying capacity at any time. To insure our having definite knowledge of this, Superintendent, Coast Division, should assign some responsible man to the job who will be able to secure from chief post office inspector in charge precise weights, and this representative of ours should keep a record of the total weight placed in each car. The Post Office people plan to make waybills, etc., and secure signatures in passing these pouches from the hands of one man to another, so that they will make available to us the information we must have about weights to insure no overloading.

These Post Office Department automobile trucks will enter the station premises at Fourth Street and depart just West of the baggage room, or vice versa. In any event, this will be an orderly arrangement one way or the other. A survey of lighting facilities, which are very desirable, seems to indicate that present lighting arrangements in the vicinity are all right. In any event, from the experience secured with first train moved out, we will be able to tell whether or not additional lighting is necessary and can arrange it if needed, before the second and following trains move out.

It will be appreciated that special care needs to be given to gas lighting facilities with which these particular 60 ft. mail storage cars are equipped. These lights will be used all night while loading at San Francisco, will be used in part the one night on the road, and will be used to the fullest extent all night while unloading at Denver. Therefore, cars should leave San Francisco will full gas tanks and mantles in good condition. I believe there are gas plugs along Track 3 where this loading will take place.

agent accompanying each train between San Francisco and Ogden, and the Union Pacific special agent accompanying each train between Ogden and Denver, will be charged with any responsibility at all in connection with this business. Presence of the special agent, however, is desirable for the purpose of cooperating with post office inspector in charge of each train for anything that may arise. Railroad special agent will be familiar with railroad practices, methods and localities and in that way be able to provide help to post office inspector in charge in that officer fulfilling his responsibilities. Do not think it makes any difference whether one particular special agent accompanies each train all the way from San Francisco to Ogden, or whether we have different men, just so long as one special agent is with the train at all times. Of course, if a trainmaster is on the train to provide this cooperation with chief post office inspector in charge, then perhaps there would not be one of our special agents required.

With regard to returning these cars to San Francisco after they are unloaded at Denver: Our Passenger Traffic Department will take care of arrangements for return of the two standard sleepers and one dining car used by all of the government people concerned in the loaded train movement eastward. I have had an understanding with Superintendents, Railway Mail Service, Mr. McGrath of the 8th Division and Mr. Musgrave of the 14th Division, that we will return from Denver to San Francisco the 60 ft. cars used, in whatever train or trains may suit our conveniences so long as we fulfill the obligation of getting those cars to San Francisco in time for loading of later outbound loaded shipments in their regular order. Assuming that cars are released at Denver, say, 7 AM, they can be moved on U.P. Train 21 same morning through to Ogden, or Train 127 afternoon of day released through to Ogden, or Train 319 afternoon of day released from Denver connecting with Train 27 at Cheyenne for Ogden. Southern Pacific can handle these cars West from Ogden on Trains 21, 9 or 27 to Oakland Pier and thence around the Bay to San Francisco in regularly scheduled freight trains. It is my opinion that these three cars should be kept together on the return trip. If there be no delay in returning the empties, I figure it will be necessary to assign to this particular service not to exceed three sets of equipment. If three cars loaded are moved in each train eastward, then nine cars would be assigned to the movement. Of course, if more cars can be loaded eastward, then the group of cars assigned would be increased correspondingly.

Question of railroad responsibility in event of loss or damage: Because of the exceedingly large value of each shipment, this is a matter of much concern. Since government authorities from the Treasury and Post Office Departments have arranged for not only postal clerks and post office inspectors, but for a detachment of troops from the U.S. Army, I think we are safe in assuming that there can be no responsibility attaching to the railroads in event of any losses. Losses might arise through defective records of the government from time this commodity is taken out of the vaults at U.S. Mint at San Francisco until it is placed in vaults of U.S. Mint at Denver. Since the railroads are maintaining no records, there should be no responsibility attaching to us. The railroads will do but two things involving contact with these valuable mail pouches. One of them is to provide the physical labor to move pouches inside the cars to designated cars. This will be done under direction of Post Office

Department. The other is to furnish a supervisory man to copy weights of pouches loaded in each car so as to make certain car is not overloaded. Beyond that, the entire handling is by government people. However, this matter is of such importance that I have addressed a letter to our General Solicitor requesting his advice. His answer will be received in a day or so, and if at that time it is deemed advisable, I shall address a letter to Superintendent, Railway Mail Service, 8th Division, notifying him that the Southern Pacific does not accept any responsibility at all for any losses which might arise from any cause whatsoever, including accidents.

This memorandum prepared by C. J. McDonald, Mail & Express Traffic Manager, Southern Pacific Company, San Francisco, after conferences on July 20 and July 23, at which government officials were present as outlined below:

July 20 conference, U.S.Mint Building, San Francisco:

L. W. Robert, Jr.,	Asst. Secretary of Treasury, Washington,		
W. C. Cram, Jr.,	Treasury Department,	"	
P. J. Haggerty,	Superintendent, U.S.Mint, San Francisco,		
Edw. McGrath,	Superintendent, R.M.S.,	"	"
J. H. Musgrave,	"	"	Omaha,
J. F. J. Crowley,	Chief Clerk,	"	Cheyenne,
C. W. Pfaffenberger,	P.O. Inspector in Charge,		San Francisco,
Jas. B. Robertson,	P.O. Inspector,		Denver,
John A. King,	Supt., Divn. of Rgstd Mails,		Washington,
W. F. Burke,	Asst. Postmaster,		San Francisco,
Wm. Arthur Newman,	District Engineer,	"	"
General Craig,	9th Corps Area, U.S. Army,	"	"
Colonel Lear,	9th " " " " "	"	"
Captain See,	9th " " " " "	"	"
Capt. T. J. Foster,	U.S. Secret Service,	"	"
F. S. McGinnis,	Vice President, S.P. Co.,	"	"
C. J. McDonald,	M. & E.T. Mgr.,	" " "	" "
F. E. Watson,	Asst. to V. P.,	" " "	" "

July 23 conference, S.P. Building, San Francisco:

Edw. McGrath,	Superintendent, R.M.S.,	San Francisco,
J. H. Musgrave,	"	Omaha,
J. J. Burke,	Chief Clerk,	San Francisco,
J. F. J. Crowley,	"	Cheyenne,
O. G. Tackle,	"	San Francisco,
G. H. Austin,	Post Office Inspector,	"
Jas. B. Robertson,	"	Denver,
Colonel Lear,	9th Corps Area, U.S. Army,	San Francisco,
C. J. McDonald,	M. & E.T. Mgr., S.P. Co.,	San Francisco,
M. I. Goldsmith,	Asst. M&ET Mgr.,	" "
L. C. Ioas,	Pass. Traf. Dept.	" "