
United States
Circuit Court of Appeals

For the Ninth Circuit.

Transcript of Record.
(IN TWO VOLUMES.)

CONTINENTAL AND COMMERCIAL TRUST AND
SAVINGS BANK, a Corporation, and FRANK
H. JONES, Trustees,

Appellants,

vs.

COREY BROS. CONSTRUCTION COMPANY, a Cor-
poration, and UNION PORTLAND CEMENT
COMPANY, a Corporation,

Appellees.

VOLUME II.
(Pages 321 to 700, Inclusive.)

Upon Appeal from the United States District Court for the
District of Idaho, Southern Division.

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(Testimony of Paul S. Roberts.)

Q. Was there very much work done on the dam during July, 1910?

A. Not a great deal, no, sir.

Q. So up to June 28th, when you made that report, all the work done on the system was done according to the plans and specifications except as you have pointed out in that report?

A. Well, there was nothing that came to my notice contrary to the—

Q. As far as you could see?

A. As far as I noticed.

Mr. MILLER.—What is that date?

Mr. HENDERSON.—June 28th.

Now, gentlemen, I haven't read this report of July 30th.

Mr. MILLER.—Just take the time to read it.

Mr. HENDERSON.—Mr. Roberts, will you permit the reporter to borrow that of you?

Mr. WITNESS.—Yes, sir.

Mr. HENDERSON.—I introduce this report of the Carey Act inspector from the State Engineer's office, dated July 30th, and signed by Mr. Roberts—this letter isn't signed, but it is one that he wrote—and it can be copied. (565.)

(The following is a copy of the above-mentioned report.)

(Testimony of Paul S. Roberts.)

“Mackay, Idaho, July 30, 1910.

BIG LOST RIVER LAND & IRRIGATION CO.

[287]

Hon. D. G. Martin,
State Engineer,
Boise, Idaho.

Sir:

I beg to submit herewith report on the progress of the construction of the Big Lost River Land & Irrigation Co.

AT MACKAY DAM.

On July 6th, the Company began dumping from the trestle crossing the embankment from upper to lower toe of dam at an angle of 45 degrees. Film No. 1, Roll No. 1, shown the first train load dumping from this trestle. This work was stopped at once, waiting a reply to my letter of July 6th to Mr. Martin stating the facts and asking the advisability of allowing this part of the work to continue. On July 14th, dumping from this trestle was resumed, the company refusing to stop the work when ordered to do so until Mr. Martin's reply was received. The surface beneath this trestle, from the core-wall to the embankment at the upper side of the dam, is the original surface of the ground. The specifications read—Page B 11, Paragraph 3, ‘Before the forming of embankment is commenced the foundation of the dam shall be thoroughly plowed to a depth of 10 inches.’ This was not done, before dumping from this trestle, although the Company's attention was called to the matter. Film No. 5, Roll No. 2, shows

(Testimony of Paul S. Roberts.)

the smooth, unplowed surface of original ground and the coarse material at the bottom of the dump. From this view it is very evident that there will be no bond between the (566) original surface of the ground and the embankment. As the embankment from this trestle approached the 'puddled zone' at the core-wall, a stream of water was played on the embankment as it was built. This stream was entirely inadequate to [288] 'thoroughly wet' the embankment as specifications require. The water was obtained from a line of 2 inch pipe running from the line of pipe supplying water for puddling the embankment at the lower toe of the dam.

The original pumping equipment furnishing water for this puddling process, delivered 5.24 cu. ft. of water per minute. The equipment has been enlarged by the addition of a second pump delivering 3.48 cu. ft. per minute, making a total of 8.72 cu. ft. per minute. This supply of water is drawn upon by two steam shovels, five engines, and when in use, one concrete mixer. The supply of water is entirely inadequate to cause proper puddling of the 'wetted zone' as is shown by the fact that water is flowing through the embankment in considerable volume.

Film No. 6, Roll No. 3, shows the water running through the opening in the core-wall. This water comes through the embankment above the core-wall, and through that portion of the embankment which should have been puddled and made impervious to water.

Film No. 9, Roll No. 3, shows the first lift of em-

(Testimony of Paul S. Roberts.)

bankment at lower toe of dam, being built toward the core-wall, and the stream of water used for puddling. This stream of water does not puddle the embankment sufficiently to stop the flow of water through the embankment as shown by the stream of water below the embankment, which water passes through the material, and is of practically the same volume as is shown in Film No. 6, Roll No. 3, flowing through the core-wall.

Film No. 7, Roll No. 3, shows the puddled material at (567) the back of the core-wall at the point of crossing of the trestle above noted. On the left of this view is shown the embankment which [289] has not been puddled, although it is within the 'puddled zone.'

Film No. 8, Roll No. 3, shows the embankment from which the puddled material shown in Film No. 7, Roll No. 3, was washed.

Film No. 6, Roll No. 1, shows the dressing to proper slope, of the upper face of the dam. The surplus material removed at this dressing of the slope is left on the concrete apron at the foot of this lift of the embankment.

Film No. 4, Roll No. 2, shows this surplus material. It averages 2 feet thick, 15 feet wide and extends along the face of the dam across the entire finished section. This material should be removed, as its weight will cause the concrete apron to break as the material of the embankment settles away from the concrete apron. After the face of the dam was dressed to slope, the concrete apron was put on with-

(Testimony of Paul S. Roberts.)

out tamping the embankment as specified.

The reinforced concrete apron on the face of the second lift has been built. Film No. 2, Roll No. 1, shows the placing of a strip of reinforcing wire. These strips run from the top of the embankment to the bottom. Film No. 3, Roll No. 1, shows the wooden stakes which hold the reinforcing strips at the top of the embankment. These stakes are 2½ feet long, and 3 inches in diameter. They are driven flush with the embankment, one stake at each edge of each strip of reinforcing wire. The lengths of reinforcing wire are tied together at each cross wire by wire clips of same size as the wire of the reinforcing material. Film No. 5, Roll No. 1, shows the gang of men tying the sections of reinforcing wire together. At the junction of this reinforcement with the reinforcement (568) of the lower, completed section, the two are joined by wire clips, one at each edge of each strip. The new reinforcement extending over the finished concrete one foot. This tying of [290] the new reinforcement to the old by only two clips to each strip is not sufficient to make the reinforcement continuous over the joint of new with old.

Film No. 1, Roll No. 2, shows the placing of the concrete on the face of the dam. The concrete was placed over the reinforcement, in strips 6 feet wide extending from the top to the bottom of the embankment. The reinforcing wire was held 2 inches above the embankment by placing the larger stones of the concrete under the reinforcing wire. This concrete

(Testimony of Paul S. Roberts.)

was very poor and not tamped after placed. It was between 4 and 6 inches thick. Work on this section of the concrete apron was begun on July 6th and finished on July 20th, as far as the face of the dam had been dressed to proper slope.

Film No. 2, Roll No. 2, shows the cleaning and wetting of the edge of the old concrete where the new concrete joins the old. The edge of the old concrete was finished on a bevel, and the new concrete overlaps the old 2 feet. The old concrete should have been finished to a square shoulder, perpendicular to the face of the embankment which would have permitted the new concrete to make a firm and tight joint. Film No. 3, Roll No. 2, shows the new concrete over-lapping the old.

The concrete cut-off wall at the end of the apron below the controlling valves was not built on solid rock. Film No. 5, Roll No. 2, shows the north end of this wall and the loose rock on which the wall is built. Film No. 6, Roll No. 2, is a view of this wall beneath the falls showing the loose rock projecting beyond the base of the wall and the holes under the wall that have been washed out by the water. This washing will in time undermine the cut-off wall and apron and they will (569) break. A new cut-off wall should be built to solid rock. [291]

The footing and first course of the concrete core-wall is finished to the rock cliff on west end of dam. At the junction of the core-wall with the solid rock, a good joint was made with concrete and the solid rock. There is no seepage between the core-wall and the

(Testimony of Paul S. Roberts.)

solid rock, but there is a little seepage out of the solid rock behind the core-wall. This seepage does not apparently come from beneath the core-wall. There was considerable flow coming out of the rock in which the trench for the footing course of the core-wall was excavated. Since the footing course and first section of the core-wall have been built this flow has been diverted through the fissures of the rock, beyond the end of the core-wall, coming out behind the core-wall. This water finds its way through the concrete apron on the face of the dam, and through the embankment at the junction of the embankment with the original surface of the hill at this end of the dam.

Film No. 10, Roll No. 3, shows the puddled section of the second lift of the embankment, in front of the core-wall. This slope is the combined length of both first and second lifts, as the first lift was not continued to the core-wall. On account of the length of this slope, the stream of water used is too small to give any puddled condition of the material at the foot of the slope.

ERA TRACT.

Film No. 1, Roll No. 3, shows the west end of flume on Elm lateral. The flume proper is finished but the concrete at the ends has not been built. Film No. 2, Roll No. 3, shows the entire flume from the east end. Some of the supporting timbers are badly split and checked. Except for this the flume is well built. (570.)

The material for the flume on Elm No. 2 lateral has been [292] hauled to the site, but work of

(Testimony of Paul S. Roberts.)

erection has not begun.

The concrete work on the Lower Blaine Canal is as last reported. I am told he has received no money for several months and was on that account compelled to stop work.

Film No. 3, Roll No. 2, shows the action of the water on the portal walls at the lower end of the tunnel on the Blaine Canal. The water has eroded the walls and some caving has occurred. As noted in report of May 27th, these portal walls showed a tendency to erode at that date. Since that time this erosion has increased until the earth has caved in places. It will be necessary to build retaining walls at the lower portal of the tunnel to prevent this erosion and caving.

On July 13th, the gates of the Blaine Canal were closed by Water Commissioner McMillan. The company has acquired some old water rights and this water was being supplied to the Era Tract.

ARCO TRACT.

All construction on the Arco Tract is as last reported.

POWELL TRACT.

On account of the unsettled conditions at the Mackay dam, I have been unable to inspect the workings on the Powell tract. I am told by the Engineer on this part of the work, that the concrete for the head-gates of the North Canal, at the diversion dam below Powell, is completed and the iron gates are at the site; that the concrete for Drop No. 5 has been

(Testimony of Paul S. Roberts.)

placed; that the excavation for canals and laterals is about completed.

There is no concrete work below Drop No. 5 and only three excavating outfits are now working. (571.)

Acting on telegraphic instructions from Mr. Martin, Engineers Drummond and Jones were requested to voluntarily close [293] down all operations at the Mackay dam, on the evening of July 23d. The request was granted and all work is now discontinued.

The working force on this project prior to July 23d has been:—

AT MACKAY DAM.

CANAL SYSTEM.

105 Men.

13 Teams.

1 Concrete Mixer.

2 Steam shovels.

2 Ditching machines.

5 Locomotives.

35 Teams.

50 Dump cars.

50 Men.

1 Concrete mixer.

I am mailing under separate cover three (3) rolls of films: Two (2) of six (6) exposures each, and one (1) of ten (10) exposures each, the subjects are as follows:

Film No. 1—Train dumping from trestle crossing embankment from upper to lower toe of dam, on July 6th.

“ “ 2—Placing reinforcing material for concrete apron on dam.

“ “ 3—Driving stakes to hold reinforcing strips.

“ “ 4—N. G.

(Testimony of Paul S. Roberts.)

“ “ 5—Tying strips of reinforcing wire together.

“ “ 6—Dressing face of dam by hand ready for concrete apron.

Roll No. 2, six exposures.

Film No. 1—Placing concrete on face of dam.

“ “ 2—Cleaning and wetting of old concrete for junction of new.

“ “ 3—New concrete overlapping old concrete at junction of new with old.

“ “ 4—Surplus material left on concrete apron after dressing face of dam to proper slope.

“ “ 5—East end of cut-off wall below concrete apron at valves, showing wall built over loose rock.

“ “ 6—Same cut-off wall beneath falls showing washing of water under the wall.

(572)

Roll No. 3, ten exposures.

Film No. 1—West end of flume on Elm Lateral, ready for the concrete. [294]

Film No. 2—Entire flume from East end.

“ “ 3—Portal walls at lower end of tunnel on Blaine Canal showing erosion of side walls.

“ “ 4—Train dumping from trestle crossing embankment at Mackay dam, July 14th.

“ “ 5—Shows unplowed original surface of ground on which above embankment is being built.

(Testimony of Paul S. Roberts.)

- “ “ 6—Water running through temporary opening in core-wall. This volume of water passes through the embankment in front of the core-wall.
- “ “ 7—Puddled and coarse, unpuddled material on lower side of core-wall.
- “ “ 8—Embankment from which above puddled material was washed.
- “ “ 9—Dumping on first lift below core-wall and stream of water used for puddling the material; also width of embankment through which the water is flowing.
- “ “ 10—Puddled area in front of core-wall on second lift.

Respectfully submitted,

Carey Act Inspector.”

Mr. HENDERSON.—Q. Mr. Roberts, there was a hole left in the core-wall all the time that you were there, was there not? A. Yes, sir.

Q. That was done to let the water go through the dam? A. Yes, sir, through the wall.

Q. To let the water go through the core-wall?

A. Core-wall, yes, sir.

Q. If that hole hadn't been left the water would have come up and gone over the top of the core-wall, wouldn't it?

A. I don't know; it never did go over the wall. (573.)

Q. On account of that hole being left? [295]

A. No, sir; the hole was stopped several times.

(Testimony of Paul S. Roberts.)

Q. Do you know what that hole was left in the core-wall for? A. Yes, sir.

Q. To let the water go through? A. Yes, sir.

Q. That was done intentionally? A. Yes, sir.

Q. And you didn't find any fault with that?

A. Oh, no.

Q. You say that on July 14th dumping from this trestle was resumed—that is, the trestle that went across the core—the company refusing to stop work when ordered to do so until Mr. Martin's reply was received. To whom did you give that order?

A. I don't know whether it was to Mr. Drummond and Mr. Jones, or simply to Mr. Jones, on the dam; it was at least to Mr. Jones, and I think to Mr. Drummond.

Q. Who was Mr. Jones?

A. He was the engineer that had charge of the dam alone.

Q. For the Big Lost River Irrigation Company?

Mr. POWELL.—That is objected to as calling for a legal conclusion, and not a proper conclusion from this witness.

Mr. HENDERSON.—Q. What is your best judgment?

Mr. POWELL.—The some objection.

A. Certainly, it was the Big Lost River Irrigation Company; he was the engineer for this company, so far as I knew.

Mr. HENDERSON.—I don't want to try to confuse you, but you didn't understand that Mr. Drummond or Mr. Jones were in the employ of Corey

(Testimony of Paul S. Roberts.)

Brothers Construction Company?

A. No, not at all. (574.)

Q. And when you refer to the engineers you are referring to the engineers of the company that had the contract with the state? [296]

Mr. POWELL.—The same objection.

A. Yes, sir.

Mr. HENDERSON.—Q. That is all I wanted to find out. Did you know from the contract of the Big Lost River Irrigation Company with Corey Brothers Construction Company that all of this puddling was done under force account?

Mr. POWELL.—That is objected to as calling for an improper conclusion from this witness as an expert.

A. I never knew anything about any contract or any other instrument between Corey Brothers and the Big Lost River Irrigation Company, or any other company.

Q. You say you never measured the number of yards that were dumped from the trestle that went crosswise of the core-wall?

A. Never measured it with a steel tape, no, sir.

Q. But you have got a judgment on it?

A. Yes, sir.

Q. How much do you think it was?

A. It was several thousand yards, in that particular dump.

Q. How many?

A. I never measured it to know any more definitely than that—computing it roughly.

(Testimony of Paul S. Roberts.)

Q. You might be mistaken about that, that there was several thousand yards?

A. I might be mistaken a yard or two, yes, sir.

Q. You might be mistaken several thousand, might you not? A. Hardly, no, sir.

Q. What do you mean by several thousand—five, six or seven? (575.)

A. More than one and less than fifty thousand.

Q. You say it was more than one thousand? [297]

A. Yes, sir.

Q. Was it less than fifty? A. Yes, sir.

Q. How much less? A. I don't know.

Q. It might have been forty-eight thousand?

A. Possibly.

Q. And it might not have been over two thousand?

A. Possibly.

Q. Did you give any other report later than July 30th, 1910?

A. You mean concerning this project?

Q. Yes.

A. I wouldn't be sure whether I submitted a report as such, or simply a letter of communication. It should show in these files if this is all of them.

Q. Let me ask you, are these two reports the same? Did you make both of them?

A. I expect this is the engineer's copy. I never have seen that until this time. I don't know what they do with these when they come in. This looks to be the same.

Q. What is this? That is what I want to know.

A. Well, now, I don't know. That is evidently the

(Testimony of Paul S. Roberts.)

same as this; I don't know. That probably may be the same report in different form.

Q. Did you send a letter like this to the state engineer, dated April 28, 1910?

A. I think that is my letter, yes, sir, the carbon of it.

Q. Will you let the reporter copy that into the record?

A. I will, yes, sir, so far as I am concerned. (576.)

(The following is a copy of the above mentioned letter.) [298]

“Mackay, Idaho, April 28, 1910.

Hon. D. G. Martin,
State Engineer,
Boise, Idaho.

Dear Sir:

Your letter of April 25th at hand.

I have seen the Tunnel on the Blaine Canal and know the conditions existing there. I understand from your letter that the matter of this tunnel and the clearing of the reservoir site, and the concrete facing on the dam, are all to remain for the present as they are.

I have a copy of Mr. Fell's last report and shall be able to give you any desired information on short notice.

Mr. Carhart was to send me a small map of the Big Lost River project. As I have not received it I thought perhaps it might have been overlooked in his crowding work. The map will be of great help to me and I should like to get it as soon as convenient.

(Testimony of Paul S. Roberts.)

I am leaving today for Blackfoot where I join Mr. Fell to go over the American Falls project.

Am sending under separate cover a report on this project.

Respectfully,

PSR—m

Carey Act Inspector.”

Mr. HENDERSON.—That is all I think of now, but there are some other reports here that I want to read, and I would like to recall this witness, if I could, in the morning again. It is now eleven o'clock. (577.) [299]

Redirect Examination.

(By Mr. MILLER.)

Those parts of the work that had been constructed and completed while my predecessor was on the job and before I came, I did not consider within my province to compare with the specifications, or to pass on their sufficiency. I had no general authority to stop work, but only to report to my superior. When, April 24, 1910, I considered the outlet of the tunnel good, that was before I discovered the vibration. The spillway tunnel was 12 or 14 feet high, not counting the concrete lining. The Antelope Creek crossing was completed before I went on the job at all. I suppose my predecessor reported on that. Drummond did not show me any of the detailed specifications for this work, either approved or unapproved. I tried from time to time to get them from him. When I reported that they had excavated the firm foundation for the core-wall at the place

(Testimony of Paul S. Roberts.)

where the sheet piling was, they had gone to pack gravel. That has nothing to do with imperviousness. The place where I spoke of Drummond omitting the sheet piling was on the Rock Cliff end of the core-wall. When I said in one report that the work in general was O. K. I did not take into consideration any part of the structure completed and passed on by my predecessor. When I said the sheet piling was driven according to plans and specifications, I meant that that I saw driven over near the Rock Cliff. When I said that on May 27th I did not know of any previous dumping from a diagonal track, I did not refer to the diagonal track following the left bank from which dumping was done while my predecessor was on the job. I made no comments in my reports on puddling which was done or omitted prior to [300] my going there. Mr. Martin expressed a great reluctance to establishing a precedent by requiring work done under his predecessor to be torn out. I did not say that prior to June 28th all work on the dam was done according to the plans and specifications. I didn't intend to make any such statement. I made a rough estimate of the dumping from diagonal tracks—about 10,000 yards.

Report of Roberts dated August 27, 1910.

Reports that the concrete work in the head-gate of the Blaine Canal is for the most part very good. In Drop No. 5 there is no cut-off wall at the upper end of the drop. At the siphon carrying the waters of Antelope Creek beneath the canal, the gravel is banked up. Construction must be changed. At the

(Testimony of Paul S. Roberts.)

tunnel end of the Blaine Canal the waters have eroded the banks of the portals. Much caving has taken place. Retaining wall must be built. All excavation and embankments on the entire system is exceedingly well done with the exception of a few places of faulty concrete work as noted in the previous report. The structures as now completed are well built.

I think I made no later report than August 27, 1910. [301]

At 9:30 A. M., Friday, April 12, 1910, the hearing was resumed pursuant to adjournment.

PAUL S. ROBERTS, a witness heretofore duly called and sworn, upon being recalled, testified as follows, on

Recross-examination (Continued).

(By Mr. HENDERSON.)

Q. Mr. Roberts, did you, on August 27, 1910, as Carey Act Inspector for the State of Idaho, make a report to the State Engineer?

A. I believe I did; yes, sir.

Q. Just look at that paper (handing paper to witness). A. I believe that is mine, yes, sir.

Mr. HENDERSON.—Now, this can't be marked, gentlemen, because it is an official record, is my understanding.

Mr. MILLER.—What is the date of that?

Mr. HENDERSON.—August 27, 1910. Now, I would like to have that marked as an exhibit, but not marked on here, and then let the reporter make a copy of it.

(Testimony of Paul S. Roberts.)

Mr. HAGA.—Where did you get this, Judge?

Mr. HENDERSON.—I got it from the reporter here. I offer that as an exhibit.

(The following is a copy of the above-mentioned report):

“Sept. 9th, 1910.

Heber Q. Hale,

Register, State Land Board,

Boise, Idaho.

Sir:

I beg herewith to submit to you Carey Act inspection report and general conditions report on the Pratt Irrigation Company by Mr. G. W. Fell, Carey Act Inspector, also general conditions report of the Big Lost River Land & Irrigation Company by Mr. (583) [302] Paul S. Roberts, and general conditions report on the work on Jerome dam by Mr. J. M. Burkett, Carey Act Inspector.

Yours truly,

State Engineer.

By _____.”

Enc-Reports.

C/V.

Same to Miss S. Belle Chamberlain, Sup. Pub. Ins.

“ “ Hon. D. C. McDougall, Attorney General.

“ “ Hon. R. S. Lansdon, Secretary of State.

“ “ Hon. James H. Brady, Governor.

(Testimony of Paul S. Roberts.)

BIG LOST RIVER LAND & IRRIGATION CO.

Mackay, Idaho, August 27, 1910.

Hon. D. G. Martin,
State Engineer,
Boise, Idaho.

Sir:

Having just completed a trip over the canal and lateral system of this project, I beg leave to submit the following report:

On August 23d, I joined Mr. James McMillan and we began our investigations at the head-gate of the Blaine Canal at the diversion dam above Darlington. The jacks which operate the gates at this head-gate are still installed on the temporary timbers over the gates. All the drops in this canal, nine in number, are finished. The concrete work is for the most part very good. At drop number five there is no evidence of any cut-off wall at the upper end of the drop. At the syphon, which carries the waters of Antelope Creek beneath the canal, considerable gravel has banked up at the intake end of the syphon. It will be necessary to construct a concrete apron on the bottom of [303] the creek extending from the opening of the syphon back up the creek a sufficient distance to prevent gravel and earth from (584.) washing down and clogging the mouth of the syphon.

At the tunnel of the Blaine Canal the waters in the canal have eroded the banks of the portal at the lower end of the tunnel to such an extent that considerable caving has taken place. A retaining wall will have to be built at this point on both sides of the portal to

(Testimony of Paul S. Roberts.)

prevent further erosion, or the batter will have to be increased to prevent caving.

All other structures on the lower Blaine canal and on the Era tract are in the same condition as reported in my report on July 30th.

On the Powell tract, all structures are the same as reported in report above noted, with the exception of the head-gate for the north canal at the diversion dam below Powell. The concrete work for this gate is completed. View No. 1 shows this concrete work from the river side.

View No. 2 is a view of the canal side of this same gate. This concrete work is well finished in a workmanlike manner.

View No. 3 shows two of the three tainter gates at the site ready to be installed.

View No. 4 is a view of the downstream face of the diversion dam. The concrete facing of this dam has been worn by the water to such an extent that in places the rocks of the dam have been laid bare. View No. 5 shows the upstream face of the same dam. I am informed that it is the intention of the company to rebuild this dam and to continue it 6 feet above its present top to the level of the top of the concrete of the gates of both the North and South canals. View No. 6 shows the upstream face of the head-gate for the South canal at this same [304] diversion dam. This view shows the wooden gates as now in use at this head-gate. (585.)

With the exception of the above concrete work at the head-gates of the north canal on the Powell tract,

(Testimony of Paul S. Roberts.)

all structures on this tract are in the condition as reported in report of July 30th. The excavation for canals and laterals on the Powell tract has been completed. Openings in the banks have been left for concrete head-gates and all excavations for drops in the main canals have been completed ready for the forms for the concrete work. There is no concrete work finished on any of the structures below drop number five of the north canal as noted in last report.

All excavation and embankment on the entire system is exceedingly well done. With the exception of a few cases of faulty concrete work, as noted in previous reports, the structures which are now completed are well built. At the present time there is no work being done at any point on the entire project.

Respectfully submitted,

PAUL S. ROBERTS,

Carey Act Inspector.

(Stamped on back:)

“Office of THE STATE ENGINEER.

INDEX NO. 010.017.

C. A. E.”

Mr. HENDERSON.—Q. Mr. Roberts, did you make any later report than this report of August 27, 1910, on the Big Lost River Irrigation project?

A. I think not, that is, embracing the entire project. I might have made some reports concerning certain phases of it, perhaps, but I wouldn't be sure of that from memory. [305]

Q. But you have no recollection of even doing that?

A. Well, I was in correspondence with the state

(Testimony of Paul S. Roberts.)

engineer (586.) about various matters, but not in the nature of so-called reports, as I designated them.

Mr. HENDERSON.—That is all.

Mr. MILLER.—I think that is all. [306]

[Testimony of Samuel Storrow, for Defendants.]

Further Cross-examination of SAMUEL STORROW.

SAMUEL STORROW, being examined by Mr. Henderson, testified as follows:

I was at the Mackay dam in the latter part of June to the middle of July, 1911. When I was at the dam, it was partially completed and there was still more to be done. The dam was six hundred feet broad at the base. It was approximately two thousand feet long. The highest work done at that time was probably 115 or 120 feet above the lowest point. (589.)

Mr. HENDERSON.—Q. In Mr. Riley's letter to you, dated June 13, 1911, he asks you to make a report, to outline a design and estimate of cost of design advised by me for completing the Mackay dam, canals and principal laterals. Did you make that report?

A. As you read the letter there you forget that that letter is written by me to Mr. Riley, and accepted by Mr. Riley.

Q. Then your letter to Mr. Riley—

A. I made the report as stated in that letter.

Q. Now, did you tell him in your report how that dam could be completed?

A. I believe I did, sir.

(Testimony of Samuel Storrow.)

Q. Did you estimate what it would cost to complete it? A. Yes, sir.

Q. What was your estimate?

Mr. POWELL.—Objected to as immaterial and irrelevant. (591.)

A. Quoting from memory, \$675,000.00, but I qualified that estimate by describing certain changes which I thought it was necessary to make on account of the bad work already done. [307]

Q. You have that report in court, have you not?

A. I have.

Q. Will you look at that report and see what your estimate was? A. No, sir.

Q. You will not? Don't you know that to be wrong? A. No, sir.

Q. Don't you know that your report was \$550,000.00? A. No, sir.

Q. Will you say it wasn't?

A. I say that it may have been so written once, but it was corrected if so written. My report was \$650,000 as I now remember it. I am testifying from memory.

Q. In that report, didn't you say that the material that was already in the dam could be used by putting a blanket over the front of it?

A. But also saying that certain other things should be done.

Q. What other thing did you recommend?

Mr. POWELL.—Objected to as immaterial, and not cross-examination, and irrelevant.

Mr. RUICK.—The proposition is that this was a

(Testimony of Samuel Storrow.)

private report made to his employers, and therefore confidential, and not the proper subject for examination or cross-examination, and not an issue in this case.

Mr. HENDERSON.—If he has made any different kind of report, I have a right to find out.

Mr. MILLER.—That is not the proper way to impeach a witness, as I presume you know.

Mr. HENDERSON.—Answer my question. (592.)

A. I told Mr. Riley, either verbally or in the report, that the work which it would be necessary to do at the Mackay dam [308] in order to make a serviceable dam of it was divided into two lines, one—

Q. Will you get your report and read from it?

A. No, I decline to.

Q. You are now testifying from your recollection?

A. I am testifying to what is in the report.

Q. All right; go ahead.

A. I told Mr. Riley that there were two ways of completing that dam; one was to do the least work which would make the least dam that we would dare build, and that, having built that in that way, he would then have a dam which would undoubtedly cost him more money as time went on for repairs and additional work and so forth; and I stated that in building the dam in that way it would be necessary to provide an impervious barrier to the water, which was utterly lacking in the dam as then partially completed, and that that might be furnished by building a somewhat new type of dam on the front or upstream side of the present structure, separate there—

(Testimony of Samuel Storrow.)

from, but connecting therewith by leaning against it; in other words, that an entirely new impervious barrier must be furnished, and that, if that were done, this new impervious barrier were furnished, then the existing material might be used to add to the physical strength, to restrain the thrust of the water, but not its percolating power. I further suggested to Mr. Riley that on account of the fact that the work on the dam as already completed was defective, in my opinion he had better leave that site altogether and go to a new site, merely because it was cheaper in the long run; I don't mean cheaper the first day, of course, but cheaper in the long run to build a new dam rather than to rework an old one and not know just what he had done or had on his hands, rather than rework it. (593.)

Q. What was your estimate on the new dam?
[309]

Mr. POWELL.—The same objection—not cross-examination and immaterial.

A. I have forgotten the exact figures. The first cost is higher than the cost of repairing the Corey dam, but, as I have just told you, I advised Mr. Riley that the ultimate cost would be less, although the first cost would be a little more, that is, the apparent first cost.

Q. You have that report in court in front of you. Will you state what your reported to Mr. Riley the new dam would cost.

A. I do not have that report in front of me.

Q. It is on the table, isn't it?

(Testimony of Samuel Storrow.)

A. I do not know; I am not looking at the table; I am looking at you.

Q. I will ask you to look at the table.

A. That is not my copy of my report. That belongs to counsel; that is not my copy.

Q. But you know that a copy of your report is here? A. Yes, sir.

Q. How much was the difference between building the new dam and the cost of repairing or fixing up the old dam?

Mr. POWELL.—The same objection.

A. I do not know what it would ultimately come to.

Q. Will you look at your report and see?

A. The report does not state.

Q. It does not? A. It does not.

Q. Did you report to Mr. Riley in writing as follows: "In order to complete the present dam at the present site, the procedure advised by me is as follows: 1st. Build a blanket of a fine material containing as much gravel as will (594.) still [310] further increase its imperviousness, placed on the water face of the present dam and connected by a deep trench to deep foundations so that any water which passes the line of the dam will be forced through a deep and safe path well below the body of the fill. This whole structure then being surfaced on the water face with a mattress of heavy gravel or rock built to withstand wave action."

A. I have already just testified to you that I did so report, or words to that effect. I wish to qualify that slightly by saying that my report included a

(Testimony of Samuel Storrow.)

number of other things with reference to construction without which your quotation, or whatever that is, the piece you have just read, is not complete, and does not express the real full meaning of my report to Mr. Riley at all.

Q. Did you further report: "The procedure for this design is to build a dike across the stream bed upstream from the present dam, so as to give access to the proposed trench, then to cut this trench by a steam shovel along the whole 2,000 feet of the face of the dam, cutting to such depth, not less than 20 feet, as the finding of the cutting itself may show necessary; the material so excavated to be used for filling in the body of the dam itself. At the same time, the present concrete face of the dam will be stripped off. When the proper time comes, after the trench has been fully excavated, it will be sluiced full of fine material washed out of the body of the present and accumulated fill. Thus the dam will be changed from its present design by the addition of a great blanket of strong and impervious material on its upstream face." Did you so report?

A. That is part of the report which I have just testified I made. It is explanatory of what I have just told you, and, taken by itself, it utterly misstates the tenor of my report. (595.) [311]

Q. But you decline to furnish it?

A. I decline because it contains confidential matters entirely distinct from construction, matters of finance and matters of credit, and matters which I do not consider in any way pertinent to this contro-

(Testimony of Samuel Storrow.)

versy. and all strictly confidential.

Q. Did you further report on this dam: "It will be necessary to effect a very secure bond between the body of the fill of the dam and the limestone cliff on the right bank. This is a simple matter and consists of merely excavating a proper cut into the bank with proper slopes of sides and back and refilling this cut with properly puddled material." Did you so report?

A. With the qualifications which I have stated, yes, sir.

Q. (Reading.) "Other detailed additions are necessary such as the building of a new spillway on the north of the dam, which will be a somewhat difficult and expensive structure, because it must cross the soft and friable cone of Cedar Creek and must be built of the elsewhere mentioned capacity of 10,000 second-feet." Did you so report, Mr. Riley?

A. With the qualifications I have just stated, yes, sir.

Q. (Reading:) "It will be necessary to rebuild the inlet of the tunnel passing water through the dam. This inlet is dangerously close to the present face of the dam and will be completely covered by the proposed blanket. It should be rebuilt by extending the main line of the tunnel to emerge from the rocky cliff well to the south of the dam and a gate tower should be built preferably as a shaft in or against the cliff. The gates themselves should be placed in the base of this tower and should be of sufficient capacity to give a maximum discharge to the tunnel." Did

(Testimony of Samuel Storrow.)

you so report? (596.)

A. With all the qualifications of my previous answers, that that is a partial statement, and the other qualifications, yes, sir. [312]

Q. (Reading:) "After all this has been done and the water is allowed to accumulate in the reservoir, I anticipate that a considerable amount of the water in the reservoir will sink into the cone of Cedar Creek to reappear again above the lower dam site at the narrows. It is probable that this leakage will be of considerable volume, but if the above suggestion has been liberally carried out, it is at once unlikely that the leakage be dangerous and certain that this leakage can be artificially reduced, and will reduce itself naturally, as time goes on and the floor of the reservoir becomes covered with mud and fine slimes." Did you so report?

A. Trusting to my memory, and with the qualifications previously given, yes, sir.

Q. (Reading:) "After the entire dam has been finished it will, in my opinion, represent a merchantable dam." Did you so report?

A. That is my recollection, with the qualifications previously given.

Q. And in that report didn't you make a report how many cubic yards would have to be moved and how much it would cost?

A. I believe so, sir.

Q. (Reading:) "Contents of the Mackay dam. Completed dam as originally designed would contain 953,152 cubic yards. Fill placed in structure prior

(Testimony of Samuel Storrow.)

to July 1, 1911, 444,176 cubic yards. Fill to be placed, 508,976 cubic yards. Replacement of excavation, 5,233 cubic yards. Total fill to be placed, 515,209 cubic yards. To this amount of fill it will be necessary to add the blanket above described which is estimated (597) to contain 250,000 cubic yards. It will also be necessary to excavate and back fill the trench above described, a distinctly difficult and expensive operation. The following estimate of cost is given, based on the present incomplete surveys:

[313]

TO COMPLETE PRESENT MACKAY DAM.

Fill necessary to complete original design

510,000 cubic yds. at 25¢.....\$122,500.

Blanket on face

250,000 cubic yds. at 25¢..... 62,500.

Excavation "in the wet"..... 100,000.

Facing of dam..... 50,000.

Spillway..... 30,000.

Tunnel, tower and gates.... 35,000.

Contingencies..... 100,000.

(Total).....\$500,000."

Is that correct?

A. You don't expect me to carry those figures in my head, do you?

Q. Well, total, \$500,000?

A. That part is not true, because you have only quoted part of the report.

Mr. MILLER.—Counsel is not correctly reading from the report.

(Testimony of Samuel Storow.)

Mr. HENDERSON.—I haven't got the report.

Mr. MILLER.—Well, you have got a copy of a part of it and are making certain omissions, and you are not correctly reading right now.

Mr. HENDERSON.—Will you show the report?

Mr. MILLER.—No, we won't show it. We prefer to have you go right on misreading it.

Mr. HENDERSON.—Q. (Reading:) "Engineering and Superintendence, \$50,000. Total cost to complete present dam, (598) \$550,000." Did you make those figures?

A. Those figures are not correct. That is not my report to Mr. Riley of the cost of completing the dam.

Q. I didn't ask you if that was your report. Did you make a [314] report to Mr. Riley that the present dam could be completed for \$550,000?

A. If I did, I corrected it afterwards. My impression is that I did not, and, quoting from memory, I am willing to say I did not.

Q. Did you make a report to Mr. Riley for a reservoir at the narrows?

Mr. RUICK.—Do you mean a reservoir, or a dam for a reservoir?

Mr. HENDERSON.—Reservoir site at the narrows?

A. Dam site or reservoir site?

Q. I am asking you—the words I mentioned—reservoir site at the narrows—did you make a report on that?

A. I think that is sufficiently close. What I intended to mean, and what I did mean was a reservoir

(Testimony of Samuel Storrow.)

site extending down to the narrows, with a dam built at the narrows.

Q. And did you estimate the cost of that to be \$675,000?

A. That estimate was made at that time and afterwards raised.

Q. Will you answer my question?

A. I have answered your question.

Q. Did you make an estimate of \$675,000, at any time?

Mr. MILLER.—He has answered it already.

WITNESS.—I repeat the answer made last time.

Mr. HENDERSON.—Q. That is all the answer you desire to give?

A. That is all I answer. (599.) [315]

Redirect Examination.

(By Mr. MILLER.)

These pits, one on each side of the core-wall, I had dug, were within three feet of the core-wall. When I went to the bottom I thrust a crow bar or drill bar through the material, toward the core-wall, a considerably greater distance than three feet, and found no resistance. I know that I was then below the core-wall. The pits were below the core-wall, but how far, I don't know. When I said that I reported to Mr. Riley, that the dam could not be completed and be safe, I meant that in view of the defective construction the dam could not be completed on its original lines. The time that I was at the dam the highest part of the crest was 15 or 20 feet below its finished height. Some parts along the

(Testimony of Samuel Storrow.)

center line were not more than 20 or 30 feet above the native ground and some were less.

The report which I first made to Mr. Riley regarding the cost of working over the present dam and building a new dam was amended and changed several times.

Trust deed offered in evidence as Exhibit 66.

[Testimony of C. B. Hurtt, for Defendants.]

C. B. HURTT, being recalled, testified as follows:

I have made computations from the record of the Big Lost River Irrigation Company as to the total amount of money of the contract for the sale of water right by that company to settlers, to date. I have not figured the number of the contracts. The amount of the contracts deposited with the trustee averaged \$36 an acre. The total acreage sold was 62,201.37 acres. That includes the water rights sold by the predecessors in interest to the Big Lost River Irrigation Company. Both the sales and water contracts deposited with the trustee are \$1,836,816.27; water [316] contracts collateral on the Bradford & Starr note, \$101,851.92; water contracts with the approval of the State Land Board, \$11,480; total, \$1,960,148.19. None of the money on those contracts deposited with the trustee has been paid except \$4 per acre cash paid when the sale was made. That was paid to the Big Lost River Irrigation Company and not turned over to the trustee.

Of all the money received from the bonds of the Big Lost River Irrigation Company, except that that has not been accounted for by Trowbridge & Niver

(Testimony of C. B. Hurtt.)

Company, the balance has all gone in payment to Corey Bros. Construction Company and other expenses. All of the money paid to Corey Bros. came from the bonds. I have here a certificate of incorporation of the Lost River Water Company. That was incorporated pursuant to the Speer contract with the State. I have produced here three forms of water contracts which were used. We had one for the Carey Act land, another for homestead and desert lands, and a third for patented lands, private lands. They were all, however, for the sale of water rights and were approved by the State Land Board, and all three forms were actually used.

(The three offered in evidence.)

The stock of the Lost River Water Company was issued on the basis of a share per acre. The certificate was attached to the water contract signed by the purchaser, and was sent to the trustee attached to the water contract. Those certificates are now held by the trustee, are signed in blank by the purchaser, and deposited with the trustees pursuant to the contract with the State, and pursuant to the trust deed. Those certificates are of 62,000 shares, a share per acre. The Big Lost River Irrigation Company did not receive cash for its stock, but received the rights, and franchises of the old [317] company and acquired by Speer. All the moneys received by the Big Lost River Irrigation Company was by the sale of its bonds and water rights and that has all gone into the project except the \$200,000 of bonds which Trowbridge & Niver Company failed to account for.

(Testimony of C. B. Hurtt.)

I won't say that the Big Lost River Irrigation Company has any property outside of the project and the water contracts. It has about \$300,000 debts outside of that involved in this suit. It is unsecured. The company is insolvent. My recollection is that \$1,378,500 bonds has been issued on the first mortgage, and under the second trust deed \$200,000. They are all outstanding. Part of the interest was paid last July 1, 1910, under the first trust deed. No interest to my knowledge has been paid on that debt since July 1, 1910, nor under the second trust deed. Interest is in default on both. I think the trust deed was executed August 27, 1909.

Articles of Incorporation of the Lost River Water Company, introduced as Exhibit 80.

The principal sales of water rights consisted of the right for Carey Act lands—between 90 and 95 per cent. [318]

[Testimony of G. H. Speer, for Defendants.]

Direct Examination of G. S. SPEER, Witness for Defendants.

(By Mr. MILLER.)

My name is G. S. Speer. I am vice-president of the Trowbridge and Niver Co., bond dealers. I live at Oak Park, Illinois. I have been connected with said concern about twelve (12) years. I was away from the firm about two (2) years. I was vice-president of the company at the time of the inception of the Big Lost River Irrigation project. My first connection with that project was a telegram from Mr. Rosecrans at Boise, approximately the first of Feb-

(Testimony of G. H. Speer.)

ruary, saying that the proposition had been presented through Clinton, Hurtt & Co., and asking me to come and look at it. I went to Boise on the evening train. Mr. Rosecrans met me at Pocatello, and we went out and examined the property. After examining the property we went back to Boise and there met Mr. Ruick, who was the attorney who had brought the proposition to Clinton, Hurtt & Co. He had secured an option from Thomas & Barnham, who had taken the matter up with Clinton, Hurtt & Co., and they mentioned it to Rosecrans and Rosecrans wired me and I went out there. Thomas & Barnham were the principal stockholders and officers of the old company. I do not remember the name of the old company. It had done about \$70,000.00 or \$80,000.00 worth of work, and they had contracts for water rights amounting to about \$360,000.00. We entered into a tentative agreement to acquire the rights of the old company, conditioned upon our being able to get a renewal of their contract with the State and advance in the price of water to \$40.00 an acre. At the time their maximum price was \$35.00 per acre. In making that contract, I was acting for Trowbridge and Niver Co. Later the matter was taken [319] up with the State Land Board and they promised to co-operate. It was several months before the contract was actually consummated. In the meantime, we negotiated with the creditors of the old company, so as to get the things cleaned up and take over and handle it. All of my dealings in this matter were on behalf of Trowbridge & Niver Co. I first met Mr.

(Testimony of G. H. Speer.)

W. W. Corey, President of Corey Brothers Construction Co., in relation to this matter, in Denver, where he came with a number of other contractors to bid on construction work on the Denver project in spring, 1909. Trowbridge & Niver Co. financed the Denver Reservoir Irrigation project, selling the bonds. This was about April 1st, 1909. Mr. Corey was a bidder and seemed disappointed that he did not get any of that work. Mr. Rosecrans and I were going on to Boise again on the Lost River project and mentioned that to him and told him there was another chance for him to do some work, and his outfit being at that time up in Canada, it was a little more convenient for him, also nearer to Ogden, his home and place of business; and when we were through at Denver and started for Boise, Mr. Corey went with us. On our way to Boise, Mr. Rosecrans and I had several talks with Mr. Corey. Practically all day and two evenings. We left Denver in the evening, which brought us to Boise the second morning. Mr. Rosecrans and I had a drawing-room and Mr. Corey, if I remember, had a berth near us, and, of course, he spent most of the day in the drawing-room with us talking these things over and our plans for handling the Lost River and the way things could be done. We talked practically all day about the condition of the project and other matters. I went over the whole thing as to the way this thing came up; and I as vice-president of Trowbridge & Niver Co. had taken it over in my own name because we did not want to have the name [320] of Trowbridge & Niver Co. tied

(Testimony of G. H. Speer.)

up in it. At the same time we wanted to have it in the name of someone representing the company where any money that we advanced would be properly protected, and as soon as we could get obligations paid off or adjusted, we proposed to organize a new company, the name of which had not yet been determined. We wanted to take advantage of the favorable weather in the summer months for the construction work; that Trowbridge & Niver Co. as soon as the engineers had gotten the project ready for the construction work would advance whatever money was necessary for the construction work done by him until such time, and be responsible to him until such time as a new company was incorporated and a formal contract entered into. I also explained to him the condition of the old company—the amount of water contracts they had outstanding and that Trowbridge and Niver Co. had hypothecated those contracts with the banks and had advanced some \$40,000, or \$50,000 on the proposition, most of which would be used in paying these old obligations and cleaning up things so that we could transfer to a new corporation safely; and that if he took the work we would want him to move slowly or at our direction to govern the amount of work done by the amount of money which we found we could pay until the new company was incorporated and Clinton, Hurtt & Co. could have a Carey Act opening and sell water rights and thereby secure additional water contracts to be used as collateral to a bond issue. I explained to him what the bond issue was to be used

(Testimony of G. H. Speer.)

for; that before the bonds could be issued we would have to have those water contracts, and because Trowbridge & Niver Co. did not want to tie up too much of their working capital in the project, we would want him to go slow on the construction work, or as we directed until such time as we could get plenty of bonds. I told him that after they had the opening and the bonds available, he could then go as fast as he [321] liked because we could sell the bonds and get money faster than he could spend it, but until that time he would have to go slow. He said that would be satisfactory, but while he was not a rich man he had quite a balance coming from other work and if it became necessary he might carry a part of it for a while.

He mentioned the Calgary work and that he had not gotten his final estimate. At that time there were no funds available or in prospect for the construction of this system, except the proceeds of the sale of the bonds and except what Trowbridge & Niver Co. would advance. I explained that fact to Mr. Corey and that the amount of money we could furnish would depend upon the condition of the bond market, and how things worked at Denver; that if there was a slowing up of the bond market, they might there call on us for some advances, and we would then be unable to put any large amount of money into the Lost River, but if the Denver parties were able to supply plenty of bonds to meet their needs, Trowbridge & Niver Co. would then be able to put more money into Lost River; that he would have to

(Testimony of G. H. Speer.)

co-operate with us and regulate the amount of work he would do from month to month, depending upon our condition. I am now stating the substance of my conversation with Mr. Corey. We had that same understanding with the other people who were interested. The engineering was done by the Arnold Company. I told him the Arnold Co. would be the engineers in charge, and Mr. Rosecrans, being their chief hydraulic engineer, would be the man in charge of the work. I do not recall positively whether I told him the Arnold Co. would have to wait until the bonds were sold before they got their money. It is likely that I did, [322] because it was understood with both Rosecrans and Mr. Arnold that the work would have to go as slow as necessary, depending upon our condition, and until such time as they had the Carey Act opening, and could get plenty of bonds. Mr. Corey soon after went to see the project and submitted his bid along with two or three other companies. I was present when Mr. Corey's bid was accepted orally in Boise. His outfit was moved on the ground to begin work the latter part of May. I do not know the exact date. I know he was anxious to get his outfit from Canada and wanted to move onto the work earlier than we would permit. I had not completed my contracts with the State and I had not yet been able to adjust all of our claims with some of the parties in Salt Lake, who had claims against the old company and we did not want the work started and have it become known that we were in the proposition until this contract with

(Testimony of G. H. Speer.)

the State had been ratified, or until we had settled with these people, because I expected to get better terms from them than I would be able to get after they knew that Trowbridge & Niver Co. were back of the project, and we had actually started work.

I have no recollection of being present in Boise about the first of June when the completed contract (excepting signatures) was delivered to Mr. Corey.

In my conversation with Mr. Corey on the train I told him that Trowbridge & Niver Co. were to negotiate the sale of these bonds; that Clinton, Hurtt & Co. of Boise were to sell land and water rights. I told him I had the organization completed except the incorporation of the company. It was understood that Mr. Hurtt was to be president of the [323] company when it was formed. I don't recall stating that to Mr. Corey at that time, but he was with us in Clinton, Hurtt & Co.'s office where we all talked the situation over. The Big Lost River Irrigation Co. of Idaho was organized in every particular pursuant to the plan which I laid down to Mr. Corey. I carried out the plan of operation as outlined to Mr. Corey. Under my contract with the State I was to organize a water company to take over this system. In all Carey Act propositions you have a water company and a contracting or construction company, which in this instance was the Big Lost River Irrigation Co. I had made the contract personally with the State Land Board, and when the company was incorporated, it took my place. The water company was a mutual subsidiary company of the Lost River

(Testimony of G. H. Speer.)

Co. All title to the water rights would be in that company. If a man bought 160 acres of land, he would get 160 shares of stock, which represent 160/1000 of the whole system, so that when the water rights were sold out and paid for, the Lost River Co. would be out of business, and the water company would own and operate the project, and the stock would be owned by the farmers. That system of doing things was explained to Mr. Corey. It was practically the same as the situation at Denver. The Denver Reservoir Irrigation Co. was doing the same thing as the Big Lost River Co. The plan was outlined and that was subsequently just the way things were worked out. There was an opening under the Carey Act. The only deviation from the plan as outlined to Mr. Corey was that we had expected to have an opening earlier than it actually occurred. We wanted Clinton, Hurtt & Co. to have the opening on June 1st, but they were delayed by other projects, and thought the time was too short to properly advertise, and have a big opening; that June 1st was not a good time to [324] get eastern farmers to come west on account of being busy with their crops, and they recommended postponement until sometime in September or October, and that was done. I think Mr. W. W. Corey was there. The opening was held in Arco. The money that was paid to Corey Brothers Construction Co. at the beginning of the work was advanced by Trowbridge & Niver Co. I think the first money he got from the purchase of bonds was paid the 10th of October, and from that time on

(Testimony of G. H. Speer.)

it all came from the Lost River bonds, and Trowbridge and Niver Co. were reimbursed for its advances made to the Corey Brothers Construction Co. from the sale of bonds. The estimates upon which Trowbridge & Niver Co. made payments to Corey Brothers Construction Co. were based on the report of the field engineer, who would measure up the work and report to the Chicago office. In all of these transactions I was acting on behalf of Trowbridge & Niver Co.

I do not recall whether I had any conversation during June and July with Mr. Corey, President of Corey Brothers Construction Co. I probably did because I spent a great deal of my time in Idaho that summer and met him frequently either at the Lost River work or at the hotel in Boise.

Cross-examination.

(By Mr. HENDERSON.)

I think McArthur Brothers and Maney Brothers bid on this work. I do not think Corey Brothers Construction Co. was the lowest bid. As I recall it, Corey's bid was lower in some things and higher in others, but the average of the bid as figured out by Mr. Rosecrans was about the same, but because of our talk and getting acquainted with Mr. Corey and his statement concerning his outfit and the work that he had [325] done and what he could do and his willingness to co-operate with us and fit into this plan and adjust himself to our conditions, and the bids being approximately the same—I could not say positively, but I think Mr. Corey's bid averaged just a

(Testimony of G. H. Speer.)

little bit higher than one of the other bids; and Mr. Rosecrans recommended that we give the contract to Mr. Corey, and we told him we would give him the work. I don't recall the exact figures nor the price at which the bids were put in, but as I remember, Mr. Rosecrans figured it out and said that Mr. Corey's bid would average about as good as the others and recommended that we let him have the work. If his bid had been very much higher than the other two, he would not have obtained the work. At times we had advanced money to the Denver proposition for which we had not sold any bonds. Sometimes they would get the bonds just a day or two before the monthly estimates would come in and Trowbridge & Niver Co. would advance the money. We were financing the Denver proposition the same as the Big Lost River proposition. I explained that to Mr. Corey. They were not quite the same. The Denver proposition had already been started and there was not to be any Carey opening. That was simply a question of how fast they could sell their water rights. I did not explain the matter to the other bidders. If their bids had been much lower than Mr. Corey's, and we had wanted to give them the work, I would then, of course, have explained it to them. We did not go into any detail about the Carey Act with them. There was no occasion for it. The reason I went into this matter with Mr. Corey was *was* partly on account of his disappointment at Denver and his apparent anxiety to get the work. As I say he rode on the train there and we got ac-

(Testimony of G. H. Speer.)

quainted with [326] him. I didn't know the other men as well as I knew Mr. Corey, at the end of that trip, and the bids had not yet been received. At this time there was no Lost River Co. to make a contract, and Trowbridge & Niver would not want to make a contract without explaining all the circumstances. I do not remember the exact date when I rode from Denver to Boise with Mr. Corey; that was about the first of April, 1909. Mr. Corey may not have bid on the work personally, but he was in with some of those people. I think he put in bids through Rosser & Whittaker. I am sure that he was a party in a bid. I do not recall the train on which we left Denver, either 7:05 or 10 o'clock P. M. I do not recall positively whether Mr. Corey got off at Green River, Wyoming, about ten o'clock the next morning. It is possible that he did get off and went down to Ogden, and joined us again the next day or so at Boise. When I took hold of this proposition there had been practically no work done on the Lost River dam. The company known as the Big Lost River Irrigation Co. did practically all of that work. A little bit of work had been done there by the old company, but it did not amount to anything. It was just enough to hold their rights. Our company did not lay out the plans for the dam. This was done by the Arnold Engineering Co. Trowbridge & Niver Co. had nothing to do with such things. The plans were drawn by Arnold & Co. after I had acquired the project, and the work that was done was done under those plans. Probably a few hundred dollars' worth

(Testimony of G. H. Speer.)

of work had been done by the old company, but all the rest was done by the Big Lost River Irrigation Co. The first bonds of the Big Lost River Irrigation Co. were sold [327] by Trowbridge & Niver Co. the latter part of September or the first of October, 1909. I can find out exactly from the books. I will look up the date of the sale of the first bond. I will also find out the date of the last sale of bonds and how much the bond sales all amounted to.

The stock of the Big Lost River Irrigation Co. was all temporarily issued to me. I do not recall how many shares were issued to me. I do not think I can tell from any of our books the number of shares that were issued to me. I do not think we have the records here. The stock that was issued to me belonged to Trowbridge & Niver Co. and their associates. The date of the first sale of Big Lost River bonds, I have just learned over the telephone from my office, was made September 10, 1909. I did not get the total amount. The trust deed was already prepared and they used water contracts that were obtained by the old company as collateral to those bonds. During the month of September we sold approximately \$300,000.00 worth of bonds, and the last bonds were sold June 23, 1910. Altogether, I think we sold about \$1,350,000.00. I do not know how much money we have turned over to the Big Lost River Irrigation Co. I will look it up and find out. I find the bonds are dated July 1st, 1909, maturing from 1915 to 1923. The trust deed was dated July 1st, 1909, and recorded August 27, 1909. The first deliveries of bonds were

(Testimony of G. H. Speer.)

made September 10, 1909. We delivered \$49,600. The orders had been taken from 30 to 60 days before that. The last bonds sold by our company for which we received money was, I believe, June 23, 1910. I do not know the exact amount of bonds sold on the 23d day of June, 1910.

I find that prior to September 10, 1909, Trowbridge & Niver Co. had advanced the Big Lost River Irrigation Co. \$209,516.00 [328] on the 11th of September, \$88,801.00. They delivered \$49,600 of bonds September 10th. The total sales in September were 301,000. I do not know the exact amount of money we have turned over to the Big Lost River Irrigation Co. I think approximately \$900,000.00 or \$910,000.00. There is due from Trowbridge & Niver Co. to the Big Lost River Irrigation Co. in gross \$164,000.00; net \$96,000.00. By gross and net I mean that there were different arrangements made. The last agreement was with the Western Mortgage & Loan Company, which then held all of the stock of the Lost River Co. They were anxious to push the work through to completion, so that water would be delivered on all of the land by May 1st, 1910. They made an arrangement with Trowbridge & Niver Co. which amounted to their offering a bonus, and if Trowbridge & Niver Co. would sell the two million within a certain length time, they were to have a special discount of five per cent, and if Trowbridge & Niver Co. sold all the bonds delivered to them, but did not sell the two million, they were still entitled to that discount. We sold all the bonds delivered

(Testimony of G. H. Speer.)

to us, and we, therefore, would be entitled to the discount, which would give us about \$68,000.00 more, which would make about \$96,000.00 net which we still owed the company. The Western Mortgage, Loan and Trust Co. is Trowbridge & Niver and their associates and Clinton, Hurtt & Co. Clinton and Hurtt, I believe, are the officers of the company. The stock of the Western Mortgage & Loan Co. is held by both Clinton, Hurtt & Co. and Trowbridge & Niver Co. I think during the time of the Construction Company, Trowbridge & Niver Co. held it all. They were to hold it all until the dam was completed. [329] What the division was to be after that time I do not remember. Trowbridge & Niver Co. took over the bonds of the Big Lost River Co. at 80¢ on the dollar, and if we sold two million we could get a discount of five per cent, and if we sold the bonds as fast as delivered to us, we were still entitled to that discount. The bonds would net the Big Lost River Irrigation Co. 75¢ and interest on the dollar. The last sale of Big Lost River Irrigation Co. bonds by Trowbridge & Niver Co. was on June 23, 1910, but the last bonds received by Trowbridge & Niver Co. from the Big Lost River Co. was on January 15, 1910, at which time Trowbridge and Niver Co. received \$1,000.00 worth. The total sales in May, 1910, were \$3,100.00. The total sales in June, 1910, were \$5,600.00, all of which deliveries were made from bonds held by banks as collateral to Trowbridge & Niver loans, that had been hypothecated on and before February 10, 1910, and were sold in May and

(Testimony of G. H. Speer.)

June, 1910 for the banks which held them and not for the Big Lost River Irrigation Co.

[Testimony of W. H. Rosecrans, for Defendants.]

Direct Examination of W. H. ROSECRANS, Witness for Defendants.

(By Mr. MILLER.)

My name is W. H. Rosecrans. I am a civil engineer. I have been a civil engineer for some twenty-odd years. I took my engineering course principally at Ann Arbor. My office is in the Stock Exchange Building; 30 North La Salle Street, Chicago, Illinois. I was at one time connected with the Arnold Company for about seven years. I severed my connection with them September 1st, 1910. My practice has been general engineering, but my special work has been along hydraulic lines. My practice has been quite extensive. [330] While with the Arnold Company I was connected with the Big Lost River Irrigation project at Idaho. My connection with it began about February, 1909. I sent word for Mr. Speer to come out and look the matter over. I was then connected with the Arnold Company. I assisted Mr. Speer in getting control of the project for Trowbridge & Niver Co. The Arnold Co. began engineering work about the latter part of March. The first man who went upon the work for the Arnold Company, I think, was H. G. Raschbacher. I put him in charge of the work on the ground. He went out there and started surveying and making profiles and examined the water supply and kindred matters.

(Testimony of W. H. Rosecrans.)

Mr. Goyne Drummond and F. A. Coy went out there to assist him. I really do not remember whether Coy went out with Mr. Raschbacher and started work before Drummond came on the ground. At this time Arnold Company were working on this project for Trowbridge & Niver Co. I first met Mr. Corey, of the Corey Brothers Construction Co. in Denver. It was not in connection with this matter. I think it was about the last of March or the first of April, 1909. I met Mr. Corey in Denver in connection with construction work that we had advertised relative to the Croke Canal and the Burlington ditch and its connection to Barr Lake. I talked over that work and advised him that the work would probably go very low as there were a number of people anxious to get it who had their outfits on the ground. Mr. Corey told me that he had an outfit in Canada at the time and told me that he had built considerable canal work for the Twin Falls Irrigation Co., and was familiar with that kind of work in Idaho, and I suggested to him that he would be more interested in taking a contract on the Lost River, which work we had in contemplation, but had not made public. I then told him something about the work and that Mr. Speer was [331] coming west, and if he would talk the matter over with us, perhaps he could get the work, if he would make the right kind of a figure. I do not know whether he told me at Denver that he had come there to bid on the work. He told me he came there to look it over. My intention was to give me the best advice I could, and that he would

(Testimony of W. H. Rosecrans.)

have a better chance to bid on the work out west. I do not think Mr. Corey bid on the Denver work. I am not positive.

From Denver we went to Boise; that is I introduced Mr. Corey to Mr. Speer at Denver, and he joined us on our trip west. Mr. Speer and Mr. Corey had a conversation at Denver. I do not know how extended. I said to Mr. Corey: "You talk with Mr. Speer and talk the situation over and I also will talk with him." I spoke with Mr. Speer, told him Mr. Corey had a large outfit and was familiar with irrigation and canal construction, and it struck me that he would be a good man to ask to bid on the Lost River work. I think we left Denver in the evening and went to Cheyenne. We got a Union Pacific train from Cheyenne west. I am not clear on that matter. I am under the impression that Mr. Corey left us on this trip either at Green River or Pocatello and then came on and met us at Boise. I saw him again before I left Boise. He came back and met us in Boise. On our trip from Denver to Green River or Pocatello Mr. Speer had quite a long talk with Mr. Corey and I had quite a long talk with him. He asked me about the finances of this affair and I explained the situation to him; that the Trowbridge & Niver people supplied the money for these projects from the sale of bonds; that the bonds were sold as rapidly as they could get them in, and from the proceeds of those bonds the contractors were paid from time to time. [332] I explained to him that they were having large work at Denver and that the

(Testimony of W. H. Rosecrans.)

contractors were substantial fellows, as he could see. They were all working along satisfied on that plan. That was the same scheme they were going to use in the west. It was suggested to him in my presence that Trowbridge & Niver Co. had taken over this project and were going to sell bonds. I did not state to him on the train who was to sell the bonds, but had further talk about the matter in Boise before Corey submitted his bid on the work. I explained to Mr. Corey that this matter would be handled just as it was subsequently handled; that Trowbridge & Niver would supply the money from time to time to carry on the work. I did not go into the matter with Mr. Corey whether or not this company which was to take over this project had yet been incorporated. I explained to him the system Trowbridge & Niver Co. worked under was to sell the bonds on this project, and from the sale the money would be supplied to the contractor. He wanted to know where the money had come from and I explained it to him. I explained to him that Trowbridge & Niver Co. were the people that we looked to for our money. We had a contract with them for the engineering and we were thoroughly satisfied with them, and thought they were all right. I do not remember of going into detail as to how soon these bonds could be issued or whether it was necessary to wait until after there was an opening. Whether there was such a conversation held about that between him and Mr. Speer I cannot recall. I know that he and Mr. Speer talked over these questions and I was present. Mr. Speer

(Testimony of W. H. Rosecrans.)

had a considerable talk about the matter. I told him to talk it over. Mr. Speer and I told Mr. Corey who would supply the money before the bonds were issued, not at the early part but later on, when it came to making a contract, [333] I explained this much further to him then. I told him that while I had recommended accepting his bid, and had Mr. Speer's approval, that he must not get his outfit down there until we notified him, and that then he would have to work along slowly with Trowbridge & Niver Co., as they would have to advance money to him until they got in shape to sell the bonds, that is, he must not go too fast from month to month. Estimates were made by the month and we would have to get together about the maximum amount of work he should do in one month while Trowbridge & Niver Co. were advancing the money. I believe Mr. Corey did some work before the contract was finally signed up and accepted, although it was agreed to with Mr. Speer. The contract was all drawn up, but I think there were some final signatures, or at least the signing by the company was not done when the first estimate came in.

I was the chief engineer of that project while Mr. Corey's work was going on there. Mr. Raschbacher was official engineer until about the first of October, 1909, after that Mr. Drummond. Mr. Drummond did not have any authority to change or deviate from the plans or specifications without written permission from me. He had no general written or verbal permission to make any changes at that time. The letter you show me is not signed by me. That is

(Testimony of W. H. Rosecrans.)

addressed to me. I received that letter. Mr. Drummond was placed as engineer in charge on the ground about the first of November. I have no recollection of Mr. Drummond asking permission after that date to make certain changes from the plans. I do not remember anything about that letter dated Mackay, Idaho, July 23, 1909. It is addressed to the Arnold Co. for my attention. I received several hundred letters a month from many different pieces of work. I cannot recall what the letters were or what my objections were unless [334] it is something of considerable moment. I do not remember at what time Mr. Coy went to work as engineer on the dam. He was there for a while and had charge of the work on the dam. He was superseded by Mr. Greeley. That came about through the request of Mr. Corey, and on the recommendation of the resident engineer. I do not know whether it came up by the request of Mr. Corey. I think Mr. Corey mentioned the matter first and I investigated. I recall receiving that letter from Mr. Corey, and acted upon the matter in due time. I do not think I saw Mr. Raschbacher between the receipt of this letter and the writing of the letter of November 26th, but this matter had been in abeyance for some time previous to Mr. Corey writing the letter. Mr. Corey had spoken to me verbally about the matter some time previous to that. Later I asked that he write a letter to me, so that I could take it up and in the meantime I discussed the matter with Mr. Raschbacher.

(Testimony of W. H. Rosecrans.)

Cross-examination by Mr. HENDERSON.

I think all of the estimates that I signed and delivered to Corey Brothers Construction Co. were correct. That is my recollection. I think after Mr. Raschbacher left, I instructed Mr. Goyne Drummond to take charge. I also instructed Mr. Raschbacher to put him in charge, or advised them mutually so that both understood it. As I recall it Mr. Raschbacher turned the matter over to him. I thought Mr. Drummond took charge the first of November. The letter indicates the 13th. The estimates would be signed by Mr. Raschbacher if he was there and in his absence Mr. Drummond probably would. Mr. Drummond was second in [335] command there until Mr. Raschbacher officially left. Mr. Raschbacher and Mr. Drummond were acting under me, and they as engineers, were representing the Big Lost River Irrigation Co. through the Arnold & Co. We changed the plans of the Big Lost River Irrigation Co., that is the plans that were there when we took over the work. They were the plans of the old company. I remember the plans and specifications in general that were furnished the Corey Brothers Construction Co. I know that they were different ones from the ones that were made for the old company. There may have been some changes in the plans given the Corey Brothers Co. That would be a matter that you would get best by referring to the record. I do not recall whether we changed the spillway. I cannot recall whether the changing the face of the dam from riprap to concrete was after it

(Testimony of W. H. Rosecrans.)

had been accepted by the State or not. I remember Mr. Corey asked me about the price on changing from riprap to concrete. Mr. Corey did not say that he was not in the habit of doing concrete work for that price. He said something about calcimining. I cannot recall the point. I cannot state at what time that was done, whether the plans had been accepted by the State of Idaho or not. The point of the transaction as far as Mr. Corey is concerned is, his plan contemplated riprapping, but when we finally prepared the plans for the dam, we put in a thin concrete face on there. That was the point that affected him. He put in a price for concrete work. We had the power to make changes in the plans and specifications, with the acceptance of the State of Idaho and agreeably to the contractor. With those limitations and agreeably to our clients, I made them. Mr. Coy is a civil engineer. He worked out there for five or six months, on the Lost River work, and the latter part of the time [336] had charge of the staking out and inception work on the Mackay dam. Mr. Greely succeeded Mr. Coy. I made the trip from Denver to Boise that I refer to the latter part of March or the first of April. The contract was let for building the works on the Big Lost River Irrigation Co. to Mr. Corey, I think in May. At that time the specifications had all been drawn up. I do not think they had been signed by the final company. Just when it was actually let to him I do not know. We accepted his bid verbally. The other contractors who bid on this work were Maney Brothers and Mc-

(Testimony of W. H. Rosecrans.)

Arthur Brothers. I think also now that you ask me that Donald Grant also bid on it. I explained to all these other contractors at different times how money was going to be raised to pay for the construction work. I do not believe I told Mr. Corey on the trip from Denver that Trowbridge & Niver Co. were a very wealthy concern. I told him we considered them reliable and substantial; that they were able to advance the money in my best judgment, and that we were taking a chance on them, and thought they were all right, and these other contractors were, and I gave them as good a recommendation as I could. I was relying on Trowbridge & Niver Co. We thought they were all right as far as we were concerned, we depended upon Trowbridge & Niver Co. for our pay and I explained to them the situation.

Redirect Examination.

(By Mr. MILLER.)

I did not tell Mr. Corey that Trowbridge & Niver Co. would pay him whether they sold any bonds or not. I did not say anything to Mr. Corey to the effect that irrespective of any bond issue, Trowbridge & Niver Co. would pay him on this whole thing. Mr. Corey thought this thin concrete would be more expensive than mass concrete work. The only changes in the plans and [337] specifications that were made were some minor changes. Such changes as I know anything about were submitted to me and authorized by me in writing. I do not know anything about the change in the Antelope Creek

(Testimony of W. H. Rosecrans.)

crossing. I do not recall anything about changes in the place of putting the flood-gate or the mud-gate at the Blaine head works, or doing away with a wall 100' long and 7' high or reducing the weir there from 150' to 125'. I did not authorize making the fill of the dam by dumping from a diagonal trestle on the core-wall. I did not authorize putting the gravel in stratas so that there would be a coarse heavy strata below.

I remember that the estimates that were prepared by Mr. Drummond were first sent to Chicago to the Arnold Co. to be looked over and signed here and then one copy was delivered to Corey Brothers Construction Co. Mr. Drummond, did not to my knowledge, sign estimates and deliver them to Mr. Corey or the Corey Brothers Construction Co. without those estimates having been submitted to Chicago and approved in my office.

Recross-examination.

(By Mr. HENDERSON.)

The last time I was out there and made an inspection of the Big Lost River project was in the fall, September, 1909. I looked at the work that had been done on the dam. I looked over the work that had been done at the time at the head-gates of the Blaine Canal. There was no Antelope crossing in at that time, nor were there any gates in at the head of the Blaine Canal. I think the work I looked over was constructed according to the plans and specifications. I have no fault to find. I think Mr. Corey was doing all right when I was there. [338]

(Testimony of W. H. Rosecrans.)

Redirect Examination.

(By Mr. MILLER.)

The Antelope crossing and the head-gate of the Blaine Canal were not finished when I was there. Mr. Coy was on the dam then. Mr. Drummond was down on the Powell tract and Mr. Raschbacher was the engineer on the ground.

Recross-examination.

(By Mr. HENDERSON.)

The work on the head-gates of the Blaine Canal was not finished. I think they were part iron and part wood. I don't know whether the Corey Brothers Construction Co. were to furnish the head-gates or not.

Redirect Examination.

(By Mr. MILLER.)

September 1st, 1909, about half the concrete work was done at the head of the Blaine Canal. The part that was nearest done was at the head works entering the canal and part of the weir run out a ways.

It was in no condition for final inspection. The quality of the work was good and as far as it went it filled the idea that we had in the plans. I did not inspect it at that time to see whether it was going to follow the plans when finished.

[Testimony of Ralph G. Arnold, for Defendants.]

Direct Examination of RALPH G. ARNOLD

Witness for Defendants.

(By Mr. MILLER.)

My name is Ralph G. Arnold. I am Secretary and Treasurer of the Arnold Co. I have held that posi-

(Testimony of Ralph G. Arnold.)

tion for about ten years. During the years 1909 and 1910 while the Arnold Co. was doing the engineering on the Big Lost River project, the estimates were undoubtedly prepared by various engineers in charge and sent in to Mr. Drummond who would check them and [339] transmit them to the Chicago office, when they would go to the chief engineer, who at that time was Mr. Rosecrans, who would inspect them and pass upon them as to their regularity and correctness and send them to the auditor for a check as to the mathematical correctness and then a copy would be sent to Trowbridge & Niver Co. and a copy to Corey Brothers Co. Estimates that came from Mr. Drummond to our office were typewritten. I do not think that Mr. Drummond was authorized to make up these estimates and hand them to the Corey Brothers Construction Co. before submitting them to the Chicago office. I do not believe that he ever delivered any estimates to the Corey Brothers Co. without submitting them to our office. Corrections were made in the estimates that were sent in to our office by Mr. Drummond before sending them back to be delivered to Mr. Corey.

From this letter that you show me dated December 2, 1909, from Mr. Goyne Drummond, it is evident that there were corrections made in these particular certificates that were enclosed in that letter. They were corrected and sent back to Mr. Drummond, who in turn delivered them to the contractor. If there were no corrections to be made, they were sent back to Mr. Drummond, who gave a copy to the

(Testimony of Ralph G. Arnold.)

contractor, the certificates being signed by the auditor and chief engineer here in Chicago. It is evident from the letter you show me from our office to Mr. Drummond dated February 8, 1910, that in that instance the certificate was corrected and sent back to Mr. Drummond and he delivered a copy to Corey Brothers Construction Co., after the same had been signed by our chief engineer and auditor. So far as I know Mr. Drummond never signed any certificate out there and then gave it to the Corey Brothers Construction Co. without having submitted it to our office for correction and approval. I do not think [340] that he was authorized to do it in any other manner.

Cross-examination.

(By Mr. HENDERSON.)

The change in the certificate of December 2, 1910, sent in by Mr. Drummond was a correction from 129,386.10, as reported by him, to 128,545.03. It was apparently a mistake in the amount allowed in the certificate on account of force account work performed that month. We took the figures made by our engineer in charge relating to the measurements of earth and rock work done on the canal. I do not think there were separate certificates issued for force account, but that was incorporated in the certificate covering the unit price work. The mistake of December 2, was for \$841.07. That was corrected. Another error appearing was the footing of an invoice for \$3016.22, which was reduced to \$2,917.22. A letter of the Arnold Co. to Mr. Goyne

(Testimony of Ralph G. Arnold.)

Drummond dated Dec. 7, 1909, Resident Engineer of the Arnold Co., Mackay, Idaho, signed by W. G. Farnsworth states that certain certificates were incorrectly numbered and that certain totals were reduced from \$129,386.10 to \$128,525.03 and that a force account for the month of November amounted to \$8,462.46, whereas the bills attached to the certificates only showed \$7,527.94. Also calls attention to an error in footing on invoice for \$3,016.22 covering work by Force account at Camp No. 3 and to items of excavating trenches of Bridge No. 1. Bill reduced to \$2,917.22. States they are returning two copies of certificate covering the above amounts. Requests that Mr. Drummond deliver one copy to the Corey Brothers Construction Co.

I did not personally send out any of these estimates. The letter I have just read is a copy of a letter which I [341] find in our files. The correction in the estimate of February 8, 1910, was 30¢. That letter was addressed to the Arnold Co. attention of Mr. Goyne Drummond, Resident Engineer, Mackay, Idaho. The changes as I have indicated are made right along; that is usual. I would say that the error in the first letter was probably an oversight in not attaching the supporting bill to the sum total called for in the estimate. I have not looked over our correspondence to ascertain whether there were other changes made in the estimates. If a final certificate was delivered to the Corey Brothers Construction Co. by us, we must have thought it correct if we certified to it. I think Mr. Corey did

(Testimony of Ralph G. Arnold.)

his work pretty well, so far as I know. I am not an engineer and I do not want to be asked engineering questions. I never inspected the work or even saw it.

[Testimony of Frank A. Coy, for Defendants.]

Direct Examination of FRANK A. COY, Witness
for Defendants.

(By Mr. MILLER.)

My name is Frank A. Coy. I am thirty years of age. I have been a civil engineer for 8 years. I am a graduate of Armour Institute of Technology. The first year out of school I was estimator in the contracting department of the American Bridge Co. From then until 1907 I was with the Illinois Central and Chicago & Northwestern R. R. Companies. Location and Construction Work. In 1907 I went to work for the Arnold Co., Chicago. Between Jan. 1908, and Feb. 1909, was an engineer on the valuation of the Chicago Electric Light System. In Feb. 1909, I went out to Mackay. Mr. Raschbacher went with me. He was my superior. I went out there to make surveys for the Big Lost River Irrigation Co. We arrived at Mackay the second or third of March. Mr. Raschbacher and I made preliminary surveys for canals and ditches and for the dam site and reservoir and everything on the Big Lost River Irrigation project. [342] The surveys were for the canals and laterals. The dam had been located by the previous company. There were signs of construction work. There had been a channel cut parallel to the bed of the river about six or eight feet deep, thirty

(Testimony of Frank A. Coy.)

or forty feet wide on the east side of the river. There had been an excavation made for the core-wall, and there was a heading for an outlet tunnel. It was lined with timber for a short distance. The excavated rock had been dumped promiscuously right down beside the cliff within the line of the dam. The dam site had already been selected by the parties who worked on the previous project. There was no change at all in the location. The core-wall was placed where the core-wall had been located previously. We were working for the Arnold Company. Mr. Drummond was with us also at that time. He came there two or three days after Mr. Raschbacher and I. He worked with us. Mr. Raschbacher was the superior. Mr. Drummond and I were the assistants. The construction work began about the first of June. I do not know the exact date. Until that time we were doing survey work there. After that I did a little survey work, but not much. My job was to see that the dam was put up according to specifications, and from that time on I was located on the dam until I was superseded the last week in November, 1909. Mr. Fred Greeley succeeded me as engineer. He is dead. Mr. Raschbacher was engineer in charge of the work until sometime in November just previous to my change. He was succeeded by Mr. Drummond. The occasion for my being superseded was a letter I received from Mr. Rosecrans stating that I had been superseded on account of my lack of tact in dealing with Mr. Corey. I do not know where the letter is, whether I left it in

(Testimony of Frank A. Coy.)

Mackay or whether I took it away with me. I may have it at home. I will look for it. [343] If I find it, I will mail it to you at this office or bring it in here Monday morning. I did not have any talk with his son. It was with his foreman, Mr. Martin. He told me that Mr. Corey had succeeded in convincing Mr. Rosecrans that he should remove me for certain altercations we had. That was the first news I had of it. Mr. Martin said: "I guess the old man has a bigger drag with Mr. Rosecrans than you have." Just previous to the time that I was removed I had an altercation with Mr. Martin and Mr. Corey combined. It was over cleaning the concrete that had already been placed. Cleaning it previous to depositing new concrete on top of it. It was covered to about one-half to one inch with thin silt that had washed in from the puddling. They were proceeding to concrete on top of the silt and I stopped the mixing. Mr. Martin sent for Mr. Corey and we had a little altercation then. Mr. Corey stated it was cement grout.

MR. HENDERSON.—I object to this line of testimony on behalf of the defendant trustees, there being no privity of contract between them and the Corey Brothers Construction Co.

It was not cement and I insisted upon its removal. I think that was the only altercation in which either one of us lost our temper. There were no insults or anything of that kind, but rather a hot conversation. We had several other altercations. One in particular was about the location of the road through the

(Testimony of Frank A. Coy.)

borrow-pit. There was a borrow-pit dug on the upstream side of the dam which necessitated building a new county road to clear it. There was a county road through the borrow-pit that had been built up the hill to clear the borrow-pit as originally staked out and paid for by force account. The changing of that road was paid for by [344] force account. Mr. Corey asked for additional borrow material so that instead of moving the earth the second time, by verbal agreement with his son, he was to do that building of the road without charging for it.

I had a verbal agreement with his son, Warren Corey. I had selected the site for the road as it was first built. At that time it was not designed to have another borrow-pit there. That road was supposed to clear the construction work. After that he put in a bill for it. I refused to O. K. it. There was no particular controversy about it. He just took it over their head. I think this occurred after the time that Mr. Drummond was made resident engineer. I understand Mr. Drummond paid for it. As a matter of fact I know that he paid for it, but I cannot state how I know. I think I gained that information from Mr. Drummond. I had some talk with the Corey Brothers Co. about the material to be used for making concrete. I insisted on a very good class of material. I insisted they get the material from some gravel banks down in the river bed. There were two sites, equally good, as far as material was concerned. He chose the lower one. There was one above the dam and one below, either place he could

(Testimony of Frank A. Coy.)

have gotten it. His foreman wanted to get the material from the same stuff that the dam was being made from, right alongside from the dirt that came in the cars. He wanted to take some of the material taken from the borrow-pits. His foreman objected to screening. While I was there I succeeded in getting the material, which was used to make the concrete, taken from the gravel-pit in the river bed. I was on the ground about a month after I was superseded. During that time the material for the cement came from the river, from the bank above the dam site. The only concreting [345] that was being done at that time was tunnel lining. I know that after I was superseded they used gravel or material taken from the bank that was dumped from the borrow-pit excavation for making this concrete. I was told it by my assistant, Mr. McCallum. He was my rod man and continued in the same capacity with Mr. Greeley. I presume he is in Mackay now. I do not know. He was a local man there, not an engineer. I had some controversy with the Corey Brothers Const. Co. regarding cutting the borrow-pits too near the dam. As I remember the specifications, they signified that there should not be cutting within 200' of the toe slope. I think they cut nearer than that while I was in charge, about 50' or 60' nearer in places. I objected to their doing this, not so much to them as to my superiors. I do not remember saying anything to the Corey Brothers Construction Co. about that.

The kind of puddling we did there, while I was on

(Testimony of Frank A. Coy.)

the job, we put in a pump there and carried lines of hose up to the elevations upon which we were working and washed the material toward the center. They had a steam pump there. Afterwards they got a larger one. Before they got the larger pump the stream of water was not enough to sufficiently puddle the cement. I do not remember whether Mr. Raschbacher or I told them to get a larger pump. I know they got a larger pump. I do not know who paid for it. I do not remember whether they used it while I was in charge. I know it was used while Mr. Greeley was there while I was on the job. After I was superseded the puddling should have been much better, because the pump was capable of supplying a much larger stream of water than the other one. I saw them putting in the pump and pipes. That was about one of the last things that was done while I was there—putting in the pump. The pump was installed and the pipes were installed while I was there. [346] In order to do the puddling sufficiently I recommended that water be supplied from Cedar Creek in a flume. They would have had to bring it about $3\frac{1}{2}$ to 4 miles in a wooden flume. There was plenty of water in Cedar Creek. I gauged it in July. I think it would never get much below that. I do not think the pump was in working order when I left. I do not know whether it afterwards was in working order or not. There was some sheet piling driven while I was in charge. They began on the bar between the river and the rock cliff and drove to the rock cliff until they could go no further and

(Testimony of Frank A. Coy.)

then started beginning a new one east toward the river. I should judge about 200 or 300' lineal feet of the piling was driven before I was superseded. After I was superseded and while I was still on the ground, I saw piling driven in soft material. I saw piling that was not driven to refusal. I only remember one particular pile that I happen to watch. They spliced the two together 32 feet long and still it did not go to refusal, when it was down. I know that other piling was driven in the same way; that was bound to be so. One pile locks into another. I do not know anything about the adjacent ones. I was just a spectator as it were. Several times I had to insist strictly on their plowing the ground. Sometimes they would plow enough to last for a day and the men coming on the dam would cover it up. They kept right on going unless we insisted strenuously on getting it started again. There was some plowing done twice—it was allowed to weather too long and I insisted upon it being done over again. It was not all plowed twice. Mr. Drummond made two or three trips up to the dam just as a [347] spectator just before Mr. Raschbacher left. After Mr. Raschbacher left, it was not very long until I left. Mr. Drummond came up a few times from the time he came there until the time I left. A fair part of the material taken from the tunnel was put in the dam. Some of it was wasted. When I say wasted I mean thrown away. There was no rock from the spillway placed inside of the dam foundation. The natural angle of repose of the material excavated from the

(Testimony of Frank A. Coy.)

borrow-pit was $1\frac{1}{4}$ to 1. It was very uniform material. I had some controversy with the Corey Brothers Construction Co. about their attaching pipes onto our tank for their own use. That being force work, I thought they should bear a pro rata share of the cost. I think they used about one-third of the water for their own purpose. I insisted that they should pay for it. That was in abeyance when I left. I do not know how it was settled. There was a pump being operated on force account, and they were using a portion of the water for supplying their engines and steam shovels, and they objected to paying for the part of the water that they used.

After I was superseded and left the dam site, I was transferred to the Colorado Southern Irrigation Co. at Canon City, Colorado. I was working under Mr. Raschbacher for the Arnold Co. I was not discharged by the Arnold Co. My salary was raised. I was doing the same general line of work there, only I was connected with the building of a canal. I was on preliminary work, surveying. The bottom of the trench that was dug from the end of the core-wall up the left bank was gravel, the same as the gravel-pits. It was the same material as deep as the trench was dug. There was a very light layer of soil on top in places. The core-wall was also placed on that same kind of material. The bottom of the trench in which the core-wall [348] was placed was the same kind of material as in the borrow-pits.

(Testimony of Frank A. Coy.)

Cross-examination.

(By Mr. HENDERSON.)

I quit the Big Lost River work the latter part of November, 1909, and I stayed around there for about a month. I was instructing Mr. Greeley, getting him familiar with the work. I was also waiting instructions to go to Canon City, and while I was doing that I stayed and helped him out. After those controversies with the Corey Brothers Construction Co. about how the work should be done, they did it as I directed.

While I was there as engineer in charge I saw to cations were carried out and the work performed it to the best of my ability that the plans and specifications according to them. There were occasional slight variations. I would call attention to them to my superiors. I called the attention of the Corey Brothers' employees to how I wanted the work done. They followed my instructions. There was one or two of those controversies. One in particular was due to the fact that they did not follow my instructions for a while. For an hour or so they did not. Finally they came around and did the work as I wanted them to do it.

The core-wall, while I was there, had progressed as follows: It started from a depth of 6' flush with the ground at Station No. 11, and went level for a distance—I do not know the exact number of feet, approximately to the river bank. In height it would vary from 6' to 20'. In the end they built the core-wall under my instructions. There were contro-

(Testimony of Frank A. Coy.)

versies on the subject. In the main my directions were carried out. [349] I do not remember the exact date when the Corey Brothers Construction Co. started the work. I know they got an estimate for June. That was for work they did in the month of June. When I went there with Mr. Raschbacher a little work had been done. A trench had been dug about 500' on a parallel with the creek. It was dug in the hill-side, so on one side it was 6' deep and the other about 15'. It was evidently dug for outlet work. The outlet works were not finally put there. It might have been intended for a temporary river channel, but it doesn't seem reasonable to me.

I have had the bossing of men before on contracts. I had more controversies with him than I had with other men. I never had more with others. The pile-driving was all done by force account. The piles that we are referring to, that work was not done under my supervision. That was under Mr. Greeley's, when I was just a spectator there. The wetting down of the dam was all on force account. The difference it made to Mr. Corey was on account of the inadequacy of the pump his work was delayed. He had to wait for the pump to get his work out. It took longer than necessary. It was a drawback to Mr. Corey. Whatever the actual cost plus 10% was paid by the company.

Redirect Examination.

(By Mr. MILLER.)

I cannot give my opinion whether the puddling before they got the new pump in was insufficient to

(Testimony of Frank A. Coy.)

make an impervious wall in the center. I would have been much better satisfied with more water. There was no fill from a diagonal trestle crossing the core-wall while I was there. The puddling with the water supply with an insufficient capacity was to a slight extent an interference and delay of Corey's work. All the [350] piling I drove did not interfere with Mr. Corey's work at all.

Mr. Coy advised the notary by telephone on Monday, June 3, that he was unable to find the letter notifying him that he was superseded by Mr. Drummond.

[Testimony of George H. Binckley, for Defendants.]

Direct Examination of GEORGE H. BINCKLEY,
Witness for Defendants.

(By Mr. MILLER.)

My name is George H. Binckley. I am an engineer. Have been one for 25 years. For a time, between four and five years I was connected with the Arnold Co. I left them in April of this year. I went to the site of the Mackay dam the first of August, 1910. I went there to close Arnold & Co.'s office and take charge of their effects. I left there August 5. Mr. W. W. Corey, President of the Corey Brothers Construction Co., was there at times while I was there. I had several talks with him. I inquired from Mr. W. W. Corey as to why the water was flowing through the dam. He explained to me that some of the excavation from the rock side had been deposited in the dam and that the concrete floor had been filled over that, this floor being the floor

(Testimony of George H. Binckley.)

of the portal of the outlet tunnel and that the water could pass freely under that floor. He also explained that the toe wall at the bottom of the concrete facing had not been put in place in the old channel of the river, and that he was satisfied a good deal of water was going through in the old channel. The excavated rock over which the concrete floor had been placed was above the core-wall. At different times when I was there after August, 1910, we estimate that about five second-feet of water was passing through the opening in the core-wall. The opening, I think, was closed by means of a flash-board. In September [351] when the old one was closed the water rose to a height of about 7 or 8' above the core-wall. The water in the reservoir was about two or three feet above the core-wall. The relative elevation between the water in the reservoir above the water above the core-wall remained about the same as before that opening was closed, between 2 and 3' above; that is at all times the water in the reservoir was between two and three feet higher than the water immediately above the core-wall. That water was coming through a fill about 300' in width above the core-wall. The explanation given by Mr. Corey as to where the water was going through seemed very reasonable to me. I cannot say that I observed any boulders near the core-wall. In one of the test-pits which I dug for Mr. Robinson, the State Engineer, we found the material was not well mixed. There would be a stratum of fine material and then a stratum of considerably coarser material. The character of the strata of

(Testimony of George H. Binckley.)

coarse material were such that I think water could flow through them freely. The test-pit was dug right alongside of the core-wall on the lower side. I observed trestles crossing the core-wall from which dumping had been done. A trestle was built there and dumping had evidently been done from it. As I remember, it crossed the core-wall at an angle of 60 degrees. I think it was on the second lift. I am not entirely sure that those lifts were there. Under conditions as I found them there it would be hazardous to impound the full proposed amount of water without making a cut-off on the upper side of the dam. The probable result of going along and filling up the reservoir without any cut-off in the upper wall would be that the water would have [352] poured right down in the lower portion of the dam, or taken a portion of it out. If you take a portion of the dam out, it all goes in time. I suggested to Mr. Corey at the time that he might float the finer material in under the concrete floor and we talked about a sheet pile cut-off along the upper toe. Another method to do that would be to excavate and fill along the upper toe with material that would be impervious.

Mr. HENDERSON.—Let this testimony, all of it, go in under my objection already made.

Mr. MILLER.—Yes, sir.

With the situation as I found it there, in order to make a safe dam to impound a head of 120' of water or thereabouts, it would have been necessary to arrange some cut-off at the upper toe of the dam, a cut-off consisting either of an excavated ditch filled

(Testimony of George H. Binckley.)

with a different class of impervious material and sheet piling. The safer way to do it would be to puddle this trench. In my opinion the trench should be clear across the bed of the river and 30 or 40' deep, and you probably could not work in there less than 40 to 50' wide. You would have to go to the sides of the river possibly not to the entire length of the dam, but to such a point that the head would not force through the dam itself. The trench should be filled with the puddling material, such as clay and very fine material and then you would have to cover the upper face of the dam with either concrete or riprap in order to make it impervious. If you did not do that the dam would saturate and go out if you had a head of water 120'. You should have a blanket of fine material underneath with riprap varying from top to bottom, but there should be 30' at the bottom, anyway. The present fill there would be used for weight. The present [353] fill and what goes on top of that in the bottom of the dam you would use to get the necessary weight for a resisting point. In my opinion as an engineer, this dam could not have been built starting from the beginning with the clean ground according to these plans and specifications, and make an impervious and safe dam to hold that head of water.

Cross-examination.

(By Mr. HENDERSON.)

I went there in August to close the Arnold Co. office. I left there the latter part of October, 1910. I did not do any work there. Arnold & Co. did not

(Testimony of George H. Binckley.)

have any people working there. There were a few men there up until sometime in August, the 8th or 9th. I think I met you there the 6th or 7th of August. They had an engineer there from New York. I think it was Mr. Holton who was there about the middle of August. Prior to that time there wasn't anybody doing any work there. All the work had stopped. When I went out there I paid off all the Arnold Co. men with the exception of Dwight Arnold. He was down on the Powell tract. He had charge of one of the camps there and the canal work. He left during my absence in Boise. He left about the middle of August. All the work ceased there about the middle of August, both by the engineers, contractors, and sub-contractors. I was with Mr. Robinson when a test-pit was dug by the sides of the core-wall. That was dug down to about the level of the water as it stood below the core-wall. The test-pit was in the body of the dam immediately below the core-wall and to the east side of the opening in the core-wall. The opening in the core-wall had been closed at times. It had been closed temporarily by a flash-board. The hole was dug 10 or 12' probably from the edge of the water. [354] It went down just about to the water level, perhaps a little below. We found some rather coarse material there. It was a little west of the center of the dam on its axis. I was never there after the State had put in the spillway. I was there in March and left about the 1st of April, 1911. The spillway was not in there then and Mr. Corey was figuring with the State

(Testimony of George H. Binckley.)

officials to build it at the time I was there. We drilled several test holes. There was some water in the reservoir when I was there. It went to a depth of about 28'. There seemed to be very little difference between the amount of water that was coming through at that time, and when the water was lower. We estimated that there were about 5 second-feet of water coming through, and that was when the water was 28' in the reservoir up on the dam. Practically the same amount of water was coming through the dam when the water in the reservoir went down. It is not my opinion that part of that water came from Cedar Creek. I think the water from Cedar Creek came out below the dam. At times it came through the hole in the core-wall, but other times we had the hole closed. We closed it with flash-boards. We did not have it entirely tight, but it was enough so that the water would raise on the upper side of the core-wall quite a good deal.

Redirect Examination.

(By Mr. MILLER.)

The water could not come through a hole in the core-wall unless it came through 300' above it. The test-pit was dug immediately downstream there and adjacent to the core-wall. When the water was 28' high in the reservoir, it was about 2 or 3' higher than the water that was standing immediately above the core-wall. I have had a miscellaneous experience in irrigation projects. I have never specialized, but I have [355] had considerable experience—practically all of my time with the Arnold

(Testimony of George H. Binckley.)

Co.—for a period of four or five years in connection with irrigation projects. All of which had earth or loose rock dams. My connection with them was only surveying. I have been an engineer 25 years and my work was miscellaneous, steam and electrical railroad work, engineering work of pretty nearly every kind, municipal and contracting end of it. After we closed the hole in the core-wall there was still water coming through the core-wall, and there was water coming out of the lower toe of the dam, substantially the same amount coming out below the toe of the dam. When the hole in the core-wall was filled up, I could not tell where the water came through. As I recollect, we had but one pit in the puddled portion of the dam. I think that the upper toe of the dam had not been put in place directly in the old river channel. They had a coffer-dam arrangement there and the water came up so high that they were unable to put that core-wall in at the lowest part. They did not put it in for quite a distance. That is what Mr. Corey told me.

Recross-examination.

(By Mr. HENDERSON.)

I think I saw some photographs taken by Mr. Storrow quite awhile ago. I think those pictures showed pretty much what was there. None of them were exaggerated. There was no intention of exaggeration in the photograph. Some of the coarse material had been dumped down loose over material that bore evidence of being puddled, and in the picture the material would look like it was in worse

(Testimony of George H. Binckley.)

shape than it probably really was. [356]

Redirect Examination.

(By Mr. MILLER.)

I saw those pictures and Mr. Storrow's report some little time ago. I forget the date. Some of them would give the impression that the conditions were worse than they were. There was loose gravel put down over the face of a fill that had probably been puddled. As soon as you would kick off loose material you could see it was hard underneath. I think the loose stuff got there by the people passing over there or by the last dumpings that had gone down there. I do not mean to say that the photographs were not taken there or anything of that kind. I mean to say that the photographs showed certain conditions that existed at that time. I think they were good photographs. What I mean to say is that I suspect in some places there was some puddling underneath some loose rock. The loose rock had not been puddled. Photographs usually show what is on the exterior of the thing taken, and that was also shown in this instance.

[Testimony of Samuel Storrow, for Defendants.]

Direct Examination of SAMUEL STORROW, Witness for Defendants.

(By Mr. MILLER.)

My name is Samuel Storrow. I have testified in this case before. I have seen the letters sent by Mr. Raschbacher ordering the rock excavated from the spillway to be put within the line of the dam. I have

(Testimony of Samuel Storrow.)

studied these specifications. As an engineer I would not say that there was any deviation from the specifications. If the rock were put in there according to specifications, dumping it from the toe and doing the other things called for, including the puddling, it would not be a deviation, nor would it be a detriment. [357]

[Testimony of James A. Green, for Defendants.]

JAMES A. GREEN, a witness for defendants, testified as follows:

I reside in Chicago; have been a civil engineer for fifteen years; graduated from the University of Nebraska in 1902. I have an office in Chicago and in Boise. My line principally has been railroad engineering and irrigation work. Have been engaged in irrigation work continuously since 1904 and intermittently before then. I have had to do with the engineering and construction of those irrigation systems, have superintended the construction of three large dams, have made plans for others. These three large dams of which I have supervised the construction were earthen, impounding from 70 to 148 feet of water.

I examined the Mackay Dam in September, 1910, at the request of the Farwell Trust Company of Chicago, representing certain proposed investors. I spent the greater portion of a week there in investigating the work already done, studying the reservoir site, etc. I observed that the material that had been dumped into the dam had been dumped from trestles

(Testimony of James A. Green.)

running at various angles from the central line and crossing the core-wall. I should judge that approximately 40,000 to 50,000 yards had been dumped from the trestles crossing the core-wall at an angle; that would be an estimate. The material that was lying next to the core-wall which had been dumped from the tracks was generally coarse. The larger pebbles were the size of your two fists. The voids created by the coarse material running down against and adjacent to the core-wall had not been filled. The angle at which the dumped material was lying was the natural angle of repose of that material.

I observed there was a free flow of water through the dam. I estimated close to 10 second-feet. This water had to percolate through 600 feet of fill from the upper to the [358] lower toe. I estimated the elevation of the water in the reservoir is about 2 to 3 feet above the elevation of the water standing immediately above the core-wall.

The effect of dumping the material from those borrow-pits from a twenty-five foot trestle is to create a conical shaped dump, the larger boulders rolling the farthest. The character of material in the borrow-pits was gravelly, grading from fine particles to larger sizes. I looked for a stratum of clay or hardpan but found none. The borrow-pits were excavated about 18 feet deep. It was all of a uniform character. I would estimate twenty per cent of the material would be fine and suitable to puddle. With this material as it came from the pits it was sufficient, if properly separated and transported to the

(Testimony of James A. Green.)

center of the dam, to make a sufficient puddle. This is done usually by throwing a stream of water on it. Puddled in this way flattens the slope of the dam. If you find the dumped material is lying at the natural angle of repose, it shows that it has not been saturated—very little puddling done. My conclusion as to the cause of this water going through the dam was because the coarse material was at the bottom and the voids not filled up. Filling the whole dam by dumping from trestles twenty-five feet high at the toe and then dumping from cross trestles, the character of the fill at the bottom would necessarily be coarse, with the voids not filled; it would be pervious. It would be impossible now to fill those voids without a complete rehandling of the material. I mean removing from the dam all that material dumped in the center along each side of the core-wall.

The rock excavated from the tunnel or spillway in the cliff was placed in the slope of the dam and on the slope of the canyon, the side of the rocky cliff. I saw that placed 15 or 20 feet from the core-wall. It was dumped loosely in a [359] pile. It could be made impervious by removal and redeposit, so that the particles would not touch and then puddling around those rocks; not otherwise. This pile of excavated rock was partly covered by gravel.

If this dam were completed, the work from now on being on the lines of the original plan, it would not be a safe and sufficient dam to impound a head of 120 feet of water. It would not, in my opinion, hold that much and could not be safely filled to that

(Testimony of James A. Green.)

extent. If so filled, it would become weakened by the excess of flow through the present structure as now built so as to endanger the whole structure—fatal. I would not as an engineer advise attempting to finish that dam on the original lines and then attempt to impound 110 feet of water. I have examined the contract and specifications for this dam between the Big Lost River Irrigation Company and Corey Brothers Construction Company, and if the dam had been constructed by the contractor in strict accordance with the contract and specifications, in my opinion, it would have made a safe and sufficient dam to impound 110 feet of water.

Defendant's Exhibit 14 correctly represents a view looking from the cliff across the stream, and Exhibit 18 correctly represents a view of the core-wall and fill as I saw it. The so-called State spillway had not been put in when I was there. Defendant's Exhibits 37, 16, 36 and 44 correctly represent conditions as I saw them, except the State spillway.

The nearest borrow-pit was excavated, I should say, as close as 20 or 25 feet to the upper toe. I would think the borrow-pits were 40 or 50 feet away.

Cross-examination.

The fines could be placed near the core-wall either by mechanical screening or by water transportation. It should [360] have been thoroughly compact by placing enough fine material in it so that the voids would be filled. I agree with the method of dumping from trestles. If water is used in the transportation of the material toward the center of the dam,

(Testimony of James A. Green.)

all that would be necessary would be to have the center of the dam impervious, leaving the outer sections formed from the heavier materials. It would be proper to dump from cars and then transport into place by water. If the trestle was at the outer toe, I would wash the fines from the coarse; that would wet the whole dam. I did not see sufficient pumps there to do that. I did not find any specifications that I read over that the whole dam should be wet. I think the specifications said a pyramidal section 30 feet on the bottom. I think that is sufficient if it was puddled. It wouldn't be necessary to wet the dam all the way through. I said that practice would wet the entire section but it was not necessary and the outer section wouldn't stay wet because it was built of the coarser particles and would rapidly drain out. The only object of the water would be to separate the finer from the coarser and thereby get the puddled material, which would be impervious, in the center section. I would move the material, that is 150 feet from the core-wall to within the zone of 30 feet by water. If I didn't do it in that way, I would put in puddled material, as it came from the borrow-pits. I think the contract and specifications provide for the puddle being impervious. (The contract and specifications handed to witness.) These two paragraphs would lead me to conclude that enough water was to be pumped against the slopes to thoroughly wet it and to make a puddle in the center of the dam, and if this material was not satisfactory, the contractor, under the next paragraph,

(Testimony of James A. Green.)

would be required to select material so that when brought in and wet it would fill the voids and make a puddle. [361]

When roughly estimated the amount dumped from diagonal tracks to be 40,000 to 50,000 cubic yards. (Section 8 read to the witness.) I would interpret the specifications to mean that the material should be dumped parallel with the core-wall. I saw only one railroad track across the core-wall at an angle. I saw the part of the trestles and the dumps from which the rails had been taken on two or three definite lifts. If I were a contractor and the engineer in charge directed me how to dump the material, I would follow them as provided in the contract. I think about 100 to 150 cubic yards was dumped parallel to the core-wall.

This coarse material that I saw near the core-wall came out of the borrow-pit. If the authorized engineer told me to dump certain material in the dam, I would do it. If he was the only engineer on the work, I would have to have information that he was the authorized engineer. If he was and gave me orders in writing, I would probably carry them out. I wouldn't make changes except when authorized in writing if the contract called for it to be given that way.

I dug into the slopes as much as I could without the use of tools. I think I was in the dam two days. If by the core-wall and immediately below the reservoir on the lower side of the wall test-pits were dug five to twenty feet below the surface of the water in

(Testimony of James A. Green.)

the reservoir, I presume they would be wet—that would be a guess.

I made a report in writing to the Farwell Trust Co. I have seen the design for the core-wall on paper. I have seen a paper like Defendants' Exhibit 1. I can't answer from looking at the drawing entitled "profile" on center line of dam how deep the trench was to be dug because the plans were attached to the contract and made a part of the contract and specifications; and there is no definite line for impervious material shown. This indicates what might be the depth, I would [362] judge. Section 5 indicates they were to be dug to impervious material. Section 6 amplifies my other answer on puddling. Section 7 provides for bonding into the impervious material, also the latter part of paragraph one. Reading from paragraph two, the plans together with the contract make it indeterminate as to what depth you would have to go for impervious material.

In my report to the Farwell Trust Company I spoke of the four-inch concrete sheet on the upper face; that work was done. I didn't find it in the contract. I concluded the plans contemplated it, or they would not have done it. I reported that the top of the core-wall was to be 50 feet above the stream bed and the bottom 6 feet below the original ground surface. That was my conclusion from Exhibit 1.

I measured the distance of the borrow-pits from the toe of the dam by stepping and guessing; did not step them all. If anyone says that the borrow-pits are not nearer than 175 feet from the toe of the dam,

(Testimony of James A. Green.)

I would say they are mistaken.

I didn't measure the water coming through the dam. There was a hole through the core-wall. I measured the water by guess just below the lower toe of the dam. Some of that water came through the hole in the core-wall.

Redirect Examination.

When in my report I spoke of the bottom of the core-wall being six feet below the original ground, I referred to the measurement as it appears on this blue-print, assuming that the dotted line means the bottom of the trench and measuring according to the scale. When I say that, taking the contract, specifications and blue-print together the distance is indefinite. I refer to that provision of the specifications relating to putting down a trench to impervious material and to the provisions requiring a good structure. [363]

In my opinion the closing of the hole in the core-wall would not prevent the water from coming through the dam; that might cause the water to rise a little higher on the upper side of the wall. If the core-wall was impervious that ten second feet of water would come out below as it is doing now. If the water was in some way confined above the core-wall that ten second feet would saturate the whole upper half of the dam.

If I were working under a contract providing that no change should be made except by written order of the chief engineer, I wouldn't make a change ordered verbally by some other engineer.

(Testimony of James A. Green.)

If all the material in the dam was dumped toward the core-wall from tracks parallel thereto, a trestle having been built in each toe, and after the embankment was built so that the base of the dump was thirty feet from the core-wall, and then we began throwing a stream of water on that incline as the dumping was done, we could get with the material out of the borrow-pit a sufficiently impervious section thirty feet wide on each side of the core-wall. The borrow-pit had sufficient voids in it to accomplish that. Doing it in that way the boulders of the size I have mentioned would be no detriment to the dam. It would not be essential to wet the material clear to the upper or lower toe of the dam in order to get this impervious section sixty feet wide at the base of the core-wall.

If the dumping is done from a trestle parallel to the core-wall from the end of the fill, the trestle not being strong enough to support the weight of a loaded train, the work being done, therefore, by dumping each car as it reached the end of the fill, dumping in that way would not make all the strata toward the core-wall. It would take four directions, that is three directions at right angle each to the next one.

[364]

Recross-examination.

I would interpret these plans and specifications to mean that the steel piling should go down to impervious material. The dam was to be about 600 feet wide. I don't think it would make any material difference how you dumped the material 300 feet from the core-wall.

[Testimony of W. F. Day, for Defendants.]

W. F. DAY, a witness for defendants, testified as follows:

I am a civil engineer residing at American Falls, Idaho. Am engaged there on the construction of a dam and power plant. Have been a civil engineer seven years. Graduated from the State University of Nebraska in 1906, getting the degree of B. S. C. Since that I have been continuously engaged in engineering work, almost entirely irrigation. I have supervised the construction of two dams, one of them impounding 133 feet and the other 120 feet of water, both earthen dams. I have supervised the construction of three systems of canals, aggregating several hundred miles; have been engaged in construction work on two irrigation systems in addition to those I have mentioned, also in investigating and reporting on several others. Have been connected with James A. Green & Company for a year and a half. Examined the Mackay dam and canals of the Big Lost River Irrigation Company in September, 1910; spent eight days on the dam and canals. There was then water coming through the dam five to ten second feet. The water in the reservoir then was about twelve feet higher than the water below the dam. I made memoranda at that time and have them with me. There was water standing above the core-wall, the hole in which was open. The water in the reservoir was 2.8 feet above that, standing immediately above the core-wall. I took levels. [365] The water was running through the hole in the core-wall; water was

(Testimony of W. F. Day.)

coming out below the dam in the old channel of the river. About half the total amount of water was going through that hole. The dam had not been made entirely from dumping from tracks parallel with the core-wall. There was more than one fill open to my observation made from tracks crossing the core. I remember three, there may have been others. I remember only one track actually crossing the core-wall when I was there. I noticed the character of the material next the core-wall wherever it was exposed. In most places it was coarse. In one place it was quite fine. This was good coarse gravel and the voids were not filled. Its character was such that water would flow through it freely. The slope of the fill as dumped was the natural angle of repose. If there had been sufficient puddling, it would have been very much flatter. If there had been any puddling, it would have been somewhat flatter. This water which flowed through was coming either through the dam or through the material under the dam. I could not tell which. Assuming the fill was made by dumping from trestles 25 feet high and that the puddling was insufficient to wash the fines from the coarse up against the core-wall, the necessary character of the base of the dam would be the coarse materials would all roll to the bottom and remain there while the finer would remain above, making the bottom of the dam pervious.

Where a fill is made by dumping from tracks crossing the core-wall at various angles, the material cannot be so puddled as to bring the fines up against

(Testimony of W. F. Day.)

the core-wall. In the case of this dam the only way that the fill could be now so puddled as to make the core impervious would be to remove the material which has been dumped from the diagonal trestles—remove the material from along the core-wall and then back-fill it. [366]

If this dam should now be completed upon the fill already made, the balance being according to the original plans, it would not in my opinion be a safe and sufficient dam to impound 110 feet of water. I don't think that much water could be impounded. I believe that such a large amount of it would percolate through the fill, that it would be very hazardous to continue attempting to fill it. I would not as an engineer advise attempting so to do.

I have examined the contract and specifications between the Big Lost River Irrigation Company and Corey Brothers Construction Company. In my opinion if that contract and specifications had been strictly observed, the dam would have been safe and sufficient to impound 110 feet of water.

I examined the borrow-pit and found the material of a uniform character; did not discover any stratum of clay or hardpan. The pits were excavated about 20 feet. One of the pits was excavated almost to the dam. The others were, I should say, 50 to 100 feet away.

I saw rocks apparently excavated from the cliff deposited on both sides of the core-wall and at one place less than 20 feet from the core-wall. It was piled apparently just as it had fallen from the cliff,

(Testimony of W. F. Day.)

in piles partially covered up with gravel. I believe to make that part of the dam impervious the rock would have to be removed and replaced and surrounded with fine material. The material in the borrow-pit was such that by dumping it from trestles in the upper and lower toes parallel to the core-wall and always dumping toward the core-wall, then wetting the slope of the fill as you approach near the core-wall, washing the fines from the coarse against the core-wall, an impervious center of the dam could have been obtained. You would have to begin puddling when the toe was perhaps 200 feet from the core-wall. If you had an impervious fill 30 feet thick on each side of the core-wall [367] that would be sufficient to hold the water.

I saw the Antelope Creek crossing. It was not built in accordance with Exhibit 5. In the structure as built in order to have water in the canal you would have to close those openings. When so closed they would have no tendency to care for the flood-waters of the creek. That arrangement not being automatic would constitute a danger to the structure.

I don't think the sluice-gate at the opposite side of the weir from the head-gates of the Blaine Canal is of any value. To have that 100-foot wall seven feet high would be an element of safety for the head-gates.

The gates at the bifurcation of the Blaine Canal are not in accordance with these plans, because there are no openings above the gates. With the openings there is an automatic safety arrangement.

(Testimony of W. F. Day.)

The wrecking of that structure as shown in the photographs would be the natural result of having no openings above those gates.

Cross-examination.

When I was there all work had been stopped on the system. The canal banks were built at the bifurcation of the Blaine Canal. I believe the filling behind the concrete work was completed. That portion of those holes above the gates which extended higher than the banks of the canal, would be of no benefit to protect the structure from flood waters. The plans show that the top of the gate is below the top of the bank about three feet and two feet of the top of the hole higher than the bank.

Redirect Examination.

There is a walk above these openings, above the gates as shown on these plans. [368]

[Testimony of Heber Q. Hale, for Defendants.]

HEBER Q. HALE, called by defendants, testified as follows:

I am Assistant Register of the State Board of Land Commissioners of Idaho. I have the minute record book of the Board in which is kept a record of its proceedings. On page 474 is a record of a resolution of the Board relating to the Mackay Dam across the Big Lost River above Mackay. That is a correct record of the action taken by the Board July 15th, 1910. (This resolution recites that it appears from the report of the State Engineer and from the Carey Act Inspectors that the Construc-

(Testimony of Heber Q. Hale.)

tion Company in the construction of the Mackay Dam is not complying with the specifications of the contract with the State dated April 30, 1907, and that their attention has been repeatedly called to that fact by the State Engineer and objection to the construction made and requests that the company perform the work in accordance with the contract, plans and specifications approved; that the company has failed and refuses to comply with the specifications and contract. It is therefore resolved that work upon the dam be discontinued and disapproved until the same is constructed in accordance with the contract and the approval of the State Engineer and that no more contracts for the sale of water rights under the project be approved until the above is done.)

Motion by complainant's counsel to strike out on the ground that the contract is not the one in controversy.

[Testimony of C. B. Hurtt, for Defendants.]

C. B. HURTT, a witness called by defendants, testified as follows:

The first Executive Committee of the Big Lost River Irrigation Company consisted of myself, J. E. Clinton, Jr. and N. M. Ruick. We were appointed July 16, 1909. From that time on the members of the Executive Committee knew Corey [369] Brothers Construction Company were proceeding with the construction of this irrigation system under this contract offered in evidence. Each and all of

(Testimony of C. B. Hurtt.)

them so knew; knew that the contract had been drawn up and was in its final shape except the final signatures and that he was proceeding with the work.

Cross-examination.

All of them knew about the time when Corey Brothers Construction Company commenced the work under the contract; that was early in June.

**[Testimony of James A. Lynch, for Plaintiff
(in Rebuttal).]**

JAMES A. LYNCH, a witness for complainant in rebuttal, testified as follows:

I live in Salt Lake City, Utah; am engineer and contractor, have been so engaged thirteen years. Attended an Engineering School two years; have been in the contracting business eight years. Was in the employ of the National Tube Company of McKeesport, Pennsylvania, for a year and a half; was superintendent of construction for the building of furnaces, foundation work and furnace construction. Then came west and worked for the Steptoe Valley Smelting and Mining Company in Nevada, was in the engineering department—started the contracting business in 1908. I am a member of the Lynch, Cannon Engineering Company. I have taken many contracts for concrete work. (Complainant offered as its Exhibit No. 72 a certified copy of the articles of incorporation of Union Portland Cement Company; also as its Exhibit No. 73 a certificate by the Secretary of State of Utah that said company is authorized to do business since March 8, 1906; also as its

(Testimony of James A. Lynch.)

Exhibit No. 74 certified copy of articles of incorporation of Corey Brothers Construction Company; also as its Exhibit No. 75 a certificate of Secretary of State of Utah showing company has been a corporation since 1902.)

During 1909 and 1910 I had the contract for all the concrete work for the Blaine, Lower Blaine, Era and Arco Canals. [370] Began work September 15, 1909, stopped June 1, 1910. Did the concrete work at the head of the Blaine Canal. Blue-prints were furnished by the Engineers Drummond and Hough. Never saw defendants' Trustees' Exhibit 6 before. Corey handed me a blue-print also. I got a complete set from Corey before I left Ogden. Others were furnished me as the work progressed by the engineers in charge. Plaintiffs' Exhibit 76 was furnished me by the engineers. 76 is numbered 145204-01, the same as on Defendants' Exhibit 6, is signed by W. H. Rosecrans. It purports to be a plan of the intake and controlling works of the Blaine Canal. It differs from Defendants' Exhibit 6 in that the wall next to the tainter-gate is shown to be five feet instead of 100 feet in length, as shown in 76. The spillway is shown as 125 feet instead of 150 feet as shown on 76. That wall was built 14 feet instead of 5 feet by order of the engineers in charge. The engineers also ordered that the tainter gate be built at the left of the spillway. That gate is not on my drawings at all. I was willing to build the wall 100 feet. I built the structure according to the plan. (Plaintiff's Exhibit 76.) I put in the Ante-

(Testimony of James A. Lynch.)

lope Creek crossing. I first saw Defendants' Exhibit 5 yesterday. Corey has shown me the plan which he said he received from the company, it is Plaintiff's Exhibit 77, numbered 145244-C 2, being the same number as Defendants' Exhibit 5. (Objected to as not rebuttal and as not properly proved.) Rosecrans' name is signed to 77. 77 differs from 5 as follows: The culvert shown as 6x2 replaces two culverts on Exhibit 5 each 6x2. 77 shows three gates into the canal 6x6. The central gate when lowered closes the inlet to the culvert leading underneath. Two other gates leading into the canal from the creek cause water to pass into the canal when the gates are lowered. Exhibit 5 shows four gate openings 6x6, allowing the water to flow in to the canal. When lowered they would shut the water out of the two culverts. The two center gates act [371] the same as on exhibit 77. The canal was not constructed according to either of those plans but according to a revised plan furnished by the engineers. (Plaintiff's Exhibit 78.) I did all the work under the instruction of Drummond and Hough, engineers for the B. L. R. I. Co. Plaintiff's Exhibit 78 calls for two concrete culverts 6x2. The gate openings leading thereto are 4x2 and two gates 4x2 to be operated from the top of the structure. When opened they allow the water of the creek to pass under the canal. When closed they allow the water of the creek to pass into the canal through two gates 4x2. Above these gates are curtain walls forming a part of the bank of the canal, allowing the water to

(Testimony of James A. Lynch.)

come in from Antelope Creek crossing. The water would rise to a sufficient height by backing up the creek. When we left the gates were not set in place. There were temporary gates there made of two-inch lumber. There was some saving in the construction of this crossing, the way it was constructed rather than according to the original plan.

I put in all the drops except 9 and half of 8. I had plans delivered by the engineers for those. Plaintiff's Exhibit 75 is the plan for drop one. Plaintiff's Exhibit 80 shows the flume drops 5, 6 and 8 in the Blaine Canal, got that from the engineers. Plaintiff's Exhibit 81 shows the flume drop as furnished me by the engineers to construct drop 2. Two piers were built at the upper end of this drop. I have no blue-print showing other drops.

I did the concrete work at the Blaine Stub. I first saw Defendants' Exhibit 10 yesterday, but an identical print was handed me by the engineers. The engineers in charge ordered the construction to be changed—gave me a revised print, Plaintiff's Exhibit 2. 10 shows four gate openings from the Blaine to the Lower Blaine 2x9 and five gate openings from the Blaine to the Era 6x5. No curtain wall above those gates. Plaintiff's Exhibit No. 82 shows five gate openings from the Blaine to the Lower Blaine [372] 4x6 with a curtain wall above and four gates from the Blaine to the Era 4x4, with a curtain wall above. I did this work under the instructions of the engineers of the B. L. R. I. Co. I understood Rosecrans was out there one time when I

(Testimony of James A. Lynch.)

was on the work. I didn't see him.

The height of the gates on Defendants' Exhibit 10 is nine feet, the walls of the embankment 10 feet, also the wing walls. The sectional area of the gates is about the same in 10 and 82. If constructed according to Exhibit 10, a flow overtopping the gates would be likely to break the banks, since they were only a foot higher.

The Darlington head-gate was put in by order of the engineers in charge, is not shown in any drawing except red pencil marks on the drawing. When we first built those works we did not make provision for the Darlington gate then, we cut two openings 3x3 through the wall six feet thick at the bottom. Darlington came down to drive us off. We had considerable trouble getting a permit to put our camp on Darlington's ground. He was antagonistic. The engineers in charge gave me a pencil sketch showing the gates that were to be cut through. They said this was a compromise and settlement with Darlington. The engineers said that Darlington claimed the company had no right to go across his land.

From the drops down to the bifurcation work the cost of putting in those logging-off piers would be about \$5,000. I was ready and willing to build them. The engineers said they had decided to omit them. I don't think they were necessary because there were no laterals leading out of the Blaine canal, except one, two miles above the bifurcation works. I saw plans for that gate and put it in.

I figured out the saving to the company by these

(Testimony of James A. Lynch.)

various changes made about \$30,000. [373]

Cross-examination.

The gates at the bifurcation works were so constructed that it was not possible for water to flow over the top of the curtain wall above the gates. We could go over a nine-foot gate with a wing wall and embankment ten feet high without destroying the embankment, provided there were no low places in the embankment. Where a canal is designed to have a nine-foot embankment it is universally customary to build a little higher to provide for settlement so as to have ample nine foot height when fully settled. If you had six inches of water running over four weirs, each five feet wide, that would amount to about 20 second-feet. To be accurate the area of the openings of the gates as shown in Defendants' Exhibit 10 would be 136 feet as compared with 120 on Plaintiff's Exhibit 82.

The opening from the Blaine into the Era Canal is shown on Exhibit 10 to consist of five gates, five feet high and six feet wide. The wing wall is shown to be ten feet above the bottom of the Blaine ditch. In case of a considerable volume of water coming down you could get a foot of water going over those five gates leading to the Era Canal and still have the water six inches below the embankment. As constructed the openings into the Era Canal are 4x4, four in number. As constructed with the curtain wall and those gates closed there would be no way for surplus water to go down the Era Canal—no automatic way; you would have to raise the gates. If,

(Testimony of James A. Lynch.)

therefore, the gates were closed through neglect or inability to reach them and an excess of water amounting to 20 to 60 second-feet came down the canal, it would be bound to go over the banks. You could have 40 second-feet going over the weirs into the Era and 20 into the Lower Blaine without raising the water more than six inches above the gates into the Lower Blaine with the structure made according to Exhibit 10.

I had no prior experience on irrigation structures. [374] I think an automatic arrangement for taking care of flood waters would be a good thing on a structure that would be in danger. Exhibit 82 was handed me by one of the engineers. It has no signature purporting to be Rosecran's. I had a blueprint like Defendants' Exhibit 10 when I went to work there.

'One of the objects of logging-off gates is for repair work but it would be impossible to log-off at any particular point unless you shut off at the head, since there were no laterals. There was one small ditch below all the drops. It is entirely conceivable that other drops might be put in. The logging-off gates could now be put in without reconstructing the head. It is not hard to attach a slot to a completed concrete structure. Exhibits 80 and 81 show two piers in each one of the flume drops. We put piers only in the drop numbered 2. The engineers said not to put any piers in drops 4, 5, 7, 8 and 9. It was Mr. Hough. He gave us a verbal order. Exhibits 79, 80 and 81 do not purport to be signed by Rose-

(Testimony of James A. Lynch.)

crans or anybody. On Plaintiff's Exhibit 76 there is no tainter gate shown through the spillway. This Exhibit 76 was furnished me by the engineers. I claim it is signed where I placed my initials. I do not know Rosecrans' signature; am not an expert on handwriting. That alleged signature on 76 looks to me very similar to the one on 6.

I never before yesterday saw a drawing like Defendants' Exhibit 5. Both in Plaintiff's Exhibit 77 and Defendants' Exhibit 5 a concrete wall is shown extending several feet above the bottom of the canal and two feet below the top of the wing wall. The "Front Elevation" on 77 means the gates opening downstream. You get a view of them looking toward the structure from upstream in the creek. "BB" indicates a cross-section through the structure two feet back of the gate. The structure was not built like 77. Hough ordered it constructed differently. The drawings were handed to us by his [374½] assistant, Mr. Beckwith. The structure was built like Exhibit 78, which is not signed by anybody. As constructed the canal had two culverts underneath 6x2, the same as shown on Exhibit 5. Above that the structure consisted of three piers, two wing walls and two gate openings into the canal 4x4; above that a wall. The bottom of those two openings were at the bottom of the canal; that was so on both the upstream and downstream side of the structure. Those 4x4 openings, two on each side, were the only openings into the canal. Four gates open into the two culverts underneath, two into each

(Testimony of James A. Lynch.)

culvert. In order to put water into the canal from the creek you close all the gates leading into the culvert and open the gates into the canal, thus raising the water in the creek. I never saw that stream dry. The canal began about two miles above this point. The gates on the upper side of the canal were to be closed in case you didn't want to take water from the creek, that water would then go underneath. If the water in the creek was too much to go under the culverts, it could be taken into the canal. If the gates were closed, of course, it would flow over the banks, if the culverts wouldn't carry it all. I think those two openings 2x6 ought to carry all the water. If the four culverts wouldn't take all the water, then the water would rise up and flow over the sides of the structure if the gates were closed. If you had this construction like Exhibit 77 and had no gates at all on the upper side, except a gate closing the culvert underneath, then there would be that automatic safety action.

I never saw Rosecrans on that work at any time. I don't think I ever saw Darlington around with a gun, or any other weapon of warfare, except his voice. I heard the engineers say that by putting in those gates they settled their difficulties with Darlington. Drummond said that. He gave me [375] no order in writing to put those gates in.

Redirect Examination.

That 125 foot weir with five feet of water going over it will carry about 5,000 second-feet. Drummond saw us putting in the Antelope Creek crossing,

(Testimony of James A. Lynch.)

talked with him about it. There are no gates on the downstream side of Antelope Creek crossing, all earth embankment. We put in the Antelope Creek crossing in March and April, 1910.

**[Testimony of W. W. Corey, for Plaintiff
(Recalled).]**

W. W. COREY, recalled on behalf of plaintiff, testified as follows:

I met Rosecrans and Speer in Denver the 19th of April, 1909. Didn't ride with them to Boise or Pocatello but only to Green River, Wyoming. Left Denver at 7 P. M., got off about 10 A. M. the next morning. I talked with them about the building of the Big Lost River works. They didn't tell me anything about how they expected to raise the money. They didn't say they were going to issue bonds secured by trust deeds and get contracts of farmers to put up to secure the bonds. Didn't say anything about the money. Didn't talk with Rosecrans and Speer about money matters. Rosecrans told me that Trowbridge and Niver was a strong concern financially. In February, 1910, I had a letter enclosing a couple of notes. That was the first I knew about bonds.

Mr. Coy, the engineer, staked out the borrow-pits. The nearest part of those pits to the toe of the dam was 179 feet. Defendant's Trustees' Exhibit 35 shows the borrow-pits. The one nearest the river had double track. The nearest point of this first borrow-pit is where I put a pencil dot. The next borrow-pit above that, the nearest point is 175 feet

(Testimony of W. W. Corey.)

from the dam, the third 190. I made these measurements on the 11th of this month. The conditions were the same as when I quit. The part between the lowest borrow-pit and the [376] dam was removed to get in the tracks. In all instances the borrow-pit is higher opposite the dam than the toe of the slope. Frank Coy, the engineer, staked the core-wall. Those stakes called for a trench about 6 or 7 feet deep. I couldn't tell exactly. The trench is built according to the stakes. It would have been better for us to have wasted the rock from the tunnel, so we could have been paid for the yardage of dirt. Rosecrans was out there when the rock was being dumped out of the tunnel. He said nothing about it. I should judge Rosecrans was out there about four or five times during the summer. He lived in Chicago. To get on the downstream side of the core-wall from the gravel pit, it is necessary to cross the core-wall at the last part of it. Defendant's Trustees' Exhibit No. 35 shows the track nearest the river where we were dumping when we were shut down. There was very little dirt dumped north of the core-wall—maybe 500 yards across there.

When I was at the dam on the 11th of this month I saw test-pits that Storrow had dug, they were still open—two above and one below the core-wall. The one below the core-wall and about four feet from it is about 25 feet deep. It was dry when I was there. One test-pit was four feet above the core-wall, 20 feet deep. That was dry. Another was about 50 feet from the core-wall and 50 feet from the edge of the

(Testimony of W. W. Corey.)

spillway. There was water in the spillway. That hole was 12 feet deep. Its bottom was below the water in the reservoir. The bottom of all those pits is below the water in the reservoir. They were all dry; all below the top of the water in the reservoir 5 to 20 feet. I had with me a couple of grandsons and John B. Henderson, who helped me make this inspection. In wetting the portion of the dam required to be wet, I acted under the engineer in charge of the work. Raschbacher ordered one pump. We had two before that. Raschbacher was in [377] charge of all the work. (Telegram from Raschbacher offered in evidence as Plaintiff's Exhibit No. 83.) The other pumps we had when we went to work. We did this wetting in accordance with the instructions of the engineer in charge. I received this letter from Raschbacher relating to the pump. (Letter offered in evidence as Plaintiff's Exhibit 84.) I wrote to Rosecrans about changing engineer Coy. That was October 28, 1909. This is a copy of the letter which I handed to Rosecrans personally. (Letter offered in evidence is Plaintiff's Exhibit 85.) I received a response from Rosecrans, which is Plaintiff's Exhibit 86. (Offered in evidence.)

On or about May 29, 1909, I received a letter from Rosecrans about the plans and specifications which is Plaintiff's Exhibit 87. (Letter offered in evidence.) On or about March 3, 1910, received letter from Rosecrans stating that he had shipped certain tainter gates for the Blaine Canal. They were put in in the spring of 1910. (Letter offered as Plain-

(Testimony of W. W. Corey.)

tiff's Exhibit 88.) On or about August 18, 1909, I received a letter (Plaintiff's Exhibit 89) from the Arnold Company. (Letter offered.) On or about August 24th, 1909, I received a letter from Arnold & Company about cement. (Plaintiff's Exhibit 90.) (Letter offered in evidence.) (Letter from Raschbacher offered in evidence as Plaintiff's Exhibit 91.) On or about July 8, 1909, I received letter from Trowbridge & Niver, which is Plaintiff's Exhibit 92. (Letter offered.) On or about February 12, 1910, I received a letter from G. S. Speer, which is Plaintiff's Exhibit 93. (Letter offered.) On or about March 12, 1910, I received a letter from Trowbridge & Niver, which is Plaintiff's Exhibit 94. (Letter offered.) On March 29, 1910, I received a letter from Trowbridge & Niver, which is Plaintiff's Exhibit 95 (Letter offered.) [378]

Coy was relieved about the middle of November. He was there three or four weeks afterwards. 360 lineal feet of piling were driven. We furnished the plant under the direction of Coy and then Greeley, his successor. We paid the men and got our ten per cent. Raschbacher sent to Denver for the engineer and foreman. Coy hired and discharged men for that work.

We plowed all the ground under the dam except the river bed. Some we plowed three or four times. The puddling was done with a pump. The company's engineer was there all the time during this work. They told us about puddling, what to puddle and where to puddle. The material for the back-

(Testimony of W. W. Corey.)

filling of the trench was hauled from the bottom of the stream. Coy said that was a good place to get the material.

I probably had a talk with Binkley during the summer or fall of 1910, about the water coming through the dam. I didn't tell him where I thought it came from, or where it did come from, *because I didn't know then and I don't know yet.* That dam is not completed.

I was never informed at a meeting with Clinton Hurtt Co. or anybody else, where the land opening was talked about at Arco. On October 28, 1909, I made a trip of inspection with Rosecrans to the head of the Blaine Canal. Some of the cement work was put in at that time. I should say two-thirds or three-fourths. He said the work was all right—first class.

I was in Chicago in July, 1910. I talked with the Arnold people and with Rosecrans. Don't recollect any comments on the work at that time. I haven't had any talk with any of the Arnold people or Rosecrans, except as I have testified relative to the way the work was done.

I received Plaintiff's Exhibit 76 from the Arnold Company. I received another map from them Numbered [379] 145204-C1, which is Plaintiff's Exhibit 96. (Offered in evidence.) Rosecrans was the chief engineer during the whole time that I had any work to do. I went to the State Engineer and got the record of puddled waters from 1907 to 1911. For 1907 for the Big Lost River 2610 second-feet; 1908-2030; 1909-2880; 1910-870; 1911-3420.

(Testimony of W. W. Corey.)

On the 11th of this month (May, 1911) I looked at the concrete facing of the dam, found only one crack, and that was about one-fourth of an inch in width extending 15 feet above the water. Don't know how far below it. It does no harm as it is. I saw Rosecrans in Boise about the concrete facing and also about the tunnel. I told him that the price for concrete work wasn't enough for that thin facing. He said do it at that price or leave it. I said I would do it. The spillway tunnel was originally laid out as an open cut, but they changed the plans to a tunnel so we agreed on a price for a tunnel. That saved the company from \$3,000 to \$5,000. I was ready and willing to make an open cut, also to waste the rock from the tunnel, also to obey the engineer in charge.

Cross-examination.

It is 107 miles from Denver to Cheyenne.

I knew this was a Carey Act project. I didn't know the only way the Irrigation Company could get money was by the sale of water contracts. I didn't figure out how they were going to get money. Didn't think they would pray for it. I don't know anything about how they could get it. I merely looked up the parties. Speer said Trowbridge & Niver were a wealthy concern.

Looking at Defendant's Exhibit 35, I should say the distance from the excavated bank to the water is 40 to 50 feet. My pencil mark is 190 feet from the toe of the dam. The bank there is 10 or 12 feet high. The borrow-pits in all instances [380] at right

(Testimony of W. W. Corey.)

angles to the fill is higher than the toe of the slope. The ravine came down here from Cedar Creek, where Rosecrans told Corey to start. The first borrow-pit is excavated to a width of 40 or 50 feet up to about 30 feet of the dam. That lower borrow-pit at its lowest part is 200 or 300 feet. I never made any request that Drummond be removed as engineer, or Raschbacher. I gave Raschbacher a diamond ring. I didn't give Mr. Coy any diamond ring, or shotgun or anything. When Coy staked out the trench he indicated the depth by marks on a stick. I gave Raschbacher the ring "just as a friendly act." I wanted to be on pretty good terms with him thinking he might assist me with information or something about another job. The excavated rock from the tunnel was just dumped down the cliff. I got this letter from Raschbacher just as we commenced this excavation. It would cost a little more but not much to waste the excavated rock than to put it in the fill. This work was sublet on a yardage basis after we got the letter from Raschbacher. When I say Rosecrans was on the work four or five times during the summer, I mean the summer of 1909. Speaking of that pit four feet below the core-wall, I can't say positively if it extended lower than the original surface of the ground, nor can I say positively whether the one immediately north of the core-wall extends below the original surface, but I think they both do. The other one 50 feet north of the core-wall, I think, was all in the fill. I think there was about 20 feet of water in the reservoir. I think the shallowest pit

(Testimony of W. W. Corey.)

was about 50 feet from the spillway, and that the fill there is about five feet above the water in the spillway. I took no levels—just observation. I should say the test-pit near the core-wall was 25 feet farther from the spillway and that the fill there is 10 feet [381] higher than the water in the spillway, and that the test-pit below the core-wall was between the other two and that the fill was about the same height there. I should say the water in the reservoir was 20 to 25 feet higher than the water at the lower toe of the dam.

In wetting the material dumped into the dam a stream of water was thrown on the material as it was dumped on the incline, so as to wash out the finer particles down toward the center; that was the object to wash it toward the core; that was my understanding of what the contract required. I didn't do any sluicing unless the engineer told me to, nor very much wetting, because it is supposed to be done under the direction of the engineer.

I first learned on February 4, 1910, that the company was getting money from the sale of bonds.

I had no foreman on the pile-driving job. Raschbacher sent to Denver for a foreman and engineer. We might have talked about somebody to do it before they started. He sent to the Denver office to send a foreman and engineer.

During 1909 I was there at the dam about half the time. Was not there during much of 1910. The whole of the base of dam was plowed in 1909. The engineer told us where the puddled zone was to begin

(Testimony of W. W. Corey.)

and we knew it already, of course. I wouldn't say we only puddled where the engineer told us to. I would say we puddled as much as he told us to. I was preparing for more puddling before we put the extra pump on. We needed an extra pump because we were doing more puddling. I think the pump was a two-inch pump. In back-filling the trench we used material other than the material from the borrow-pits, that was to get imperviousness. I think it was impervious before we dug it out. I understood the object of this puddling near the core-wall was to get imperviousness there. [382]

I didn't tell Binkley where I thought the water was coming through. It came through all along the gravel-pit next to the bank. I don't recollect telling Binkley about the rocks dumped in above the core-wall and a concrete floor wall being put in. There were two tracks running into each borrow-pit and about eight feet excavated for each track.

I think it was October, 1909, that Drummond succeeded Raschbacher.

Redirect Examination.

I gave that diamond ring to Raschbacher about Christmas, 1909, after he had quit this work. I don't know how much I paid for it. This Darlington gate was put in because Darlington requested it. He came down to our camp and tried to drive us off. The top of that dam is in the same condition as it was when we quit work, with the exception that the State has built a spillway. There are no marks on the top of that dam that I can see indicating railroads built

(Testimony of W. W. Corey.)

across the core-wall from which gravel was dumped.

The reason I asked that Coy be removed was because he had a controversy with my foreman and I came along and Coy said: "Corey, if you don't make this man do as I tell him, I will shut him down in a minute." I said, "What is the matter?" and he said, "This man don't obey my orders." I said, "If he don't obey your orders, I will make him lose his job." I said, "You don't need to ask anything more of me, if you will let me know what you want." That was the substance of it. I wrote the letter the next morning.

C. D. Chapin was Carey Act Inspector of Idaho in 1911. I got a report from him dated April 19, 1911, as to the water coming through the dam. Chapin is dead. (Letter offered in evidence as Plaintiff's Exhibit 97.)

Recross-examination.

I have given the grounds of my requesting the removal [383] of Coy, that was all there was to it. I considered that sufficient grounds to remove this young man.

I was in Chicago when this Chapin letter was written. I don't know who requested Chapin to write the letter. I don't know how much water was in the reservoir at the time Chapin made his observation, or whether the outlet tunnel was open, but presume it was. The weir was just below the dam. This weir was eight feet long and a foot and a half or two feet high.

[Testimony of John T. Henderson, for Plaintiff.]

JOHN T. HENDERSON, a witness for complainant, testified as follows:

I live at Arco. I am operating the canal system of the Big Lost River Irrigation Company under the Receiver. I have been at that since June, 1911. I am an engineer by profession, have studied engineering for two years in the Pennsylvania Military College; didn't graduate. I have been cement inspector for the War Department two years. I was at the Mackay Dam the eleventh of this month with Mr. Corey; was there several times before that, not while the work was going on. I examined the upper face of the dam after the cement was put on. The condition was practically the same as now except that there is one crack an eighth of an inch wide and ten feet long above the water—not a serious crack. I was inspecting with Mr. Corey at his request. I measured the borrow-pit—the one next to the river. The toe of the dam is 190 feet from the borrow-pit. No. 2 borrow-pit is 175 feet from the toe of the dam; No. 3 is 190.

I examined some test-pits, two above and one below the core-wall. They were dry. The one near the core-wall, I should judge, extended 15 feet below the water in the reservoir. The test-pit nearest the core-wall is about 20 feet deep and from 10 to 15 feet deeper than the water in the reservoir, I [384] should say. Another test-pit was located near the center of the river and about 50 feet from the core-wall, that was about 12 feet deep and dry. This

(Testimony of John T. Henderson.)

bottom was lower than the water in the reservoir, a little bit, not to exceed five feet, I don't think.

I noticed the surface of the dam to see if there was any indication of railroad tracks having been built and removed, where gravel had been dumped parallel to the core-wall. I didn't notice any. I took some photographs of the canal system, that is they were taken under my direction in the fall of 1910, for a man named Stanton, a bondholder from Honolulu. Here is one marked "Bifurcation Works and Blaine Stub." That was taken before it was wrecked. The back one there was not complete. The cement was a good job. (Picture offered in evidence as Plaintiff's Exhibit No. 98.) The picture of Plaintiff's Exhibit 99 shows the Darlington head-gates in October, 1910. The cement work was good. The concrete work was good on the 70-foot drop in the Blaine Canal shown by photograph, Plaintiff's Exhibit No. 100. The concrete work at the outlet gates of the Mackay Dam is good, shown by photograph, Plaintiff's Exhibit No. 101. The work at the Blaine head-gates is good concrete work, also the sluice-gate; also at the bifurcation works. I have seen the wreck at the Blaine Stub; it was caused by an excess of high water. The works were not filled in at one place before the wreck occurred; that was on the upper side at the intersection of the river embankment with the wing wall. The water came from Antelope Creek. The siphon up above was plugged. I was there the next day after the wreck at the bifurcation works. We couldn't tell then what was the cause of the wreck.

(Testimony of John T. Henderson.)

I am satisfied it was caused by not being filled in at that point. Gravel and sand filled up one of the siphons under the canal at Antelope Creek. It was cleaned out under my supervision. I don't believe that would have occurred if the gates at Antelope Creek had been properly attended to. The water went down the canal from Antelope Creek. The gates at Antelope crossing were one open and [385] one shut. One was partly down so that no water was going through and one was partly raised so that the water was going through. The siphon was stopped up after the gates had been opened. Plaintiff offered photographs marked Plaintiff's Exhibits 102 to 106, inclusive.

Cross-examination.

It was the lower crossing of Antelope that was stopped up, that is one opening in the lower one was stopped up. Two of them were stopped totally and two partly with sand and gravel. It took them ten or fifteen minutes to get stopped up. I tried to close the Antelope gate that was open leading into the canal; that was immediately above the floor of the canal. There was a flood in the creek. Part of the main canal bank is wrecked at Antelope crossing, but not the concrete work; that was caused by the opening of that gate. The siphon wouldn't have been filled up if the gate had been closed. The sudden opening of the gates caused the rush of sand and gravel behind. I caused the gate to be opened to try to save the canal system; otherwise I think the lower bank of the main canal would have gone by the water

(Testimony of John T. Henderson.)

shooting clear across from the pressure behind it through the partly open gate. If both gates had been closed the water would have gone through the siphon. This one gate being partly open and the other closed made the water shoot across the canal and was scouring out the lower bank, therefore I opened it. I tried to close it but couldn't. The opening cut down the pressure of the water against the gate; prevented the lower bank from going out. The head was relieved from behind the gate. There was probably a couple of feet of water in the canal. By opening the gate and relieving the pressure it caused the water to stop shooting across the canal and let in a good deal more water; that relieved the pressure against the lower bank and the pressure being decreased against the gate, carried the sand and [386] gravel into the siphon. My idea is that when I suddenly opened the gate that decreased the velocity of the water and caused the sand and gravel to settle. I opened both gates. By increasing the outlet of that water it decreased the velocity. That gate before I touched it might have been open a foot or two feet. I opened it the full height of four feet. The water had risen before I opened the gate to about ten or eleven feet from the bottom of the creek. It was up on the curtain wall probably three or four feet below its top. The curtain wall was probably five or six feet above the gate. The water had probably risen when I went there about two feet above the top of the opening in the gate that was partly open. After I opened those gates the water fell a number of

(Testimony of John T. Henderson.)

feet. I believe the siphons were sufficient to carry that amount of water. I think the water could still rise and still be going through. I think by opening the gates the velocity of the water was decreased. I think the large amount of water I let in is what caused the wreck at the bifurcation works. I think the place where there was no back-filling was at the extreme north end of the wing wall on Defendant's Exhibit 3. The bank was not filled up to the end of the wing wall at that point. There might have been a three-foot hole there. That was the place where the water went over. If the bank had been a foot higher up to the wing wall the water wouldn't have gone over. Looking at Plaintiff's Exhibit 98, the left bank appears to be of uniform level up to the wing wall except one point at the intersection of the bank with the concrete wall. I can't see a continuous crest there, that is on the other side of the canal. You can't see the right bank of the canal at any other place on this picture except the one that I mention.

I spent one afternoon with Mr. Corey on the 11th of this month up there—probably three or four hours. I measured the distance between the lower borrow-pit and the [387] upper toe of the dam. The excavated portion leading from the upper toe to the borrow-pit is between 25 and 50 feet, probably. I am an amateur photographer. I know that if you take a photograph pointing your camera across the street, the street appears to be narrower than it is; and that if you take a photograph from the middle of the street looking up or down it, the street appears

(Testimony of John T. Henderson.)

wider than it is. The lower borrow-pit at the widest part might be all the way from 50 to 100 feet. I wouldn't be surprised to know that the lower borrow-pit is 300 or 400 feet wide. Taking the point marked with the letter "a" over to "b" that might be as far as from this pencil mark to the toe of the dam.

I am 26 years old. Pennsylvania Military College is at Chester. I was there when I was sixteen years of age. Before that I had got part way in the first year of the High School. I took two years of the engineering course. I didn't study any engineering suppose that two years, just mathematics. I didn't have any engineering training in school. I got a job with the Government at the age of 18. I measured the two upper borrow-pits about as accurately as I measured the lower one. I never studied surveying in school, have absorbed it along the way. When I was at the dam site, I didn't take any levels of the water. I couldn't tell from the looks whether the pits extended below the original surface of the ground. Didn't take any levels of the bottoms of the pits. I can run levels. The water in the reservoir I think is about 25 feet above the water at the lower toe. Think the top of the fill where the pits were dug was five to ten feet above the water in the reservoir. I couldn't say for certain whether a line drawn from the water level at the upper face of the dam to the water level at the toe of the dam would be above or below the bottom of the test-pits. Think it would be above. On Defendant's Exhibit 44 I see one test-pit that I have been talking about. I

(Testimony of John T. Henderson.)

wouldn't [388] be positive whether the fill at that point was at least 25 feet above the water in the spillway opposite the core-wall. The diagonal fill might be 25 feet high. I am sure the fill where the test-pits are is more than five feet below the top of the diagonal fill.

When I identified these various photographs and said that the work was good, I referred to the character of the concrete work, not to the efficiency of the structures for the purpose for which they were designed.

The Antelope Creek crossing is between ten and twelve miles from the bifurcation works.

Redirect Examination.

Those head-gates I tried to raise in Antelope crossing were temporary wooden gates. I think the siphon would have carried the water if I had been able to get the gate closed.

[Testimony of W. W. Corey, for Plaintiff (Recalled —Cross-examination).]

W. W. COREY, recalled for further cross-examination, testified as follows:

On March 17, 1910, I wrote the letter to G. S. Speer marked Defendants' Exhibit 81 and received in reply Defendants' Exhibit 82. On March 23d, I wrote Defendants' Exhibit 83. On April 3d, I wrote Defendants' Exhibit 84. I received Defendants' Exhibit 85; also Defendants' Exhibit 86; also Defendants' Exhibits 87 and 88. (The above exhibits offered in evidence.) My purpose in making the

(Testimony of W. W. Corey.)

diagonal lift or fill which appears in the foreground of Defendants' Exhibit 85, was in order to fill up the track as we went along, to make the track stronger because the trestle was not strong enough. That was the sole reason. We could have built parallel to the core-wall on the lower side and filled from that if we had made the trestles strong enough. Above the core-wall, as I recollect, there was no trestle. We excavated in the edge of the bank and [389] then when we ran out there we dumped a few cars. I wouldn't be positive there wasn't any trestle above the core-wall.

Looking at Defendants' Exhibit 44 and Defendants' Exhibit 35, I can't figure it out that they show the same fill from different directions. I can't tell anything about it.

One of the test-pits I examined on the 11th of this month was between the State Spillway and the diagonal lift and the other two were beyond that diagonal lift. I should say the foot of that lift is in all about 25 feet from the State Spillway.

A line drawn upstream at right angles to the core-wall leading from those test-pits near the core-wall would strike the first borrow-pit.

[Testimony of W. S. Collins, for Defendants.]

W. S. COLLINS, a witness for defendants, testified as follows:

I am a civil engineer and have been for seven years. Got my training at the State University of Colorado and the Colorado State School of Mines; studied civil engineering three and a half years. I am now em-

(Testimony of W. S. Collins.)

ployed by James A. Green & Company at American Falls as an engineer. On Saturday evening last I was requested by Mr. Day to go to the Mackay Dam site and look for three test-pits. I went up. I examined the test-pit above the core-wall and between the first diagonal fill shown on Defendants' Exhibit No. 25, and the spillway. I have marked with a cross about where the hole is. That was 72 feet from the spillway. I didn't measure the distance from the lower edge of the diagonal fill but it was 15 to 20 feet. It was 80 feet upstream from the core-wall; that was the only test-pit in that vicinity. I measured the distance from that to the spillway. The pit was 11.6 feet deep. There was no water running through the spillway. There was one little pool standing in it less than a foot deep. There was no water in the pit. I took the top of the core-wall there as a bench mark and assumed [390] an elevation of 100, and the water in the reservoir stood at elevation 95. The bottom of the test-pit was at elevation 89.6. The elevation of a line drawn from the water in the reservoir at the top end of the spillway to the level of the pool below the lower toe of the dam, the upper end would be 95 and the lower end 76.9. This pit was 129 feet below the nearest point of the reservoir. If there was any water immediately upstream from that pit, it would be very little and very shallow. If that pit were on a line between the reservoir and the lower toe of the dam, a line drawn from the surface of the water in the reservoir to the surface at the lower toe would be two feet above

(Testimony of W. S. Collins.)

the bottom of the pit. In view of the fact that this test-pit is not between those points, I would not expect to find any water in the pit if the fill were previous. I discovered no other pits there within 150 feet of the State Spillway. I was told to look for pits within 100 feet of that spillway. I didn't measure the distance between the State Spillway and the diagonal track on exhibit 35, but I did measure the distance between the corner of the core-wall projecting from the side of that fill nearest the spillway to the spillway and found it to be 132½ feet. It was about 10 or 15 feet from that corner back to the track. Assuming that there are holes over there more than 150 feet from the State Spillway beyond that diagonal fill shown in exhibit 35 and that a line drawn upstream from them and at right angles to the core-wall would strike in the first borrow-pit, I would not expect to find any water in those test-pits even if the fill is not impervious. I spent nearly two hours at the dam. Took levels at all those places I have mentioned with instruments. I found two pits below the lower toe of the dam. One was practically at the toe and one ten feet from it. The elevation of the ground at the lower pit was 92.2 and at the upper 97. One of those pits was dry and the other had 3.6 feet of [391] water in it. That was the one where the elevation of the ground was 16 feet above the pool at the lower toe.

The lower borrow-pit came practically to the toe of the dam.

(Testimony of W. S. Collins.)

Cross-examination.

(By Mr. HENDERSON.)

Q. This, where you have drawn this mark, you took that to be the borrow-pit?

A. I took that to be the borrow-pit; yes, sir.

Q. You don't know whether the borrow-pit commenced away up here where there is a lead pencil mark, right at the end of my finger?

A. I don't know what was done with the material that came out of here.

Q. There were two tracks there, were there not?

A. I didn't notice.

Q. Did you notice a water tank?

A. Yes, sir.

Q. That is still there, and there is a double track there, isn't there? A. Well, I didn't notice.

Q. And you say where you have drawn that line there it is 20 or 25 feet across, you should judge?

A. It is at least that much; it may be more. I have no clear recollection.

Q. Well, I am just asking your best recollection, that is all. You didn't find any test-pits below the core-wall about four feet from it, from the core-wall?

A. No, sir.

Q. And these two test-pits that you say there was water in, they were on the outside of the lower toe of the wall? A. Yes, sir. [392]

Q. And not in the dam at all? A. No, sir.

Q. And that is in the bed of old Cedar Creek, isn't it?

(Testimony of W. S. Collins.)

A. No, they are above the bed, they are on the side slope.

Q. Now, in making your measurement of the test-pit that is above the core-wall, do you assume, in taking your levels, that the top of the core-wall is 100?

A. Yes, sir, the top of the core-wall at the point noted.

Q. And from that point the top of the water was 85? A. 95.

Q. 95, that is to say, how much lower would the water be than the top of the core-wall?

A. Five feet.

Q. And the bottom of this test-pit above the core-wall would be 89, you say?

A. Eighty-seven, I believe, $87\frac{1}{2}$.

Q. Eighty-seven and a half? A. Yes, sir.

Q. So the bottom of that test-pit would be $12\frac{1}{2}$ feet lower than that point which you took for 100 on the core-wall, is that right, or $11\frac{1}{2}$ feet lower?

A. Yes.

Q. Then the bottom of that test-pit would be $7\frac{1}{2}$ feet lower than the water in the reservoir?

A. Yes, sir.

Q. And you say that pit was dry? A. Yes, sir.

Q. Who was it asked you to go up there?

A. Mr. Day.

Q. Engineer? A. Yes, sir. [393]

Q. What are his initials? A. W. F.

Mr. HENDERSON.—Q. Mr. Miller, will you admit that Mr. Day telephoned Mr. Collins at your

(Testimony of W. S. Collins.)

request to make these measurements?

Mr. MILLER.—Yes. I will swear to it if you want me to.

Mr. HENDERSON.—Oh, no; I supposed he did; which was all right. That is all.

**[Testimony of W. W. Corey, for Plaintiff
(Recalled).]**

W. W. COREY, being recalled, testified as follows:

The test-pit referred to by Collins at the lower toe of the dam is in the bed of Cedar Creek.

[Testimony of William M. Wayman, for Plaintiff.]

WILLIAM M. WAYMAN, a witness for plaintiff, testified as follows:

Direct Examination.

(By Mr. HENDERSON.)

I live in Boise. In the summer of 1910, I was in Chicago from January first up to about August 1st, with the exception of a few trips out. I was there when I heard work had been stopped on the Big Lost River project. I know W. H. Rosecrans and Ralph Arnold, Secretary and Treasurer of the Arnold Company. I talked with both in Chicago. Newspaper reports kept coming in of conditions at Mackay and the work being stopped by the State, and the claim of political influence, and other reservoir sites being offered for sale. I asked Rosecrans if the work was as contracted—up to specifications. He said it was in every particular and was first class. I don't remember whether Hurtt was present. I was with Rosecrans quite often.

(Testimony of William M. Wayman.)

Cross-examination.

(By Mr. MILLER.)

I am vice-president of the Northwestern Investment Company, [394] which is in the farm loan business in Boise. In 1910, at the time of which I speak, I was handling the sale on the Conrad project, Teton County, Montana. I was interested in the Big Lost River matter on account of Clinton, Hurtt & Company being sales agents and the course it was pursuing was cutting off the sales. I had stock in Clinton, Hurtt & Company; that was my interest. I still have the stock and am an officer of the Company. I did not know the Clinton, Hurtt Company were to get some of the stock of the Big Lost River Company. I never saw Ralph Arnold out here on the ground. I know nothing about it, whether he was ever up at the Big Lost River project or not. Never heard he was or wasn't. I don't know how often Rosecrans was there. I am not able to say just when he was there. He represented that he was in charge of the work at all times. I think about August, 1910, he withdrew from the Arnold Company. It might have been the fore part of August. The talks I had with him were both before and after he withdrew. After he withdrew I don't know that he had any connection with this project. The talks I have had with him at some of which he made statements that I have mentioned, covered a period both before and after he left the Arnold Company. In my talks with Ralph Arnold and Rosecrans I was trying to get the real status of affairs, so that

(Testimony of William M. Wayman.)

if there was anything radically wrong Clinton, Hurtt & Company could stop spending money on the campaign to sell the land. I was representing Clinton, Hurtt & Company. My interest in the matter was my interest in Clinton, Hurtt & Company. I didn't represent Corey.

Redirect Examination.

(By Mr. HENDERSON.)

At that time the Big Lost River Irrigation Company owed Clinton, Hurtt & Company about \$200,000.00. I was interested in finding out whether Corey Bros. Construction Company had done their [395] work. My interest was solely because of my interest in Clinton, Hurtt & Company. Mr. Hurtt was trying to get other people financially interested

Recross-examination.

(By Mr. MILLER.)

The \$200,000.00 which the Big Lost River Irrigation Company owed Clinton, Hurtt & Company was for commissions on land sales. We were expecting every day that Trowbridge & Niver Company would be closed up, but they were not.

[**Testimony of C. B. Hurtt, for Plaintiff (Recalled).**]

C. B. HURTT, recalled on behalf of plaintiff, testified as follows:

I was in Chicago in the summer of 1910 for about three months and at the time when work was shut down on the Big Lost River Irrigation Company project. I talked frequently with Ralph Arnold and W. H. Rosecrans. Both Rosecrans and Arnold

(Testimony of C. B. Hurtt.)

claimed the work was all right in every particular and always have in their conversation with me. Rosecrans claims the work was done according to plans and specifications, said the work was satisfactory. I remember particularly about the work on the canals. He said it was unusually good. Rosecrans and I spoke to Mr. Bradford and Mr. Starr about putting money into this project. Rosecrans said to them that the work was done according to plans and specifications and in a substantial manner. I, as President of the Big Lost River Irrigation Company, never complained to Corey Bros. Construction Company that the Company did not do its work according to plans and specifications. None of the directors have objected to my knowledge. The directors were, as I recollect, Mr. Clinton, George S. Speer, Louis N. Roos, myself—don't remember the others.

Cross-examination.

(By Mr. MILLER.)

I, as President of the Big Lost River Irrigation Company [396] never assumed to give any directions about this work up there at all, never assumed to accept or reject it. The Board of Directors of the Big Lost River Irrigation Company never assumed to give any directions as to this work or to accept or reject it, to my knowledge. I don't remember the Board of Directors ever authorized the payment of any money on account of this project, or ever passed on a single estimate. I think perhaps one estimate was submitted to the Board, or to me

(Testimony of C. B. Hurtt.)

as President. I think it was in the early stages of the work; that was about the time the Big Lost River Irrigation Company was organized. We did not assume to pass on that at all. The estimates went directly to the Arnold Company and were approved by them and sent to Trowbridge & Niver. As a matter of fact the officers of the Big Lost River Irrigation Company had practically nothing to do with the work, the manner in which it was done, the approving of the work or the taking of the estimates. When I had these talks with Ralph Arnold and Rosecrans I represented Clinton, Hurtt & Company. I didn't represent Corey. Reports were coming in that the State was making complaints about the work on the dam and was about to stop it, and finally did stop it. And I as a member of Clinton, Hurtt & Company and for the Big Lost River Irrigation Company was interested in knowing whether the project was going to be promptly completed. I therefore talked with these men as to how it was going on. I don't know whether Ralph Arnold was ever on this work or not. I never heard he was. I never heard he claimed to be an engineer. Don't know whether he is, and never heard him spoken of as an engineer. I don't know of Rosecrans having been upon the ground after September, 1909.

Redirect Examination.

(By Mr. HENDERSON.)

The Big Lost River Irrigation Company still owes Clinton, Hurtt & Company more than \$200,000.

(Testimony of C. B. Hurtt.)

(Here follows a statement [397] of the directors' meeting and the subjects considered.)

Recross-examination.

(By Mr. MILLER.)

In 1910 I was in Chicago, early in July, and remained until some time in September. It was about the first of August that Rosecrans severed his connection with the Arnold Company. I had many talks with him, some before and some after that. The conversations I have detailed took place at some of those talks.

**[Testimony of W. W. Corey, for Plaintiff
(Recalled).]**

W. W. COREY, being recalled, testified as follows:

Direct Examination.

(By Mr. HENDERSON.)

These notes I have testified about are simply held as collateral security for the account that the Big Lost River Irrigation Company owed us. Didn't give them credit on the books. I returned the notes to Trowbridge & Niver at their request. The interest which is spoken of in one of those letters I credited upon the account of the Big Lost River Irrigation Company as soon as received. Didn't credit it as interest on the note. Think it was about three hundred and some dollars. I advised Speer of Trowbridge & Niver that I could not credit the Big Lost River Irrigation Company with those notes; that if I could dispose of them, I might use them,

(Testimony of W. W. Corey.)

but not otherwise. He said not to do that; didn't want his paper hawked about. Didn't use those notes.

Cross-examination.

(By Mr. MILLER.)

I don't recall that I had any letter requesting that those notes be sent back to Trowbridge & Niver. Whatever request was made might have been by letter. I don't remember having any conversation to that effect. We tried to collect one of the notes, and as we couldn't, thought they were useless—we returned [398] them. I don't know that there was a verbal request by Trowbridge & Niver to return them. I told Speer verbally I couldn't give him credit for those notes. That was about the fifth of March. All the other matters I have talked about here in the last testimony, communications with Trowbridge & Niver, were by letter except this fifth of March talk.

(Motion to strike out testimony as to above communications.)

I never tried to raise money on those notes. [399]

Stipulation that affidavits and letter may be considered as evidence. (The clerk will here insert the stipulation and affidavits of Amos C. Miller, W. H. Rosecrans, Ralph G. Arnold, Samuel Storrow, and Frank Coy, and letter of W. S. Collins attached to said stipulation filed on the 23d day of July, 1912.)

Plaintiff's Exhibit 14. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 19. (The clerk will here insert

a true copy of said exhibit.)

Plaintiff's Exhibit 20. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 23. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 24. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 32. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 65. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 83. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 84. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 85. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 86. (The clerk will here insert a true copy of said exhibit.) [400]

Plaintiff's Exhibit 88. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 89. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 90. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 91. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 92. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 93. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 94. (The clerk will here insert

a true copy of said exhibit.)

Plaintiff's Exhibit 95. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 34. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 77. (The clerk will here insert a true copy of said exhibit.)

Plaintiff's Exhibit 80. (The clerk will here insert a true copy of said exhibit.)

Minutes of Big Lost River Irrigation Company. (The clerk will here insert a true copy of the minutes of the Big Lost River Irrigation Company introduced in evidence.)

This matter coming on for a settlement of the evidence to be included in the record on the appeal taken herein by the defendants, Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees, and the said appellants and Corey Bros. Construction Company and the Union Portland Cement Company, through their respective solicitors, [401] consenting thereto, it is ordered that the foregoing statement of the evidence be and it is hereby settled, allowed and approved as a true, complete and properly prepared statement of the evidence in said cause, and sufficient to properly present to the Circuit Court of Appeals the evidence pertinent to the issues raised on said appeal.

FRANK S. DIETRICH,
Judge.

[Endorsed]: Filed March 27, 1913. [402]

Plaintiff's Exhibit No. 14.

CONTRACT BY AND BETWEEN G. S. SPEER,
SUCCESSOR IN INTEREST TO THE BIG
LOST RIVER LAND AND IRRIGATION
COMPANY, LIMITED, AND THE STATE
OF IDAHO.

THIS AGREEMENT, made and entered into in duplicate this 27th day of May, 1909, by and between the State of Idaho, the party of the first part, by and through the State Board of Land Commissioners of said state, said Board consisting of James H. Brady, Governor and Chairman, Robert Lansdon, Secretary of State, Daniel C. McDougall, Attorney General, and S. Belle Chamberlain, Superintendent of Public Instruction of said state, and George S. Speer, of the city of Chicago, county of Cook, State of Illinois, party of the second part.

WITNESSETH,

THAT, WHEREAS, the Big Lost River Land and Irrigation Company, Limited, a corporation, the predecessor in interest of the party of the second part herein, did heretofore, to wit: On February 19, 1906, file with the said State Board of Land Commissioners a proposal for the construction of certain irrigation works for the irrigation of lands in the Counties of Blaine, Bingham and Fremont in said State of Idaho, under the provisions of Section 4 of the Act of Congress approved August 18, 1894, commonly known as the Carey Act, and the acts [403] amendatory thereof and the laws enacted by the State of Idaho in pursuance of the power

granted by the said Acts of Congress, the lands being described as Idaho State Desert Land, List No. 8, comprising 79,122.06 acres, to which said proposal an amendment was filed with the said Board on July 13, 1906, and

WHEREAS, said Big Lost River Land and Irrigation Company, Limited, did thereafter, to wit: On November 15, 1907, file with the said Board a request and proposal for the segregation of new and additional lands, List No. 18, to the extent of 27,022.90 acres and the relinquishment of lands included in said First Proposal, List No. 8, to the extent of 27,194.15 acres which Second Request and Proposal was granted by said Board, together with a relinquishment of the lands, as proposed, the lands remaining after such relinquishment and such new and additional segregation being 78,950.81 acres, which segregations are still intact, and,

WHEREAS, at the request of the State of Idaho, the lands hereinbefore referred to, included in said List No. 18 and in said List No. 8 less the lands relinquished as aforesaid, have been, by agreements between the United States and the State of Idaho, set apart in compliance with the provisions of the said Acts of Congress, the said lands being fully described in Schedule "B" hereto attached and made a part of this agreement, and [404]

WHEREAS, on the 30th day of April, 1907, the State of Idaho, as party of the first part, did enter into a contract in writing with the said Big Lost River Land and Irrigation Company, Limited, for the construction of the works necessary for the

reclamation and irrigation of the lands included in said List No. 8, and

WHEREAS, no contract has yet been entered into for the construction of the necessary works for the irrigation of the lands included in said List No. 18, aggregating 27,000 acres and upwards, and

WHEREAS, it has been made to appear to the satisfaction of the Board that the said George S. Speer, party of the second part, herein, has become and now is the owner of all property, real and personal, rights, privileges and franchises of the said Big Lost River Land and Irrigation Company, Limited, including the property, rights, privileges and franchises relating to and connected with the irrigation system and works, the subject of agreement hereinbefore referred to of date April 30th, 1907, and

WHEREAS, said party of the second part, as such successor in interest, has made application to and filed with the Board a written proposal and request that the said agreement of April 30, 1907, be altered and amended for the reasons set forth in such written proposal, and [405]

WHEREAS, the said George S. Speer, party of the second part, has made a satisfactory showing as to the ability of himself and those whom he represents to construct the said irrigation works and to complete the same within the time allowed by law and by said agreement of April 30, 1907, and

WHEREAS, it appears that said Big Lost River Land and Irrigation Company, Limited, has entered into contracts to a large extent with settlers upon the lands to be reclaimed to supply said settlers with

water for their lands, and which contracts are still in force and unfulfilled on the part of said company, and it further appearing to the Board that it is to the interest of the State and to the settlers holding water contracts with said Big Lost River Land and Irrigation Company, Limited, the rights of which latter it is the purpose to secure by the terms of such altered and amended contract, that the request of said George S. Speer should be granted to the end that said works may be completed as originally proposed, and that the rights of the settlers upon the lands included in said project may be secured, and a resolution having been adopted by the Board to enter into said altered and amended contract as proposed.

NOW, THEREFORE, in consideration of the covenants and agreements herein contained, the party of the second part agrees to construct the dam, reservoir and irrigation system hereinafter referred to and described in accordance with [406] specifications hereto attached and marked Schedule "A" and hereby made a part of this contract, and to provide for the sale of shares of water rights in said reservoir and irrigation system, from time to time as and in the manner hereinafter provided, to persons applying to enter portions of the lands described in Schedule "B" hereto attached and hereby made a part of this contract, together with other lands which may hereafter be segregated upon the application of the party of the second part, his successors or assigns, and for which the said party of the second part is or may hereafter be author-

ized to furnish water; also to the extent of the capacity of the irrigation works to supply water from said irrigation system to the owners of other lands not described in said Schedule "B" but which are susceptible of irrigation from this system, such shares and water rights to be sold on the terms hereafter specified, and finally to provide the manner of transfer of ownership, management and control of said irrigation system to the purchases of said shares or water rights as hereinafter provided.

For a description of the dam, reservoir and irrigation system referred to, reference is made to Schedule "A" hereto attached and to the field notes of survey and contour maps on file in the office of the State Engineer at Boise, Idaho. [407]

2. GENERAL PROVISIONS.

It shall be the duty of the said second party to file with the State Engineer of the State of Idaho notes showing the size, courses and distances from angle to angle of the canals and main laterals as soon as the same shall have been finally determined and to, on demand, furnish any further detailed specifications that may be required. Changes may, from time to time, be made in the specifications by agreement between the State Engineer, State Land Board and the said second party, such changes, however, not to impair the efficiency or durability of the works for the purposes for which they are intended.

The main canals of this system shall have a carrying capacity when completed sufficient to deliver simultaneously one second foot of water for every eighty acres of land described in Schedule "B" at-

tached to this contract, together with all other land susceptible of irrigation from the said canals, for which water rights shall be sold by said second party, as nearly as the same can be estimated and agreed upon between the State Engineer and the engineers of the said second party.

Coulees and draws may be used as water ways when convenient, but all coulees or draws utilized as laterals from which water is to be taken by settlers for irrigation shall [408] be so constructed and improved as to practically conform to artificially constructed laterals of like capacity, so that water may be available for use from the same in practically the same manner and at approximately the same expense; and it is further agreed that the specifications as to the construction and improvement of said coulees and draws shall be filed from time to time as the work progresses with the State Engineer and the State Land Board for their approval, it being understood that this paragraph is to be liberally construed, in order that no unnecessary improvement of coulees need be made.

A main lateral, within the meaning of this contract, is a lateral taken from the main line of the canal. A subordinate lateral, within the meaning of this contract, is a lateral built for the purpose of conducting water from a main lateral to a point within half a mile of the place of intended use. A coulee or draw used as a main lateral or a subordinate lateral shall also be included within these terms.

The plans, specifications and details for the construction of the dam, reservoirs, canals, head-gates

weirs, etc., so far as the same are not covered by the specifications contained in Schedule "A" hereto attached, shall be submitted to the State Engineer of the State of Idaho for his approval prior to the further construction of any of said works, with the right of appeal by the said second party from his decision [409] to the State Board of Land Commissioners, and the works when completed shall be in accordance with the specifications as finally determined upon to the satisfaction of the State Engineer and the State Land Board.

The party of the second part reserves the right, by and with the consent of the first party, to construct any additional reservoirs, canals and dams, which, in his judgment, may hereafter become necessary; provided, such reservoirs, dams and canals shall meet with the approval of the first party and that they shall be constructed in a manner that shall meet with the approval of the State Engineer and with the State Land Board.

3. RIGHT OF WAY.

The said party of the first part grants to the said party of the second part a right of way across all lands belonging to the State of Idaho, or that may be ceded to the State of Idaho by virtue of the Act of Congress, commonly known as the Carey Act, or by any other laws for the construction and operation of said reservoir and irrigation system, which right of way shall be equal to the actual width of the canal, lateral or waste ditch at its base, from toe to toe of the embankment, together with a strip of land along one side of such canal, lateral or waste ditch, and

adjacent thereto, not to exceed fifty (50) feet in width along the main canal, thirty (30) feet [410] in width along the laterals leading from said main canal, and a proportionate width along the smaller laterals and waste ditches; said right of way to be located as designated by the Chief Engineer of the party of the second part, and approved by the State Engineer, and in all cases to be sufficient for ingress and egress along said canal, lateral or waste ditch, in proportion as the necessity therefor exists, and all water users on lands irrigated from said reservoir and irrigation system shall have such right of way as may be necessary from the second party's canal or laterals to their own land in order to construct and maintain the necessary service ditches for their own use, and such right of way across said lands as may be necessary for waste ditches. No reservoirs, however, shall be constructed under this provision of this contract upon any portion of Sections Sixteen (16) or Thirty-six (36), without making compensation and complying with the laws of the State governing that subject. No more laterals, service or waste ditches shall be constructed across any premises than are necessary, in the opinion of the Chief Engineer of the second party and the State Engineer, to properly irrigate the land so intended to be irrigated from such ditches and to carry away the waste water therefrom.

The laterals, service and waste ditches shall be constructed under the direction of the Chief Engineer of the [411] second party and subject to his approval and the approval of the State Engineer.

In case any land owner is dissatisfied with the location of any service ditch across his premises he shall have the right to appeal to the State Board of Land Commissioners, whose decision shall be final. Detail maps showing the location of laterals and waste ditches constructed by the second party shall be filed with the Board and with the State Engineer, but such filing need not be made prior to the lands being thrown open for settlement.

4. APPROPRIATION OF WATER.

It is understood that the party of the second part is the owner of permits to divert from Big Lost River and its tributaries, particularly Antelope Creek, 1300 cubic feet of water per second of time, under Permits Nos. 1507, 1513, 1748, and Permits amendatory thereof numbered 4061, 4062 and 4063 respectively, all of which permits were issued by the State Engineer of the State of Idaho, and appear of record in his office.

And the said party of the second part agrees to furnish and deliver to the owners of shares in said reservoir and irrigation system, as specified in the other provisions of this contract, all of said appropriated waters to which the said second party may be entitled, to the extent of one-eightieth (1-80) of one (1) cubic foot per [412] second of time per acre, said water to be furnished for the reclamation of the lands included in said Schedule "B," Segregation Lists Nos. 8 and 18 not heretofore relinquished, together with other lands which may be hereafter segregated at the request of the party of the second part, his successors or assigns, also any other lands

not included in said segregations, but which are so situated as to be susceptible of irrigation and reclamation from the canal and distributing system designed for the irrigation of the lands included in the aforesaid lists to the extent of the capacity of such irrigation works.

And the said second party hereby covenants and agrees that he has not done, suffered or permitted on his part any act or thing by reason whereof the appropriation so made, of the said waters of Big Lost River and Antelope Creek, for the purpose of the irrigation and reclamation of lands through the system of works to be constructed hereunder, has been or in the future may be in any way impeached, clouded or impaired.

5. ENTRY OF LANDS.

When the actual construction of the said canals and irrigation works shall have been so far completed as to insure that the said water will be furnished the lands described in Schedule "B" hereto attached the said Board of Land Commissioners may in their discretion cause to be opened to settlement, by advertisement as provided by law, such portions of said tract [413] as they deem advisable and which shall not have been already opened to settlement; in every case the opening of said lands to settlement and the disposition thereof to be under such regulations as shall be prescribed by the State Board of Land Commissioners.

6. APPLICATION FOR LANDS.

The said party of the first part, through its State Board of Land Commissioners, agrees that it will

not approve any application for or filing on the Lands referred to in Schedule "B" hereto attached, until the person or persons so applying shall furnish to the said Board a true copy of the contract entered into with the party of the second part for sufficient shares or water rights in said reservoir and irrigation system for the irrigation of said lands, said shares or water rights to be evidenced by the stock of the Lost River Water Company, as hereinafter provided.

The second party stipulates and agrees that to the extent of the capacity of the irrigation works and to the extent of his water rights, he will, as rapidly as lands are open for entry and settlement, sell, or contract to sell water rights or shares for land to be filed upon to qualified entrymen or purchasers without preference or partiality, other than that based upon priority of application; it being understood, however, that priority of application or priority [414] of entry or settlement shall not give any priority of right to the use of water flowing through the canal as against subsequent purchasers, but shall entitle the purchaser to a proportionate interest only therein, the water rights having been taken for the benefit of the entire tract of land to be irrigated from the system. The priority of the application upon the opening days shall be determined by a system of drawing under the direction of the State Board of Land Commissioners.

7. SALE OF LANDS BY THE STATE.

The party of the first part, acting through its State Board of Land Commissioners, agrees to sell

the lands described in Schedule "B" hereto attached, except in as far as already sold, to such persons as are or may be by law entitled to file upon the same, for the sum of fifty cents (\$0.50) per acre, half of which sum shall be paid at the time of application for the entry of such lands made to said Board, and the remaining one-half at the time of making final proof thereon.

8. PRICE OF WATER RIGHTS.

Said party of the second part further agrees and undertakes that he will sell or cause to be sold to the person or persons filing upon any of the lands described in Schedule "B" hereto attached, together with lands which may hereafter be segregated, as well as to the owner of other lands not described [415] herein, but which are or may be susceptible of irrigation from his canal system, by good and sufficient contract of sale with right of possession and enjoyment by the purchaser pending its fulfillment, a water right or share in said irrigation works for each and every acre filed upon or purchased from the State or acquired from the United States. Each of said shares or water rights shall represent a carrying capacity in said canal sufficient to deliver water at the rate of one-eightieth (1-80) of one (1) cubic foot per acre per second of time, and each share or water right sold or contracted, as herein provided, shall also represent a proportionate interest in said reservoir and irrigation works, together with all rights and franchises therein, based upon the number of shares finally sold in said reservoir and irrigation works. Said irrigation system, however, to be built

in accordance with the plans and specifications hereto attached as Schedule "A" and filed with the Board, which irrigation system, according to said plans, has been determined by the State Engineer to have the carrying capacity hereinbefore mentioned.

Such water rights or shares shall be sold to the person or persons aforesaid for lands included in said segregations and for lands adjacent thereto, at a price not exceeding forty (\$40) Dollars per share, except as is hereinafter provided, the same to be paid for as follows: [416]

In cash at the time of sale, four dollars per acre. And the remainder in nine annual installments, bearing interest at the rate of six per cent (6%) per annum, interest payable annually, installments as follows:

One year from date of sale,		\$4.00
Two years	Do.	4.00
Three	Do.	4.00
Four	Do.	4.00
Five	Do.	4.00
Six	Do.	4.00
Seven	Do.	4.00
Eight	Do.	4.00
Nine	Do.	4.00

Total Forty (\$40) Dollars per acre.

To the person or persons purchasing any portion or portions of Sections numbered sixteen (16) or thirty-six (36), or any other land belonging to the State of Idaho and within the exterior limits of said segregations and which are susceptible of irrigation and reclamation from said irrigation system, water

rights or shares shall be sold at a price not to exceed Thirty (\$30) Dollars per share; provided, said water rights or shares are purchased within one year after the purchase of the lands from the State, and not exceeding Forty (\$40) Dollars per share at any time thereafter. Said payments upon said state lands to be made as follows:

When the price is Thirty (\$30) Dollars per acre.

In cash at the time of sale, Three (\$3) Dollars per acre. And the remainder in nine annual [417] installments, bearing interest at the rate of six per cent (6%) per annum, interest payable annually, installments as follows:

One year from date of sale		\$3.00
Two years	Do.	3.00
Three	Do.	3.00
Four	Do.	3.00
Five	Do.	3.00
Six	Do.	3.00
Seven	Do.	3.00
Eight	Do.	3.00
Nine	Do.	3.00

In case purchaser or entrymen on lands other than those segregated under the Carey Act decline to purchase water rights for two years or more after the water is ready for delivery, then \$2.40, may be added to the price of the water right for each year's delay, or fraction thereof,

It is further agreed that no payment other than the initial payment and no interest shall be required under any contract either for Carey Act Lands or State or private lands until the water for the said

land is available from said reservoirs and canals for distribution at a point within one-half mile of each legal subdivision of 160 acres of the said lands, and such water must be available May first in order to make such payments become due, and all payments and interest provided in said contract shall be advanced in time according to the delay in the delivery of said water as aforesaid.

It is understood and agreed that the said party of the second part shall charge interest at the rate of six per cent [418] per annum, upon all deferred payments whenever said shares are sold upon a time contract. This agreement shall not, however, be construed to prevent the sale of shares or water rights to purchasers upon terms more favorable than those hereinbefore provided, or to prevent the payment of installments of the purchase price in advance of the maturity of the same at the option of the purchaser. But in no case shall water rights or shares be dedicated to any of the lands aforementioned or sold beyond the carrying capacity of the said canal system or in excess of the appropriation of water as hereinbefore mentioned.

9. TRANSFER OF POSSESSION AND MANAGEMENT OF CANAL.

It being necessary to provide a convenient method of transferring the ownership and control of said canal and irrigation works from the said party of the second part herein to the purchasers of said water rights in said canal and for determining their rights among themselves and between said purchasers and the party of the second part herein,

for the purpose of operating and maintaining said canal during the period of construction and afterwards and for the purpose of levying and collecting tolls, charges and assessments for the carrying on and maintaining of said canal and the management and operation thereof, it is hereby provided that, as soon as practicable after the execution of this contract, a corporation, to be known as the Lost River Water Company, [419] shall be formed at the expense of the party of the second part, the Articles of Incorporation of said company to be in the form approved by the Attorney General of the State of Idaho, a copy of which approved Articles is hereto attached, marked Schedule "E" and made a part hereof; that the authorized capital stock of said corporation shall be one hundred thousand dollars, divided into 100,000 shares of a par value of \$1.00 each, which amount is intended to represent one share for each acre of land which may hereafter be irrigated from said canal and irrigation system. The entire authorized amount of the capital stock of said corporation shall be delivered to the party of the second part herein in consideration of the covenants and agreements herein contained in order to enable it to deliver to purchasers of water rights the shares of stock evidenced and accompanying the same. Said shares of stock, however, shall have no voting power and shall not have force and effect until they have been sold or contracted to be sold to purchasers of land under this irrigation system.

At the time of the purchase of any water right there shall be issued to the purchaser thereof one

share of the capital stock of said corporation for each acre of land entered or filed upon. That the said party of the second part herein shall, in case said water rights are not fully paid for, require the endorsement and delivery to it of [420] said stock, and shall at the same time, require of said purchaser an agreement that until thirty-five (35%) per cent of the purchase price of said stock has been paid the said party of the second part herein shall vote said stock in such manner as it may deem proper at all meetings of the stockholders of said corporation.

But the said second party hereto nor the Lost River Water Company, Limited, cannot in any manner control any of the said system so as to limit the liability of the second party under the terms of this contract.

The said Lost River Water Company shall have the management, ownership and control, as above set out, of the said irrigation system as fast as the same is completed and turned over to it for operation by the said party of the second part, as hereinafter provided. Whenever it is certified by the Chief Engineer of the party of the second part and the State Engineer that certain portions of said irrigation system are completed for the purposes of operation, the same shall, with the consent of the State Land Board, be turned over to the said Lost River Water Company for operation, and said last named company shall thereupon take possession of and operate the same. Such transfer and operation, however, shall not in any manner lessen the responsibility of the said second party with reference to the terms of this

contract, nor shall such consent upon the part of the State [421] Land Board be construed as a final acceptance of such portion of such canal, it being always understood that the acceptance of said irrigation system must be in its entirety and that the bond given for the faithful performance of the said contract must be made and be liable for the substantial completion of the entire irrigation system.

10. WATER RIGHT DEDICATED.

The certificate of shares of stock of the Lost River Water Company shall be made to indicate and define the interest thereby evidenced in the said system, to wit: A water right of one-eightieth (1-80) of a cubic foot per second for each acre and a proportionate interest in said reservoir and irrigation system, based upon the number of shares ultimately sold therein. While the party of the second part shall retain control of said Lost River Water Company, water, when measured, shall be measured and shall be available for use within one-half mile of the place of intended use and in such quantities and at such times as the condition of the crops and weather may determine, but according to such rules and regulations, based upon a system of distribution of water to the irrigators in turn and by rotation, as will best protect and serve the interests of all the users of water from said irrigation system. It is agreed that said system of distribution by rotation shall be devised by the said party of the second part and used by the said Lost River Water Company (in case [422] the necessity arises) during the period while he retains the management of said Lost River

Water Company, said system of rotation, however, to be approved by the State Engineer. The sale of the water rights to the purchaser shall be a dedication of the water to the lands to which the same is to be applied, such water right to be a part of and to relate to the water right belonging to said irrigation system.

11. MEASUREMENT OF WATER AND CHARGES FOR DELIVERY.

The party of the second part agrees to construct said reservoir and irrigation system so that water conducted through its canals may be available at points not to exceed one-half mile, measured in a direct line, from each quarter section of land described in said segregations, and to be irrigated and reclaimed by water conducted through said canals. That he will construct and place in position all headgates, flumes, weirs and other devices for the control and measurement of water in the main canals and reservoirs and in the main laterals, it being intended that the settler shall, under the direction of the Chief Engineer of the second party, build and furnish one gate or measuring device for his use, but that all other gates, weirs and measuring devices in the main canals, main or subordinate laterals shall be furnished and constructed by the second party. Plans for measuring devices, headgates and weirs are to be approved [423] by the State Engineer. No charge shall be made to the purchaser for the delivery of water for said lands, or lands adjacent thereto, prior to the first day of May, 1910. For each succeeding year thereafter, while the second party

retains the control of the said Lost River Water Company, said Company may charge and assess the purchasers of water rights in said irrigation system not to exceed the sum of fifty cents (50¢) per acre for each acre of land for which a water right has been purchased, the same to become due May first of each year, if the water is ready for delivery at the beginning of such season, and such water must be available for use at a point within one-half mile of each quarter section of such land. If the sum so raised shall be insufficient for the purpose of maintaining, operating and keeping in repair the said system and paying the expenses for the management thereof, then the said party of the second part will furnish all the additional funds necessary to supply such deficiency.

During each year, while the second party retains the control of the said Lost River Water Company, the said company shall furnish a supply of water for domestic use and for the watering of stock, when necessary, outside of the regular irrigating season; such water to be delivered under rules and regulations to be prescribed by said company. [424]

12. COMPLETION OF SYSTEM.

Said party of the second part agrees to continue to prosecute the work of said reservoir and irrigation system diligently and continuously to completion; and that there shall be no cessation of work thereon for more than sixty days without the consent of the Board; and to supply water to the unrelinquished lands included in the said Lists Nos. 8 and 18 on or before May 1, 1911, and to complete the

entire irrigation works, on or before April 30, 1912, at which last mentioned date the obligation to furnish the full one-eightieth (1-80) of a cubic foot per second of time of water per acre shall be in force and effect.

It is understood that charges and alterations in the plans and specifications heretofore prepared and filed may be made at any time with the consent of the State Board of Land Commissioners.

13. FORFEITURE.

The rights of the party of the second part herein, or his assigns, may be forfeited in accordance with the laws of the State of Idaho now in force and effect.

14. ESTIMATED COST.

The estimated cost of the proposed irrigation works is three million five hundred thousand (\$3,500,000) Dollars and upwards, and the price at which water rights are fixed [425] herein and for which liens are authorized by law against separate legal subdivisions of land herein described are deemed necessary in order to pay the costs and expenses of reclamation and interest thereon. The existing laws under which this contract is made are understood and agreed to be a part of this contract.

15. DESCRIPTION OF LANDS.

The lands hereinbefore referred to are lands donated by the Act of Congress of the State of Idaho under and pursuant to the Act approved August 18, 1894, and the amendments relating thereto, commonly called the Carey Act, the irrigation and reclamation of which lands this contract is designed to effect. The lands are fully set forth in Schedule

B hereto attached and which are hereby referred to and made a part hereof.

16. HIGHWAYS.

Entries of land are understood to be made subject to a right of way, without compensation to the entrymen, for roads upon all exterior section lines and also upon all half section lines, which may be designated by the Board of County Commissioners, as may be provided by law. [426]

17. WATER SUPPLY FOR CITIES AND TOWNS.

It is understood and agreed that so much water as may be necessary for the use of cities and towns and the inhabitants thereof, which cities and towns must necessarily take their water supply from said system of canals, shall be furnished from said canal system to said cities and towns and the inhabitants thereof, upon such terms of sale or rental as may be agreed upon by the party of the second part and said cities and towns or the owners of the lands upon which the same are established, or the residents therein. Said cities and towns must contribute to the maintenance and support of said irrigation system in proportion to the amount of water used by them, and shares of stock of the Lost River Water Company shall be issued for the amounts of water represented by said use to the Trustees of any village or the Mayor of any City, in trust for the use and benefit of the towns and cities and the inhabitants thereof.

18. DELIVERY OF WATER TO USERS.

It is agreed that the said Lost River Water Com-

pany shall not deliver water to or permit the use thereof from said irrigation system by persons who have not purchased water rights or who are not holders of stock in said Lost River Water Company, or who are not otherwise entitled thereto, under this contract. [427]

19. ASSIGNMENT OF INTEREST — MORTGAGE.

The right, title and interest of the second party in the works and irrigation system, and in this contract, may be sold or assigned, and the interest of said second party, or his assigns, may be mortgaged, the form of such mortgage to be approved by the Attorney General of Idaho.

20. QUITCLAIM BY SECOND PARTY.

When full payment shall have been made to the party of the second part, his successors or assigns, for each and every of the Water Rights sold, said party of the second part, his successors or assigns, shall quitclaim to said Lost River Water Company all his, or their, right, title, claim or interest in and to the said irrigation system and appurtenances, including lands, water rights, reservoir or reservoirs, dams, main and lateral canals, ditches, head-gates, and any and all rights, privileges and franchises pertaining thereto or connected therewith, free from any and all liens or encumbrances created by said party of the second part, or his successors or assigns.

21. NEW CONTRACTS IN EXCHANGE.

Said party of the second part hereby assumes and undertakes the fulfillment of each and every of the

contracts, both time and cash, for water rights heretofore sold and contracted to be furnished by the Big Lost River [428] Land and Irrigation Company, Limited, with the several persons, or the assigns of such persons, mentioned and set forth in the Schedule hereunto attached and marked Schedule "C" and made a part of this agreement, and it is agreed, that, upon the execution of the said party of the second part or his assigns, of contracts in the form heretofore approved by said Board and which are hereunto annexed, made a part of this agreement and marked Schedule "D," the said several parties holding time water contracts with said Big Lost River Land and Irrigation Company, as per Schedule "C," shall surrender said contracts so held and receive in lieu thereof a new contract as herein provided. The price for shares and water rights in such new contract to be the same as is provided in the contract surrendered and the holder of a time contract as per said Schedule "C" shall, at the time of executing such new contract, receive credit for the payment heretofore made on such former contract and the remaining payments shall correspond in amount to those provided for in such former contract.

Owners of cash contracts, as per Schedule "C," shall, as soon as water shall be ready for delivery to and use upon said lands, and upon the surrender and cancellation of the contracts now held by them, respectively, receive full paid shares of the capital stock of the Lost River Water Company to the number as heretofore purchased of said Big Lost River [429] Land and Irrigation Company, Limited, and

paid for in full to said company; the water represented by said shares to be and remain dedicated and attached to the particular tract of land described in such cash contracts and certificates of shares.

22. AMENDMENTS.

This contract may be altered and amended by first party with the consent of second party for the purpose of carrying out the object of the contract, and for the purpose of meeting any conditions now unforeseen.

23. BOND.

The said second party agrees to furnish a good and sufficient bond according to law for the faithful performance of the within contract.

IN WITNESS WHEREOF, the said party of the first part, the State of Idaho, has caused the agreement to be signed in duplicate by its Governor and President of the State Board of Land Commissioners of the State of Idaho, and the seal of said Board to be affixed, and attested by the Register, and the party of the second part has hereunto set his hand and seal the day and year first above written.

For the STATE OF IDAHO.

[Seal] By JAMES H. BRADY,
Governor and President of State Board of Land
Commissioners.

Attest: M. I. CHURCH,
Register.

GEORGE S. SPEER. [Seal] [430]

Filed April 25, 1912. A. L. Richardson, Clerk.

Schedules B, C, D and E omitted at request of attorney for appellant. [431]

Plaintiff's Exhibit No. 20.

COPY.

THE ARNOLD COMPANY.
 Engineers—Constructors.
 Electrical—Civil—Mechanical.
 181 La Salle Street.
 Chicago.

**CERTIFICATE FOR PAYMENT
 ON CONTRACT FOR
 CANAL SYSTEM**

BIG LOST RIVER IRRIGATION PROJECT.

Certificate No. 23.
 Date August 31, 1910.

To Big Lost River Irrigation Company,
 Boise, Idaho.

This is to certify that there is now due Corey Brothers Construction Company, Contractor, the sum of Three Thousand Two Hundred Fifty One and 61/100 Dollars as 23rd payment on account, for material delivered and labor performed on site to and including _____, under contract dated _____, as follows:

Date of Commencement June 1, 1909.
 Date of Completion.

Item No.	Description.	Preliminary Estimate of Quantity.	Preliminary Estimate of Cost.	Unit Price.	Estimate of Quantity Done to Date.	Cost of Work Done to Date.	Per Cent Remaining to be Done.
1	Force account to July 31, 1910.....					\$ 38,490.47	
2	Force account August, 1910.....					0.00	
3	Earth excavation		0.16		1,306,592.1	209,054.73	
4	Gravel excavation		0.25		542,531.2	135,632.80	
5	Loose rock excavation		0.50		147,940.3	73,970.15	
6	Solid rock excavation.....		1.50		239,414.9	359,122.35	
7	Clearing		6.00A.		945.49	5,672.94	
8	Concrete		12.00		3,282.09	39,385.08	
9	Reinforced concrete		12.50		3,445.49	43,068.63	
10	Riprap hand laid.....		1.00		11,192.13	11,192.13	
11	Bridging		40.00M.		227,031.20	9,081.25	
12	Tunnel		6.00		1,146.80	6,880.80	
13	Riprap, not hand laid		1.00		476.2	476.20	

Cost + 10%

Total Cost of Work to Date.....\$932,027.53
 Less 10% Per Cent Retained..... 93,202.75
 Total Amount Due Contractor to Date..... 838,824.78
 Less Previous Certificates..... 835,573.17
 Amount Due Contractor This Certificate..... 3,251.61

Correct: GOYNE DRUMMOND,

Resident Engineer.

Approved: F. A. SAGER,

Chief Engineer.

Audited: W. G. FARNSWORTH,

Auditor.

Filed Apr. 25-1912. A. L. Richardson, Clerk. [433]

Plaintiff's Exhibit No. 23.

THIS AGREEMENT, Made and entered into this 26th day of August, 1909, by and between COREY BROTHERS CONSTRUCTION COMPANY, hereinafter called the Contractor, having its principal place of business in the city of Ogden, State of Utah; and the BIG LOST RIVER IRRIGATION COMPANY, hereinafter called the Company, having its principal place of business in the City of Boise, State of Idaho,

WITNESSETH:

THAT, WHEREAS, The Contractor has agreed to furnish all labor and appliances required, and to construct an earthen dam, diversion works, tunnels, canals, concrete structures, and all other work incidental to the completion, ready for operation, of the irrigation system of the Company all in accordance with plans and specifications prepared by the Engineer for said Company:

NOW, THEREFORE, In consideration of the covenants herein contained, the parties hereto agree each with the other, as follows:

1. *Definition of Terms:*

Wherever the term Contractor is used in this Contract, it refers to and indicates Corey Brothers Construction Company.

Wherever the term Company is used in this Contract, it refers to the Big Lost River Irrigation Company.

The term Engineer is used to designate the Consulting Engineer duly appointed and assigned by the

Company to have general charge of all work incidental to the construction of the Company's project ready for operation.

2. *General:*

The Contractor hereby covenants and agrees to provide all labor and all materials, not herein required to be furnished by the Company, necessary for the complete and substantial execution of everything described or reasonably implied in the following specifications, in strict accordance in all respects with the terms of this contract, and to the satisfaction and acceptance of the Engineer, including all transportation, apparatus and appliances of every kind requisite for the same.

The Contractor further covenants and agrees that the plans accompanying these specifications and referred to in these specifications are to be and are accepted as an essential part of this contract, the same as if written at length herein, it being distinctly understood that wherever the specification conflict with this agreement, the terms of this agreement shall govern. [434]

The several parts of this contract shall be taken together to explain each other, and to make the whole consistent. All work that may be called for in the specifications and not drawn on plans, or drawn on plans and not called for in the specifications, is to be executed and furnished as if described in both these ways; and should any work or material which is not noted in the specifications and plans, but which is nevertheless necessary for the proper carrying out of the obvious intentions thereof and of

this contract, the same shall be deemed to be implied and required, and not to be an addition to or deviation from the work hereby contracted for, and the Contractor shall, without additional remuneration, perform all such work and furnish all such material as fully as if it were particularly delineated or described.

3. *Subletting or Transferring of Contract:*

The Contractor shall not sublet nor transfer this contract, or any part thereof, to any person, excepting for the delivery of material, without the consent and approval in writing of the Engineer, who shall be furnished with copies of contracts if he requires them. The Contractor shall give competent attention to the work, and shall also keep a thoroughly competent foreman constantly upon the work. No subcontract shall under any circumstances relieve the Contractor of his liability under this contract, should the subcontractor fail to perform the work undertaken by him.

4. *Co-operation:*

The Contractor shall co-operate with any other contractors that work on the premises, and arrange to carry on his work in such a manner that none of the other said contractors shall be unnecessarily hindered or delayed in the progress of their work.

5. *Inspection:*

The Supervising Engineer, or his duly authorized assistants, shall at all time have access to the work, which work is to be entirely under their control.

Any material or construction which does not fully accord with the letter or the intent of these specifica-

tions may be condemned by the Engineer or his representatives, and the Contractor shall immediately rectify or replace such defective work without expense to the company.

6. *Night and Day Work:*

If so directed by the Engineer, the Contractor shall carry on the work day and night, in order to complete the same within the contract time, and no extra charge shall be made by the Contractor for such night work.

7. *Time of Completion:*

It is hereby expressly covenanted and agreed by the [435] Contractor that all work pertaining to this contract shall be started within ten (10) days from the execution hereof, and carried forward to completion as rapidly as is consistent with the weather and other conditions, and completed before May 1st, 1910; provided that, if the contractor is prevented from beginning or proceeding with said work at any time by reason of strikes, inevitable accident or casualty, the act of God, or for any cause over which the Contractor has no control, the time the Contractor shall be necessarily delayed by any of said causes shall be added to the time herein provided for the completion of said work.

8. *Guaranties:*

The Contractor agrees to defend any and all suits for alleged infringement of any process of construction or system furnished by him under the specifications, and further agrees to reimburse the Company for any and all expense resulting from litigation with reference thereto; provided, however, that noth-

ing in this paragraph contained shall require the Contractor to defend or to reimburse the Company for defending any suit resulting from or growing out of the use of any device specifically described in the specifications and required to be used or incorporated by the Contractor in said dam or other structure.

The Contractor further guarantees all workmanship and all material furnished by him to be first class in every particular, and agrees to replace free of cost to the Company any part or piece showing defects of such material or workmanship within a period of one year from the completion of the entire work, unless otherwise specified. The Contractor further agrees not to use any material, whether furnished by him or otherwise, known to him to be inferior or defective.

9. *Bond:*

The Contractor agrees upon the execution and *deliver* of this contract, if the Company so directs, to execute and deliver to the Company a good and sufficient bond of indemnity in amount equal to.....

.....
 and as security for the faithful performance by him of all the covenants and agreements he undertakes in this contract. The security in such bond of indemnity shall be a properly recognized surety corporation, and such security shall be such as shall be accepted and approved by the Engineer. It is understood that the cost of such bond, if required by the Company, shall be paid by the Big Lost River Irrigation Company.

10. *Compensation:*

In consideration of the faithful performance by the Contractor of all and singular the covenants and agreements herein contained, the Company agrees to pay the Contractor the following prices for doing the work, to-wit: [436]

Earth and Gravel, to construct

dam.....	\$0.25 per cubic yard.
Tunnel Excavation at Dam....	5.00 per cubic yard.
Tunnel excavation in Canal..	6.00 per cubic yard.
Riprap per square yard (not hand laid)	1.00
Concrete of all kinds and structures	12.00 per cubic yard.
Driving Piling, cost plus 10%	
Solid Rock excavation.....	1.50 per cubic yard.
Loose rock excavation.....	.50 per cubic yard.
Earth excavation in canal....	.16 per cubic yard.
Clearing sage brush.....	6.00 per acre.
Lumber, in place.....	40.00 per thousand.
Wet excavation below river level, cost plus 10%.	
Wash Gravel, or 90% pure gravel25 per cubic yard.
Pumping of all kinds, cost plus 10%.	
Any extra work ordered by Engineer, cost plus 10%.	
Riprap, hand laid.....	1.00 per sq. yard. plus 110% cost of laying.

All material furnished by Contractor, except lumber, cost of haul plus 10% cost of material.

The same classification of materials shall hold as stated in specifications for Mackay Dam.

On canal construction, the length of free haul shall be 200 feet, measured from center of gravity of embankment to center of gravity of excavation. An allowance of 1½ cts. per cu. yd. per 100 ft. over haul shall be made.

For hauling cement from the nearest railroad station to the dam site, the contractor shall be allowed \$1.50 per ton; but all cement for canals shall be hauled by the contractor free.

Partial payments of ninety per cent. (90%) of the cost of the materials furnished and work done (said payments to be based upon the contract prices covering the entire work) shall be made by the Company to the Contractor on or before the tenth day of each calendar month for all work done by the Contractor during the preceding calendar month; but said partial payment shall be made only on estimates by the Engineer of the amount of work done and material furnished and of the proper allowance hereunder for such work and material. Final payment of the balance of the contract prices shall be made by the Company to the Contractor within sixty (60) days of the completion of the work and acceptance thereof by the Engineer, provided that first payment shall not become due until.....

11. *Materials for Construction:*

The following construction materials will be furnished by the Company.

All cement will be furnished f. o. b. cars at the nearest railroad station. The Contractor's price per

cubic yard for placing concrete shall cover the unloading [437] and storing of cement in a dry place until used, and shall include the proper care of and shipping back to the cement mill of all sacks, the freight charges, however, being paid by the Company. Any loss of cement due to improper storage or carelessness on the part of the Contractor will be charged against the Contractor.

All steel reinforcement will be furnished F. O. B. cars at the nearest railroad station, and the price paid the contractor per pound for placing steel reinforcement will include the unloading from the cars and responsibility for the material until placed in the work.

All sheet piling, valves and structural steel, hereafter specified to be furnished the Contractor on items which are to be placed by force account will be furnished f. o. b. cars at the nearest railroad station, and the force account paid the Contractor for placing sheel piling shall include the unloading from the cars and responsibility for the material until placed in the work.

It shall be the duty of the Contractor to make requisition for materials furnished by the Company at such a date that the same can be furnished without delay to the work, and the Contractor shall hold the Company harmless from demurrage charges due to delay in unloading materials.

12. *Understanding of Plans and Specifications:*

The Contractor hereby distinctly and expressly declares and acknowledges, that before the signing of this contract, he has carefully read the same and the

whole thereof, together with and in connection with the set of plans and specifications herein referred to, and that he has made such examination of this contract and of such plans and specifications and such investigation of the work required to be done and of the material required to be furnished as to enable him to thoroughly understand the intention of this contract and the requirements, covenants, agreements, stipulations and restrictions contained in this contract and in said plans and specifications, and distinctly agrees that he will not hereafter make any claim or demand upon the Company based upon or arising out of any alleged misunderstanding or misconception on his part of the said requirements, covenants, stipulations and restrictions.

13. *Other Agreements:*

It is understood that there are no written or verbal agreements outside of this contract.

IN WITNESS WHEREOF, the parties hereto have executed this instrument in duplicate the day and year first above written.

COREY BROTHERS CONSTRUCTION
COMPANY,

By W. W. COREY, President.

(Seal) Attest: R. D. ROBERTS,

Secretary.

BIG LOST RIVER IRRIGATION COM-
PANY,

By G. B. HURTT, President.

(Seal) Attest: B. W. OPPENHEIM,

Secretary. [438]

SPECIFICATIONS

FOR

THE CONSTRUCTION OF

EARTH DAM AND CONTROLLING WORKS

AT

MACKAY RESERVOIR SITE

MACKAY, IDAHO.

THE ARNOLD COMPANY
Engineers—Constructors
Electrical—Civil—Mechanical
181 La Salle Street
CHICAGO
May, 1909.

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CONSTRUCTION OF EARTH DAM AND
CONTROLLING WORKS AT MACKAY
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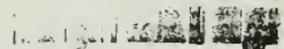
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SPECIFICATIONS
FOR THE CONSTRUCTION OF
EARTH DAM AND CONTROLLING WORKS
AT MACKAY RESERVOIR SITE.

I. GENERAL.

1. *Scope of Specifications:*

It is the intention of these specifications to provide all labor, tools and materials required both for the furnishing and construction as herein specified of the Mackay Reservoir Embankment and Controlling Works, to be located about 2½ miles north-west of Mackay, Idaho, in Section 12, Township 7 North, Range 23 East, the same being a part of the irrigation project of the Big Lost River Land & Irrigation Company.

The work is hereinafter described under the headings appearing in the index on the preceding page.

2. *Drawings:*

The following detailed plans covering the work herein specified will be furnished, and are hereby made a part of these specifications.

145005-A1 Contour map of reservoir site showing dam location.

145202-B3 Plan and cross sections of dam.

145202-B4 Plan, profile and cross section of spillway.

145202-D3 Details of tunnel and controlling works.

Construction details are shown on the drawings accompanying these specifications, but if the Contractor discovers that drawings of the work will not provide a satisfactory construction, it is his duty to immediately stop the work in question, and notify

the Engineer in writing. He shall not proceed with the construction until satisfactory construction has been decided on, and until he has been notified in writing by the Engineer for the Big Lost River Land and Irrigation Company to proceed with the work.

3. *Inspection:*

The material and work called for under these specifications shall be subject to the inspection of the Engineer of the Big Lost River Land and Irrigation Company. The contractor shall give every facility at all times to make standard tests, inspection of materials and work, and all orders of the Engineer [442] as to the fitness of material or work shall be obeyed by the successful bidder under these specifications.

All material that has been rejected by the Engineer on the work is to be removed at once from the site of the work. Any work that has been done, and has been found to be defective, shall at the direction of the Engineer be taken out and replaced to the satisfaction of the Engineer.

4. *Transportation:*

The Oregon Short Line Railroad passes through Mackay, Idaho, located about 2½ miles from the dam site.

5. *Completion of Work:*

Work hereinafter specified shall be started immediately on letting contracts, and shall be entirely completed.

6. *Changes in Plans:*

No change from the designs as shown on the plans shall be allowed in the construction of any part of the

work without written authority from the Engineer. In case unforeseen difficulties in the construction work necessitate such changes, they will be authorized by the Engineer in writing, and the Contractor shall then construct the work in accordance with the revised plans, and shall be paid for the same at the contract rates. In case any such changes necessitate an entirely different method of construction work, unit prices for the revised method of construction shall be agreed upon in writing before construction shall proceed on this part of the work.

7. *Proposals:*

Bidder shall submit a proposal on all the work herein specified, setting forth the unit prices for which the bidder will contract to do the required work in accordance with these specifications.

Proposal will be submitted on the attached proposal sheet. The blanks on proposal sheet shall be filled out, including the date on which, and price for which, the construction herein specified shall be completed.

II. SCHEDULE AND CLASS.

1. *GENERAL:*

The dam and controlling works herein specified are part of the irrigation system to be constructed by the Big Lost River Land and Irrigation Company, under which project it is proposed to store the flow of the Big Lost River in [443] Mackay Reservoir, and to release this storage to the river bed as required in irrigation seasons. The flow is to be diverted into the canal system at a lower point.

The work consists of an earth dam about 2,050 ft.

long, containing approximately 925,000 cu. yd. of embankment, together with cut-off trenches, concrete core walls, sheet piling and riprapping upstream face of dam, a spillway about 350 ft. long excavated in solid rock, and a discharge tunnel excavated in rock for a length of about 400 ft. with the necessary controlling works and approaches.

2. *Schedule:*

The work herein specified will include the following:

- (a) Preparation of foundation.
- (b) Excavation.
- (c) Sheet piling.
- (d) Core walls.
- (e) Back-filling trenches.
- (f) Forming embankment.
- (g) Riprapping upstream face.
- (h) Tunnel approaches.
- (i) Tunnel excavation and lining.
- (j) Controlling works.
- (k) Spillway excavation.
- (l) Spillway walls and lining.
- (m) Force Account Work; which is, in all cases, to be paid for at the actual cost of labor and materials, plus 10%, the Contractor furnishing all necessary plants and tools, unless otherwise specified.

3. *Classification for Payment:*

Payment will be made for the work contemplated in this contract under the following items:

- (a) Grubbing and clearing per acre.
- (b) Dry earth excavation per cubic yard.

- (c) Wet earth excavation by force account.
- (d) Gravel excavation per cubic yard.
- (e) Loose rock excavation per cubic yard.
- (f) Solid rock excavation per cubic yard.
- (g) Back filling per cubic yard. (Paid for as excavation.)
- (h) Forming embankment per cubic yard.
- (i) Excavation in tunnels per cubic yard.
- (j) Placing concrete in tunnel lining or structures per cubic yard.
- (k) Placing steel reinforcement per pound in place.
- (l) Handling and placing valves, castings, piling and structural steel by force account. [444]
- (m) No. 1 common Oregon fir timber in place in structures per 1,000 ft.
- (n) Riprap not hand laid, per sq. yd.

4. *Classification of Excavation:*

All excavation for cut-off trenches, stripping, or excavation for structures shall be classified as excavation, unless the material is placed in embankment, in which case the material will be classified as embankment, the intent being that all material moved shall be paid for once.

All excavation shall be classified as dry excavation, except excavation of earth which is thoroughly saturated with water. This is supposed only to include material lying in swampy ground, and the material which will be classified as wet excavation is that which lies below the elevation at which the surface of the water will stand in the open excavation just prior to the commencement of work.

Material which is under the classification of wet

excavation will be removed by the contractor, if notified in advance of work in writing, under the direction of the Engineer, by force account.

EARTH—Earth excavation shall include all sand, loam, clay, shale, or cemented sand or soft sandstone, or a mixture of earth and gravel containing over 10% of earth or other material which can be plowed with a grading plow and six horses well handled.

GRAVEL—Gravel excavation shall include all gravelly material containing 90% of clear washed gravel.

LOOSE ROCK—Excavation of all boulders between $\frac{1}{2}$ cu. ft. and $\frac{1}{2}$ cu. yd. in volume shall be classified as loose rock. Where it is impracticable to measure the actual percentage of loose rock excavation, the same shall be estimated on a percentage basis by the Engineer.

ROCK—Rock excavation shall consist of solid rock of whatever nature which cannot be plowed by six horses well handled, or boulders of more than $\frac{1}{2}$ cu. yd. in size.

TUNNEL EXCAVATION—Tunnel excavation shall include all excavation estimated by the engineer between the tunnel portals regardless of the ease or difficulty of excavating the same.

The price per cubic yd. for all excavation shall include the furnishing of all plant materials and labor necessary to perform the work. [445]

FORMING EMBANKMENT—The item of forming embankment includes the placing of material in the embankment, all backfilling behind structures

and backfilling of cut-off trenches. All embankment will be paid for by the cubic yard, measurements wherever practicable being made in excavation.

5. *Monthly Estimates and Payments:*

Monthly estimates shall be made by the Engineer of the work completed and material on hand but not yet in place, and the company will on or before the tenth day of each calendar month make payment to the contractor of 90% of these estimates based on the unit contract prices for all work completed, and the actual cost of material on hand, but not in place.

6. *Materials for Construction:*

The unit prices covering the various items of work are intended in all cases, unless otherwise specified in the contract, to include all plant, labor, temporary and permanent construction materials necessary to entirely complete the work, except as hereinafter specified.

The following construction materials will be furnished by the Company.

All cement will be furnished f. o. b. cars at the nearest railroad station. The Contractor's price per cubic yard for placing concrete shall cover the unloading and storing of cement in a dry place until used, and shall include the proper care of and shipping back to the cement mill of all sacks, the freight charges, however, being paid by the Company. Any loss of cement due to improper storage or carelessness on the part of the Contractor will be charged against the Contractor.

All steel reinforcements will be furnished f. o. b.

cars at the nearest railroad station, and the price paid the contractor per pound for placing steel reinforcements will include the unloading, storing and care of same until placed in the work.

All sheet piling, valves & structural steel, hereafter specified will be furnished the Contractor on items which are to be placed by Force Account will be furnished F. O. B. cars at the nearest railroad station, and the Force Account paid the Contractor for placing sheet piling shall include the unloading from the cars and responsibility for the material until placed in the work. [446]

It shall be the duty of the Contractor to make requisition for materials furnished by the Company at such a date that the same can be furnished without delay to work, and the Contractor shall hold the Company harmless from demurrage charges due to delay in unloading materials.

III. MATERIALS AND WORKMANSHIP.

1. *General:*

All construction work of every class in connection with work herein specified shall be done in a workmanlike manner. All due attention shall be given to the relative sequence of the various parts of the work to the end that all parts of the work shall be constructed at such relative times as are necessary to secure the greatest stability and permanence in the completed work when finished.

2. *Cement:*

(a) General.—All cement shall be a true Portland cement made from a mixture of clay and lime carbonate in definite proportions calcined at a high

temperature, and reduced to a fine powder.

All cement shall be delivered at the site of the work in the original package bearing the original stamp and label.

Each sack or barrel shall be clearly marked with the brand and name of the manufacturer.

(b) Fineness.—Ninety-two per cent (92%) of the cement shall pass through a #100 sieve, having 10,000 meshes per square inch, and 80% shall pass through a #200 sieve, having 40,000 meshes per square inch.

(c) Set.—Initial set shall not occur in less than 30 minutes. Final set shall not occur in less than one hour, nor more than ten hours. The time of setting shall be determined by means of Vicat needle apparatus.

(d) Soundness.—A pat of neat cement 2-1/2 in. to 3-in. in diameter and 1/2 in. thick at the center and tapering at the edges must withstand boiling and air pressure without checking, distortion, or softening.

(e) Purity.—Cement shall not contain more than 1.75% anhydrous sulphuric acid, nor more than 4% of magnesia.

(f) Tensile Strength.—Briquettes made of neat cement and water of the shape recommended by the A. S. C. E. and having 1 sq. in. across section shall stand the following tensile tests:

1 day	475 pounds.
7 days	500 pounds.
28 days	600 pounds.

3. *Gravel:*

Gravel shall be composed of clean, hard, durable, thoroughly washed pebbles, free from earthy and organic material. One hundred per cent. (100%) of the gravel must pass through a 1-1/2 in. ring, and 0% must pass through a 1/4-in. ring. It shall be screened to remove the sand, which shall afterwards be re-mixed with it in the required proportions, unless in the judgment of the Engineer the relation of the pebbles to the sand is so uniform as to allow of its being used without screening. In case gravel is used without screening, the same proportion of cement to other materials as is hereinafter specified shall be maintained.

4. *Crushed Stone:*

Crushed stone shall consist of either limestone, granits, or trap rock. The crushed stone shall be clean and free from earthy and organic material. One hundred per cent. (100%) of the crushed stone must pass through a 2-1/2 in. ring, and 0% must pass through a 3/4 in. ring. It shall be screened to remove all fine dust and particles, which shall afterwards be re-mixed with it in the required proportions, unless in the judgment of the Engineer the relation of the fine to the coarse is so uniform as to allow of its being used without screening. In case the crushed stone is used without screening, the same proportions of cement and other materials as is hereinafter specified shall be maintained.

5. *Sand:*

Sand shall be clean, coarse, sharp, free from clay, lumps, sticks, organic matter, or other impurities.

6. *Concrete:*

(a) General.—All concrete work done under these specifications shall be first class in every particular, and in accordance with the most modern construction practice.

(b) Proportions.—The proportions of the raw materials for concrete shall be exactly determined from time to time in accordance with the relative coarseness of the aggregate, so as to obtain a thoroughly compact concrete free from voids. In general, for gravel concrete, the proportions of cement, sand and gravel will be as follows:

	Cement.	Sand.	Gravel.
For footings, head walls, floors of trenches, etc.	1	4	8
For reinforced concrete work, outside finish and facing walls	1	2-1/2	5
For heavy walls not rein- forced	1	3	6

[448]

(c) Consistency.—A medium of quaking mixture of a tenacious, jellylike consistency, which quakes on ramming, shall be used in mass concrete, such as foundations, heavy walls, etc.

A very wet or mush concrete so soft that it must be handled quickly, that it runs off the shovel shall be used for reinforced concrete work.

(d) Placing.—Concrete shall be conveyed from the place of mixture to different parts of the work in such a manner that no distinct separation of the different ingredients shall occur. In case such

separation takes place, the concrete shall be remixed before placing. Concrete shall be used so soon after mixing that it can be tamped in place as a plastic, homogeneous mass. Any concrete which has set before placing shall be rejected. Noticeable voids or stone pockets discovered when forms are removed shall be immediately filled with mortar mixed in the same proportions as the mortar used in the concrete. No concrete shall be placed in freezing weather.

(e) Surfaces.—Ordinary surfaces shall have no special treatment further than care in placing the concrete to prevent voids or stone pockets. Exposed faces shall be made smooth by spading, that is, by thrusting a spade down between the form and concrete to force back the large stones, thus bringing the fine materials against the forms. Within 24 hours after the removal of forms, all exposed surfaces shall be brushed with a neat cement grout of such consistency as to thoroughly fill and cover all small irregularities in the surface.

(f) Forms.—Lumber used in forms and design of the forms shall be adapted to the structure and kind of surface required on the concrete. For exposed faces the surface next to the concrete shall be dressed. Forms shall be sufficiently tight to prevent loss of cement or mortar, and shall be thoroughly braced and tied together so as to withstand pressure and all strains due to handling concrete. Forms shall be left in place until the concrete has attained sufficient strength to resist accidental thrusts and permanent strains which may come upon it. Forms

shall be thoroughly cleaned before using a second time.

7. *Timber:*

All timber that may be used in construction work under these specifications shall be first grade quality for its purpose, and must be sound, straight-grained, free from water cracks or loose knots, or other imperfections. [449]

8. *Steel and Iron:*

Cast-iron used in the construction of the pipes and valves shall be close-grained, tough, grey cast iron, free from all blow-holes, sand-holes, and all imperfections, of smooth surface, and true to pattern. Cast iron shall have a tensile strength of 18,000 pounds nor more than 22,000 pounds per square inch. All sand, loose scale, etc. shall be removed from castings before erection, and all cuts and bars must be neatly chipped and filed smooth to the general surface of casting before erection. All castings shall be moulded with a sweep wherever practicable.

All steel used under these specifications shall be of medium steel, free from imperfections, straight, full gauge, and true to dimensions. All steel pipe shall be thoroughly cleaned, and have all rust, dirt and scale removed, and shall then be immediately given one coat of approved protective paint. Reinforcing steel shall be of medium steel, having an elastic limit of not less than 45,000 pounds per square inch. It shall stand being 180 degrees throughout the diameter equal to the thickness of the piece without a fracture on the outside of the bent portion. Tensile stress in the steel shall not be more than one-

third of its elastic limit, but in any case shall not exceed 18,000 pounds per square inch. Elongation of steel under working stresses shall not exceed 1/15000. Steel rods shall not be painted, but shall be free from mill rust and loose scale.

IV. DETAILS OF CONSTRUCTION.

1. *General:*

The dam herein specified is about 2,000 ft. in length, and terminates on one end in a rocky bluff immediately adjacent to the present river bed, and on the other side of the river is located on a gradual slope. The solid rock at one end of the dam stands on a very steep slope, the lower part of which is covered with float rock, which will have to be excavated in order to allow the foundation of the concrete core wall at the end of the dam to be bedded in solid rock. Along the river bed and on the opposite side of the rock there is a layer of gravel of varying thickness averaging about 15 ft. Underneath the gravel is a bed of impervious clay and gravel: From the base of the rock bluff, sheet piling is to be driven in the clay extending across the river and part way up the slope. From the termination of the sheet piling, trench is to be dug through the layer of gravel, and the trench backfilled with material, making a bond with the impervious material underlying the thin gravel layer at the higher elevations. The main fill is to be earth embankment, the upstream face protected by riprap.

The spillway will be constructed by excavation around the end of the dam in solid rock, the spillway being carried far enough below the dam to prevent

any wash on the lower toe.

A tunnel will be constructed through the solid rock [450] around the end of the dam at an elevation approximating the base of the dam. The approaches will be excavated in the float rock, and solid rock to the two portals. Trash racks of iron and steel will be installed at the entrance portals. The controlling works consisting of steel pipes with the necessary regulating valves will be installed at the lower portal. Valves will discharge into a concrete basis, from which water will be discharged into the bed of the river over a measuring weir.

2. *Sequence of Construction:*

The sequence of construction will be to drive and line the outlet tunnel as soon after the commencement of work as possible in order to utilize the tunnel to care for the flow of the stream during construction.

The preparation of foundation and driving of sheet piling should be organized and carried on with such rapidity as to enable the forming of embankment to commence without delay.

Riprap should be placed as the embankment rises and all the detailed structures should be completed and ready for operation when the embankment is finished.

3. *Preparation of Foundation:*

Before the forming of embankment is commenced the foundation of the dam shall be thoroughly plowed to a depth of 10 inches, and all scrub growth, roots and vegetable matter above the ground shall be removed from the site of the embankment. All

soil shall be removed from the upper third of the embankment and placed near the lower toe within the foundation of the embankment, unless ordered wasted by the Engineer.

If, in the opinion of the Engineer, the same shall be necessary to properly bond the embankment into the foundation, additional material shall be stripped from the middle third to such depth as the Engineer may require. This material, when suitable, shall be placed in the lower third of the embankment.

After the removal of the sod from the upper third of the embankment, and after such material as is necessary is stripped from the middle third embankment, the surface shall be again replowed before the forming of embankment is commenced.

For this work the Contractor will be paid for the actual yardage stripped at the unit price paid for stripping and measurement shall be made of such material as is placed in the spoil banks outside of the base of the embankment, the Engineer making such measurements as are necessary to pay the Contractor once for each movement of material, payment being made either at the unit price for embankment or price for excavation, depending upon which of these items is affected. The cost of plowing the foundation is included in the price paid the Contractor for forming embankment, and the removal [451] of all scrub growth, roots, and vegetable matter above the ground is included in the price per acre for clearing and grubbing.

4. *Driving Sheet Piling:*

Between stations 15 plus 75 and 19 plus 50, approximately, sheet piling will be driven as shown on

the plans. For this work the Contractor will be paid by Force Account and the work shall be done under the immediate direction of the Engineer. The Contractor shall provide such plant as is necessary to complete the driving of piling at such a time as not to delay the commencement of forming enbankment. All piling must be driven to lines and grades set by the Engineer and down to and into impervious material. The Contractor shall employ such skilled labor as is necessary to do this work in a workman-like manner.

5. *Cut-Off Trenches & Core Wall Trenches:*

Core wall trenches and cut-off trenches shall be excavated for the placing of the core wall and puddled material as shown on the plans. This work shall be done and at such a time and with such a force as is necessary to complete the same without delay in forming enbankment.

In general, these trenches will be excavated as shown on the plans but the object in view is to excavate to and into the impervious stratum below the foundation of the dam and such changes will be made as the work progresses as are found necessary.

6. *Back-Filling of Cut-off Trenches:*

Before back-filling the cut-off trench, the surface of the trench shall be thoroughly cleaned from all foreign matter and the exposed surface of the excavation shall be roughened so as to make a thoroughly good bond with the material used for back-filling when placed as below specified.

All back-filling when deposited shall be thoroughly puddled by the use of water, and shall be

compacted by driving horses back and forth over it, or by a similar method approved by the Engineer. The material used for back-fill shall be of such character and so placed that it can be thoroughly puddled as above specified.

Immediately after the completion of any or all back fill, the forming embankment over the same shall commence and shall not be discontinued until at least 3 ft. of embankment is formed over all the back-fill in question.

7. *Concrete Core Wall:*

Concrete core-wall shall be constructed approximately between the limits as shown on the plans but the exact length will be determined as the work progresses. Great care shall be exercised in properly bonding the core wall on to [452] the piling and down to and into the impervious material, where not founded on the piling.

Concrete shall be of a quality designated in detail in the specifications "Concrete." All forms shall be firmly and substantially made of undressed lumber. All joints shall be made tightly fitting to prevent the wasting of cement. The joints shall be allowed to overlap and the surface of the concrete shall be as rough as possible to make a thorough bond with the embankments placed against the core wall.

In general, the height of the core wall shall be kept at one set of forms above the rising embankment. After the concrete is thoroughly set all forms shall be removed before the embankment is placed against the wall.

The concrete in the core wall shall be measured to

neat lines as laid out by the Engineer.

8. *Forming Embankment:*

Embankment may be formed either by the use of teams or by steam shovels and cars. In case the material is placed by means of steam shovels and cars the Contractor may either raise the embankment by shifting track, or by placing two trestles; one in the lower toe, and one in the upper toe of the rising embankment. This system of trestles shall be used for the entire height of the dam and the method of placing material must be as follows:

The material on the outer and inner slope of the embankment shall be dressed to slope as the embankment rises. The material between the trestles may be dumped from the cars toward the center of the dam, taking the general slope determined by the angle of repose of the material as dumped; the only limitation being that each trestle shall be used to the extent that practically the same weight of material is carried towards the center of the dam from each trestle. A similar scheme of placing material must be adopted if track is shifted, the object being to place all sloping strata towards the center of the dam. The Contractor shall further use such precautions in the regulation of his work as the Engineer deems necessary until the fill has reached the top of the finished concrete core wall to protect the same against unequal earth pressures from the fill being formed on each side.

The method of puddling this material shall be as follows:—

It is the intention to thoroughly wet the interior

portion of the dam throughout a section of embankment, which extends for a distance of 30 feet each side of the core wall at the base of the dam at the maximum height, with a width of 6 feet of wetted section on the crest of the dam, the limits being defined for various elevations of dam by straight lines drawn between these points. Such labor must be performed and plant furnished to carry out this wetting continuously during the forming of the embankment as is satisfactory to the Engineer. [453] The cost of this wetting, plus 10%, will be paid as hereinafter specified.

In general, it is expected that all of the material developed in the borrow pits is suitable material but the Contractor will be required to leave any large amount of undesirable material in the pits, and will be required within practical limits to so conduct the placing of material in the embankment as to mix the various materials which may be encountered. No frosty material will be allowed placed in the embankment, and the Contractor will be required to so saturate the wetted portion of the dam as to entirely dissolve any lumpy material.

In case embankment is made by teams, the material will be placed on the fill in irregular lifts, the depth of lift being not more than 3 feet. Teams will be required, in going to and from the borrow pits, to pass over the embankment in such a way as to give it a uniform settlement and will not be allowed to track. Before each lift is started, the surface of the previous lift shall be plowed, and such plowing will be done as is necessary to always deposit the mate-

rial on a broken surface.

No steam shovel borrow pits will be allowed within 200 feet of the toe of the embankment, and the borrow pits will be so laid out by the Engineer as not to interfere with the operations or location of any part of the structure.

The price paid per cubic yard for forming embankment shall include all plant, labor, trestling, and other construction materials necessary to properly place the embankment according to these specifications, except that the Contractor will be paid cost, plus 10%, on all labor, plant and materials required in wetting the embankment. All measurements for embankment will be made in excavation.

9. *Riprap:*

Riprap shall consist of 12 inches of stone, roughly but firmly laid on the embankment after the same has been neatly dressed to grade. It is intended that the Contractor shall place selected material containing gravel on the face of the embankment in order to make a bed for the riprap. In case this has not been done the Contractor will be required to spread a bed of 6 inches of gravel before placing the stone. Riprap stone shall in general be 12 inches in depth, but 15% of the stone may be not more than 9 inches in depth providing the same is used to make a tight joint. It is intended in general that the stone shall be laid without dressing and as far as practicable with broken joints. Any irregular stone which will not form a joint or bed must, if used, be roughly dressed with a hammer before laying. After being laid the stone must be rammed, if necessary to a true

firm surface and the joints completely filled with gravel.

In all cases riprap as herein specified shall be measured by taking the area on the sloping surface of the embankment [454] with a depth of 12 inches.

10. *Spillway:*

The excavation of the spillway shall be done to the neat lines as shown on the plans and staked out by the Engineer. Great care shall be exercised not to shatter material outside the neat lines, and all of the material excavated shall be deposited neatly in spoil banks where designated by the Engineer.

The concrete lining for the spillway shall be of the class designated in the specifications as "Facing Walls" and shall be placed as heretofore specified. In case it is found desirable to tie the spillway lining to the rock side walls dowel pins will be placed where designated by the Engineer.

All concrete will be measured for payment to the lines designated by the Engineer and all dowel pins which may be used will be paid by Force Account.

11. *The Outlet Tunnel:*

The limits of the outlet tunnel are approximately given on the plans but the exact location of the portals will be determined as the driving progresses, the intention being to have the entire length of the tunnel that which will be economically developed as the work progresses.

The earth excavation at the inlet and outlet approaches shall all be placed, if suitable, in the embankment.

12. *Tunnel Excavation:*

The excavation of the tunnel between the portals as finally completed, and as measured by the Engineer, shall be classified as "Tunnel Excavation" regardless of the ease or difficulty of removing the same. The Tunnel shall be driven from both ends, working night and day continuously until the work is completed. Great care shall be taken not to shatter the bottom, sides and roof of the tunnel outside the neat lines. It is expected that this tunnel will be driven for its entire length through sustaining rock and that the Contractor will provide such temporary bracing as is necessary to hold the section of the tunnel until the concrete lining is placed. In case bad ground is encountered and a permanent timber lining must be placed back of the concrete the same will be paid for under the item of "Timber In Place In Structures." The measurement of the tunnel excavation shall be to the lines determined by the Engineer.

13. *Concrete Tunnel Lining:*

The concrete tunnel lining shall be placed true to line and grade as shown on the plans, the class of concrete [455] being that heretofore designated in the specifications as "Facing Walls." All forms shall be firmly and substantially made of dressed lumber and the joints so fitted as to give a uniform and smooth surface throughout the barrel of the tunnel. Forms shall be constructed in such a manner that their operation shall be satisfactory to the Engineer, and there shall be sufficient forms to enable the work to proceed continuously until the work is

completed without removing the forms until the work is set. The method of placing concrete is heretofore specified under the general specifications for "Concrete." Concrete will be measured to the lines determined by the Engineer. [456]

14. *Placing Valves, Castings & Structural Steel:*

The item for placing of valves, castings and structural steel includes the unloading and carting from the nearest railroad station to the work, and the storing, care and responsibility of these materials until placed in the work. All structural steel, castings and valves shall be set true to grade and line as shown on the plans. All work requiring the labor of artisans shall be done by men skilled in the special line of work required and of all these parts shall be installed in a workmanlike efficient manner satisfactory to the Engineer.

This work shall be paid for by Force Account, the Contractor being required to furnish all labor and tools necessary to properly carry out the *the* work.

15. *Concrete Structures:*

All concrete structures shall be built to the lines and grades shown on the plans and established by the Engineer. The class of concrete used and the method of placing being as heretofore designated under the heading of "Concrete." All Structures shall be measured to the neat lines as shown on the plans, unless additional work is ordered in writing by the Engineer.

16. *Back-Filling Behind Structures:*

As soon as a structure is completed, forms shall be removed and the necessary back-filling shall be

placed back and around the structure. Back-filling shall be done with selected material, which shall be placed in layers not more than 4 inches in thickness and thoroughly wet and tamped until there will be no appreciable future settlement. Measurements for back-filling shall be made to the lines determined by the Engineer.

17. *Grading & Cleaning up of Site:*

Before the structure is completed as a whole the Contractor shall clean up and grade, and finish in a workmanlike manner, the entire site of the work, and shall remove all nuisance, making any minor repairs or alterations that are necessary to complete the structure as a whole ready for operation.

Pages 1 to 16 approved, in this office, June 2, 1909.

The above numbered sheets in this copy of specifications being identical with the approved copy in this office.

(Signed) D. G. MARTIN,
State Engineer.

May 23, 1910. [457]

PROPOSAL SHEET
FOR THE CONSTRUCTION OF
EARTH DAM AND CONTROLLING WORKS
AT MACKAY RESERVOIR SITE.

Submitted by Corey Bros. Construction Co.

Date _____

- | | |
|--|---------|
| 1. Grubbing and clearing per acre..... | \$ 6.00 |
| 2. Dry earth excavation per cubic yard... | .25 |
| 3. Wet earth excavation by Force Account. | |
| 4. Gravel excavation per cubic yard..... | .25 |
| 5. Loose rock excavation per cubic yard... | .50 |

6.	Solid rock excavation per cubic yard. . . .	1.50
7.	Forming embankment per cubic yard.25
8.	Excavation in tunnels per cubic yard. . . .	5.00
9.	Placing concrete in tunnel lining or structures per cubic yard.	12.00
10.	Placing steel reinforcement per lb. in place.	Cost plus 10%
11.	Handling & placing valves, castings, pil- ing and structural steel by Force Account.	Cost plus 10%
12.	No. 1 Common Oregon Fir Timber in place in structures per 1,000 feet. . . .	40.00
13.	Riprap, not hand laid, per sq. yd.	1.00
14.	Actual cost, haul of cement to site by Co.	
15.	Cost plus 10%, haul of steel to Site by Co.	

Note:—Unit prices refer to work done in accordance with attached specifications. [458]

SPECIFICATIONS FOR CONSTRUCTION OF THE CANAL SYSTEM—CUSTER, BLAINE, BINGHAM AND FREMONT COUNTIES, IDAHO.

1. SCOPE OF SPECIFICATIONS.

It is the intention of these specifications to provide for all labor, tools and materials required to construct an irrigation canal system for the Big Lost River Irrigation Company, in Custer, Blaine, Bingham and Fremont Counties, Idaho, the location of which is more particularly shown on the map attached hereto and made a part of these specifications.

2. PROPOSALS.

Proposals are invited on the construction of the canal and regulating works in connection with the

Engineer's plan and specifications.

Proposals must be accompanied by the attached proposal sheet with full information as outlined.

The right is reserved to reject any and all bids.

III. GENERAL REQUIREMENTS.

1. *Labor, Tools, etc.*

The Contractor is to provide all labor, tools and materials necessary for the complete and substantial execution of everything described, shown or reasonably implied in the drawings of the following specifications, also all transportation of apparatus and appliances of every kind requisite for the completion of the work.

2. *Workmanship and Materials.*

All workmanship and materials shall be strictly first class. All work, methods of construction and material shall receive the approval of the Engineer before acceptance.

All workmen employed by the Contractor shall be thoroughly skilled and competent. All workmen who have proved to be incompetent shall, upon written request of the Engineer, be immediately removed from the work and not permitted to return.

3. *Supervision.*

The Contractor shall keep a competent foreman on the work during working hours, who shall be his representative in all cases where the contractor himself is absent. The Contractor shall see that his employees work in strict harmony with any and all other artisans employed upon the work.

4. *Loss and Damage.*

The Contractor shall be held responsible for any

loss by fire, theft or any other cause, of material and apparatus furnished [459] to him or by him, until the final acceptance of the work as hereinafter specified. Proper care shall be exercised in the protection of such parts of the work as may be damaged by frost, injury or defacement from any source during the process of construction.

5. *Inspection.*

The Supervising Engineer, or his duly authorized representative, shall at all times have access to the work, which work is to be entirely under his control.

The Supervising Engineer may require the Contractor to remove work that in his opinion is not in accordance with these specifications, and substitute without delay satisfactory work. The expense of doing so, and making good other work disturbed by this change is to be borne by the Contractor.

6. *Lines and Levels.*

All grades, lines and levels will be given from bench marks and lines established by the Supervising Engineer. These lines and levels must be followed and payment will only be made for material moved within said lines.

7. *Dimensions.*

The Contractor shall follow dimensions marked on the plans. Where no dimensions are given, directions of the Engineer in charge shall be followed. In no case shall the Contractor be permitted to scale blue prints for dimensions.

8. *Delays.*

No charge shall be made by the Contractor for hindrances or delays due to any cause in the process

of the work, but it may entitle him to an extension of time for completing the work sufficient to compensate for the delay.

The time allowance to be made shall be determined in each case by the Chief Engineer, provided the Contractor shall give the Engineer in charge immediate notice in writing of the cause of the delay.

9. *Extra Work.*

No claims shall be allowed for extra work, unless the same be in pursuance of a written order from the Engineer in charge or unless the Chief Engineer at his discretion shall direct that the claim or such part thereof as he may deem just and equitable be allowed.

10. *Completion of Work.*

The Contractor shall at all times employ a sufficient number of competent and skilled labor to push his work to completion within the specified time.

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The contractor shall employ more men, or shall work longer hours, when so instructed in writing by the Engineer in charge that such increase appears to be necessary in order to complete the work at the specified time.

11. *Omissions.*

Any omission of the specific mention of any petty detail necessary to make any part of the installation complete shall in no wise relieve the Contractor from finishing his work in a thoroughly workmanlike manner, and to the satisfaction of the Engineer in charge.

IV. *General Description.*

1. *Purpose and Description of Canal System:*

The general object of the system is to supply water for irrigation by diverting a portion of the flow of the Big Lost River at the headgate of the Blaine Canal, through which canal such diversion is carried for approximately 15-1/2 miles.

The following canals in Blaine, Custer, Bingham and Fremont Counties in the State of Idaho, and whose more definite location is shown on the accompanying drawings, together with their headgates, diverting dams, drops and all other structures necessary to their completion for operation comprise the work to be done under these specifications:

Name.	Approximate Length Miles.	Capacity Second-feet.
Blaine Canal	15.5	1275
Blaine Canal	3.1	1035
Era Canal	3.4	300
Arco Canal	8.3	100
North Side Canal		
Northeast Canal		
South Side Canal		

V. *Canals.*

1. *Cross Section and Gradient of Canals.*

The water area, gradient and velocity of each canal shall be approximately the same, whether it be in side hill section, having slopes 3 to 1, or greater, or in level section with practically no side hill slope. Values for the water area, gradient and velocity of each canal are shown on the accompanying drawings, as well as dimensions for the level and side hill sections. [461]

2. *Excavations.*

That portion of the canal section in cut shall be

excavated true to grades set by the Engineer; the bottom shall be left smooth and shall not vary more than .1 at any point above or 0.5 below the correct grade elevation at that point.

The sides of the canal section in cut shall have a uniform slope of $1\frac{1}{2}$ on 1. The finish left by plowing and scraping in removing the excavated material will be considered sufficient finish for the side slopes when done in a workmanlike manner, and in general no extra smoothing or dressing down of the slopes will be required. But whenever in the opinion of the Engineer the side slopes are not finished in a workmanlike manner, the same shall be brought to the finish required either by hand with pick and shovel, or by dragging with teams.

The portion of the canal in cut shall be cleaned of all loose material and debris before being accepted.

No earth shall be borrowed from the bottom or sides of the canal section. Whenever possible, all borrow shall be made adjacent to the outer toe of the upper embankment, and such borrow shall be excavated in a neat and workmanlike manner.

Whenever in the opinion of the Engineer borrow is necessary at points not covered above, such borrow shall be made only at such points and in such manner as the Engineer may direct.

No material shall be paid for which is excavated beyond the neat lines of the cut sections, as shown on the attached plans.

3. *Embankment.*

The canal embankments shall have a minimum section as shown on the accompanying drawings, and in

all cases the top of the embankment shall be left smooth and neat.

The entire ground surface which shall fall within the limits of the outer and inner toes of the embankment shall be thoroughly plowed in a direction *a*parallel to the canal alignment, and all brush, stones or debris of any kind removed before any material is placed as embankment.

Where new embankment is placed over the present embankment, as will be the case with the North Sude Canal, to be enlarged from 220 second feet to 350 second feet capacity, the old embankment shall be cleaned of all brush, stones or debris of any kind, and the entire surface thoroughly plowed in a direction parallel to the canal alignment before any new embankment is placed.

The material forming the embankment shall be free from any material which in the judgment of the Engineer might allow the [462] percolation of water through the embankment. Material placed as embankment shall be placed in horizontal layers not exceeding 12 inches in thickness, and each layer shall be thoroughly compacted by rolling or grading teams before the next layer is placed. The successive layers shall be kept smooth and regular, and the top surface of the last layer shall be loosened either by light plowing or harrowing before the next layer is placed, whenever in the opinion of the Engineer such procedure may be necessary to insure a good bond.

Waste material shall be placed in neat spoil banks at such places as the Engineer may designate. Whenever possible waste material shall be deposited

in such manner as to strengthen the lower embankment.

The length of Free Haul shall be 200 ft. measured from center of gravity of embankment to center of gravity of excavation. An allowance of $1\frac{1}{2}$ cents per cu. yd. per 100 ft. over haul shall be made.

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SPECIFICATIONS
FOR
CONCRETE.

I. *Materials.*

1. *Cement.*

All cement used shall conform to the specifications for Portland Cement.

2. *Sand.*

All sand shall be clean, coarse and sharp, and shall be free from clay, loam, sticks, organic matter, or other impurities.

3. *Crushed Stone.*

Crushed stone shall be perfectly clean and entirely free from earth and organic material. One hundred per cent (100%) of the crushed stone shall pass through a $2\frac{1}{2}$ inch ring and 0% shall pass through a $\frac{1}{4}$ inch ring. All crushed stone shall be screened to remove all fine dust and particles, which shall afterwards be mixed with it in the required proportions, unless in the judgment of the Engineer the relation of the fine to the coarse is so uniform as to permit of its being used without screening. In case the crushed stone is used without screening, the same proportion of cement to other materials as is hereinafter specified shall be maintained.

4. *Gravel.*

Gravel from the river bed may be used for concrete, provided it is clean and free from all dirt or vegetables or clayey material, and contains no stones larger than will pass through a 2½ inch ring.

II. *Mixing.*

1. *General.*

The method of mixing the ingredients of concrete shall be of such a character that the several constituents are evenly and uniformly distributed through the resultant made.

The mixing shall also be accomplished in such a manner that there shall be ample time in which to place the concrete before any portion shall have taken the initial set. [464]

2. *Proportions and Consistency.*

The proportions of the raw material for concrete shall be exactly determined from time to time, in accordance with the relative coarseness of the aggregate, so as to obtain a fairly compact concrete free from voids.

In general for crushed stone concrete the proportion of cement, sand, crushed stone or gravel will be as follows:

	Cement.	Sand.	Crushed Stone or Gravel.
For footings near walls, abutments and the out- side 2 ft. around reg- ulating works struct- ure	1	3	5
For reinforced work	1	2	4
For all other concrete	1	3	5

A mixture of jellylike consistency gently quaking on a tamping shall be used for mass concrete, such as the heavy walls.

Very wet or mushy concrete, so soft that it will run off the shovel unless handled quickly, shall be used for facing very thin walls and for reinforced concrete.

III. *Placing.*

1. *General.*

All concrete work done under these specifications shall be first class in every particular, and in accordance with the most modern construction practice.

2. *Transporting.*

Concrete shall be conveyed from place of mixing to different parts of the work in such a manner that no separation of the different ingredients shall occur. In case such separation takes place, the concrete shall be mixed before placing.

3. *Set.*

Concrete shall be used so soon after mixing that it can be tamped in place as a plastic, homogeneous mass. Any concrete which has been set before placing shall be rejected.

4. *Voids.*

Noticeable voids or stone pockets discovered when forms are removed shall be immediately filled with mortar mixed in the same proportion as the mortar used in the concrete. [465]

5. *Continuous Work.*

The following shall constitute sections for continuous work: (1) each footing course for bed of wall; (2) each wall or pier from footing course to top in such a way as the Engineer may direct, always providing deep transverse channels where work is allowed to set before the next section is placed thereon.

Each of the above sections shall be carried on continuously when once started night and day, if possible, that is, each layer shall be well rammed in place before the previously deposited layer shall have had time to partially set.

6. *Surfaces.*

Ordinary surfaces shall have no special treatment further than care in placing the concrete to prevent voids or stone pockets. Exposed faces shall be made smooth by spading; that is, by thrusting a spade down between the form and the concrete to force back the large stones, thus bringing the fine material against the forms. Within 24 hours after the removal of forms, all exposed faces shall be brushed with a neat cement grout of such consistency as to thoroughly fill and cover all small irregularities in the surface.

7. *Forms.*

Lumber used in forms and in the design of the forms shall be adapted to the structure and kind of surface required on the concrete. For exposed faces,

surfaces next the concrete shall be dressed. Forms shall be sufficiently tight to prevent loss of cement or mortar, and shall be thoroughly braced and tied together so as to withstand pressure and all stresses due to handling concrete. Forms shall be left in place until the concrete has obtained sufficient strength to resist accidental thrusts and permanent stresses which may come upon it. Forms shall be thoroughly cleaned before using a second time.

8. *Frozen Concrete.*

No concrete shall be placed during freezing weather unless thoroughly protected and with the approval of the Engineer.

9. *Dimensions.*

All structures, course walls, abutments, etc., shall be constructed according to the designs and to the dimensions shown in the drawings herewith, which are made a part of these specifications. [466]

SPECIFICATIONS FOR PORTLAND CEMENT.

I. *General.*

All cement shall be a true Portland Cement made from a mixture of clay and lime carbonate in definite proportions, calcined at a high temperature, and reduced to a fine powder.

All cement shall be delivered at the site of the work in the original package bearing the original stamp and label.

Each sack or barrel shall be clearly marked with the brand and name of the manufacturer.

All cement failing to meet the requirements of the specifications will be rejected. All rejected cement, whether damaged or rejected for other causes, shall be removed at once by the Contractor.

The selection of the sample for testing must be left to the discretion of the Engineer, but shall be a fair average of the contents of the package from which it is taken.

II. *Fineness.*

Ninety-two per cent. (92%) of the cement shall pass through a #100 sieve, having 10,000 meshes per square inch, and 80% shall pass through a #200 sieve, having 40,000 meshes per square inch.

III. *Set.*

Initial set shall not occur in less than 30 minutes. Final set shall not occur in less than 1 hour, nor more than 10 hours. The time of setting shall be determined by means of Vicat needle apparatus.

IV. *Soundness.*

A pat of neat cement $2\frac{1}{2}$ inches to 3 inches in diameter and $\frac{1}{2}$ inch thick at the center and tapering to the edges must withstand boiling and air exposure without checking, distortion or softening.

V. *Purity.*

Cement shall not contain more than 1.75% Anhydrous sulphuric acid, nor more than 4% magnesia.
[467]

VI. *Tensile Strength.*

Briquettes made of neat cement and water in the shape recommended by the A. S. C. E. and having 1 square inch center cross section, shall stand the following tensile tests:

Briquettes for 24-hour tests shall be allowed to set 24 hours in moist air.

Briquettes for 7-day and 28-day tests shall be allowed to set one day in moist air, and the remainder of the period in water.

Neat 24-hour tests shall not show less than 175 lb. per sq. inch. Neat 7-day tests shall not show less than 500-lb. per square inch.

Neat 28-day tests shall not show less than 600 lb. per square inch.

Filed April 25, 1912. A. L. Richardson, Clerk.
[468]

Plaintiff's Exhibit No. 24.

CONSTRUCTION CONTRACT.

THIS AGREEMENT, Made this 18th day of Sept. 1909,

WITNESSETH, That Union Portland Cement Company agrees to sell and The Big Lost River Irrigation Company, Mackay, Idaho, agrees to buy and take delivery of during the year 1909-10 all the cement required for the construction of Dam and Ditch work known as the Big Lost Land and Irrigation Company project, Mackay, Idaho, or Twenty-five Thousand barrels of Red Devil Cement (four sacks equalling a barrel) at the price of Two Dollars and Eighty Four cents, per barrel, in carload lots, F. O. B. Mackay and Moore, Idaho, sacks extra. Delivery at central freight station, any charges for switching or demurrage at destination to be at expense of purchaser. Purchaser hereby agrees to take delivery at destination, subject to the rules and

regulations of transportation company delivering same. Freight to be paid by purchaser and same to be credited to purchaser's account upon return to seller of receipted freight bill. This contract shall last during the year 1910 and shall expire with the 31st day of December of that year.

TERMS.—30 days; 1 per cent off the net amount for cash in 10 days; no discount allowed on sacks or freight.

QUALITY.—Cement to be guaranteed to fulfill the specifications and requirements of the American Society of Civil Engineers. Seller's liability to cease when cement is delivered to the U. P. Co. at Devil's Slide, Utah. Purchaser to have the right to have cement tested at the factory before acceptance at Devil's Slide, Utah, if desired.

SACKS.—Cement to be packed in jute, cotton or canvas sacks and charged to purchaser at 10 cents each. The seller to pay 10 cents each for empty Red Devil Cement sacks returned by the purchaser [469] to the seller in good condition. The seller's count and acceptance of sacks returned to be the basis of credit. Purchaser to pay the railroad freight on returned sacks.

DELIVERIES.—Deliveries are to be taken by the purchaser at the rate of 2000 to 4000 as advised barrels per month during 1909 and 10.

Seller shall not be held responsible for deliveries when prevented by strikes, lockouts, accidents, fires, floods, shortage of cars, or other causes over which seller has no control.

If purchaser fails to make any payment hereunder,

when the same becomes due, or fails in any way to perform the conditions of this contract, the seller may, at its option, cancel contract. Time is and shall be of the essence of this agreement.

This contract shall not become operative or binding upon the Union Portland Cement Company until it has been approved by one of the Executive Officers of said Company at the home office in Ogden, Utah, and a copy with such approval forwarded to purchaser.

IN WITNESS WHEREOF, the Seller and Purchaser have hereunto set their hands and affixed their seals in duplicate the day and year first above written.

Seller:

UNION PORTLAND CEMENT COMPANY.

By JAMES PINGREE,

Secretary.

Purchaser:

BIG LOST RIVER IRRIGATION CO.

By C. B. HURTT,

President.

Witness:

O. B. GILSON.

Witness:

Filed April 25, 1912. A. L. Richardson, Clerk.
[470]

Plaintiff's Exhibit No. 32.

**CERTIFICATE OF QUALIFICATION OF
FOREIGN CORPORATION.
STATE OF IDAHO.**

DEPARTMENT OF STATE.

I, ROBERT LANSDON, Secretary of State of the State of Idaho, do hereby certify that the COREY BROS. CONSTRUCTION CO., a corporation duly organized and existing under the laws of the State of Utah, has fully complied with Section 10 of Article XI of the Constitution, and Section 2653 of the Revised Statutes of Idaho, as amended by an Act approved March 10, 1903, by filing in this office on the Fifth day of August, 1909, a properly authenticated copy of its Articles of Incorporation, and a certificate of the appointment of J. H. GREENE of Mackay in the County of Custer, State of Idaho, as agent for said Corporation within the State of Idaho, upon whom process issued by authority of, or under any law of this State, may be served.

And I further Certify, That said Corporation has accepted the provisions of the Constitution of the State of Idaho for all the intents and purposes contemplated by the provisions thereof, relating to such acceptance, by other than municipal corporations (Art. XI, Sec. 7), all of which are recorded in Book "A" of Foreign Incorporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the Great Seal. Done at Boise City, the Capital of Idaho, this Fifth day of August, in the year of our Lord one thousand nine

hundred and Nine, and of the Independence of the United States [471] of America, the one hundred and thirty-fourth.

(Seal)

ROBERT LANSDON,
Secretary of State.

Filed April 25, 1912. A. L. Richardson, Clerk.
[472]

Plaintiff's Exhibit No. 65.

THIS AGREEMENT, Made and entered into this 16th day of February, 1910, by and between The Arnold Company, a corporation organized and existing under and by virtue of the laws of the State of Illinois, hereinafter called the Engineer; and the Big Lost River Irrigation Company, a corporation organized and existing under and by virtue of the laws of the State of Idaho, hereinafter called the Client, WITNESSETH:

That in consideration of the covenants hereinafter set forth, the parties hereto agree each with the other, as follows:

ARTICLE I.

(1) This contract is intended to include all the engineering work of whatsoever nature necessary to complete the irrigation system of the Big Lost River Irrigation Company, located in Blaine County, Idaho, ready for operation as a completed irrigation system.

(2) It is mutually agreed between the parties hereto that the work to be done by the Engineer shall be segregated for payment as engineering and force account engineering. Engineering shall be paid for

upon a percentage based on the construction cost as hereinafter specified, and force account engineering to be paid for on the basis of the actual engineering pay roll as hereinafter specified.

ARTICLE II.

Engineering to include all surveys, plans, estimates, specifications, and supervision of construction for the entire work as follows: [473]

(1) The Engineer agrees to make all surveys, plans, estimates, and specifications which are necessary preliminary to the letting of contracts for the construction of the structures and canals for the entire project.

(2) To furnish five (5) copies of all plans and specifications for the entire work, and to assist and co-operate with the Client in securing proposals for the construction of the various parts of the work specified, and in letting contracts for the same.

(3) To furnish the Client with a report covering the possible methods of developing the project with recommendations as to the best sequence for carrying on the construction of the various parts of the work.

(4) To supervise the construction of the irrigation project herein specified, and to interpret the plans and specifications, and for this purpose shall furnish a competent supervising engineer, who shall represent the Engineer on the construction work, and such a field force as is necessary to stake out the work and measure the same for payment.

(5) To supervise and inspect all materials entering into the work, and shall, if requested in writing, furnish and submit to the Client all necessary records in connection with such inspection.

(6) The Engineer shall employ and direct such inspectors of work as he may deem necessary to the proper execution of the work, the payment for such inspectors being made as hereinafter specified.

(7) To prepare and submit to the Client monthly estimates setting forth the amount of work done and moneys [474] due contractors on account of any and all construction work performed and done under the plans and specifications for the work herein contemplated.

(8) To furnish all surveying instruments, construction field books, and drawing materials, and to save the Client free from all salary obligations and office expense of engineer, except as hereinafter specified.

ARTICLE III.

(1) The Client agrees to pay the Engineer for making the surveys, plans, estimates, and specifications as heretofore described a fee of three per cent. (3%) on the actual cost of construction, as evidenced by the final contract figures, or upon the Engineer's estimated cost of the work based on these plans, if the same is not constructed.

(2) The Client further agrees to pay the Engineer for supervision of construction, as heretofore described, an additional two per cent (2%) based on the final contract figures.

ARTICLE IV.

Force account engineering will include such work done by the Engineer as should properly be chargeable to construction, and such items of engineering as are uncertain in quantity, and which can be per-

formed by the Engineer to the Client at a more reasonable cost when based on the actual cost of the engineering work.

Force account engineering is intended to cover such items as checking up the surveys or engineering work done previous to this contract; surveys to establish section corners for the subdivision of land; such contour [475] surveys of the land to be irrigated as the Engineer considers necessary to economically design the irrigation system; surveys for filing purposes, rights of way or promotion, together with maps and plans as are required in connection with the above surveys, or any engineering work which is not embraced under engineering as heretofore described, which the Client may require.

The force account work contemplated under this contract consists of the supervising of soundings or borings for foundations, the employment of necessary inspectors to actually supervise the placing of material in the structures, or engineering field work of any nature whatsoever that the Client may require done under the direction of the Engineer, or which the Engineer shall consider necessary to properly prosecute the work.

ARTICLE V.

It is mutually agreed that the first payment of the three per cent (3%) engineering fee for any particular part of the work shall be one per cent (1%) of the Engineer's estimated cost, and shall be due and payable in cash on the completion of one-half of the engineering work for that particular part of the project as evidenced by the plans and specifications

in the Engineer's office; and the second payment likewise at one per cent (1%) shall be due and payable in cash when the plans and specifications are delivered to the Client. The balance of the engineering fee shall be payable thirty (30) days after the date of delivery of the plans and specifications, and shall be based on the Engineer's estimate of the cost of that particular piece of work. Final adjustment as to the fee for work the Engineer is entitled to shall be made at the date of final [476] estimate of the cost of the same to the Client.

It is mutually agreed that the payments on the two per cent (2%) engineering fee for supervision are to be due and payable in monthly installments as the work progresses, payments to be based on the cost of the work done to date, and the same to be due ten (10) days after the receipt of the monthly statement by the Client.

ARTICLE VI.

It is mutually agreed that the Engineer shall submit to the Client at the end of each month;

(1) A statement of expenditures for materials supplied by the Engineer, properly chargeable to the Client hereunder, and the Client will pay the same within ten (10) days from receipt thereof;

(2) The Engineer shall submit to the Client at the end of each month receipted pay rolls and other expenditures for materials and supplies properly chargeable to the Client hereunder for force account engineering, and the Client will pay the Engineer the same within ten (10) days from receipt thereof.

ARTICLE VII.

General. It is mutually understood and agreed that the Client will supply any and all tools or materials which the Engineer finds necessary for work done as force account engineering, and that the Engineer will assist the Client in every way to obtain materials and tools suitable for the work to be done.

The Client agrees to pay the cost of the traveling and living expenses of representatives of the Engineer while away from Chicago engaged on the work of the Client, [477] and further agrees to provide adequate and suitable transportation for parties in the field satisfactory to the Engineer.

The Client further agrees to provide such commissary and commissary equipment as are necessary to keep the various engineering forces in the field within reasonable distance of their work.

The Engineer agrees during the progress of the work to furnish the Client with any additional blue prints of plans or copies of specifications or report made on those items of work paid for on the percentage basis at cost, if so requested by the Client.

It is further mutually agreed that the sequence in taking up the engineering work contemplated in this project shall be determined from time to time by mutual agreement between the Client and the Engineer, such understanding to be confirmed in writing.

It is further understood that the Engineer will immediately proceed with the engineering work for that part of the project so agreed upon on receipt of written confirmation from the Client.

IN WITNESS WHEREOF, The parties hereto have executed this instrument in duplicate the day and year first above written.

THE ARNOLD COMPANY,
By W. L. ARNOLD,
Vice-President.

(Seal) Attest: R. G. ARNOLD,
Secretary. [478]

BIG LOST RIVER IRRIGATION COM-
PANY,

By C. B. HURTT,
President.

(Seal) Attest: JOHN P. ROOS, Jr.,
Secretary.

Filed April 25, 1912. A. L. Richardson, Clerk.
[479]

Plaintiff's Exhibit No. 83.

(TELEGRAM)

Salt Lake, Utah, Oct. 6.

Corey Bros. Constn. Co.,
Kackay, Ida.

Telegraph confirmation order Fairbanks Morse for
pump and pipe.

H. RASCHBACHER. 11:10 AM.

Filed July 1, 1912. A. L. Richardson, Clerk.
[480]

Plaintiff's Exhibit No. 84.

Cheyenne, Wyo., Sept. 7, 1909.

Corey Bros. Const. Co.,
Mackay, Idaho.

Gentlemen:—

The writer has placed an order for a low service

tank pump capable of working under about 190 ft. head with a discharge of about 150 gals. per minute with Fairbanks-morse and Co. at Salt Lake. With

pump
this ~~upmp~~ will come suction pipe, one L and one bushing and also 800 ft. 3 in. black pipe, all they had in stock and probably enough for immediate needs at the dam. These goods were to be sent by freight and shipment was to be made to-day.

The price f. o. b. Salt Lake was \$167.50 for the pump; \$10.10 for the suction pipe, \$0.80 for the L and .20 for the bushing.

The goods for the pile driver were ordered from The Salt Lake Hardware Co. and were to be shipped to-day by freight.

Pipe for the pump, \$24.92 per 100 ft.

Very truly yours,

H. RASCHBACHER,

Resident Engineer, The Arnold Co.

Filed July 1, 1912. A. L. Richardson, Clerk.

[481]

Plaintiff's Exhibit No. 85.

CORAY BROS. CONSTRUCTION CO.

Rail Road Contractors,

Main Office, Ogden, Utah.

Mackay, Idaho, October 25, 1909.

Mr. W. H. Rosecrans,

Chief Engineer The Arnold Co.,

Chicago, Illinois.

Dear Sir:—

Knowing that you have a good many projects under way, where you are using a large number of

Engineers, we are writing to ask if it is possible for you to transfer Mr. Coy to some other place, without inconveniencing yourself or your Company, as it is very unsatisfactory for us to work under him, and if possible we would like to have a man who could make his wants known without doing so in an overbearing and insulting manner, as we are *perfectly* willing to do anything required.

We have made no objection to Mr. Raschbacher, or Mr. Drummond regarding Mr. Coy, and if you cannot see your way clear to make the change as above, we trust you will say nothing regarding this letter, as we will have to try and go along the way we are, and do the best we can, but we assure you it is a hard matter for us to get along with Mr. Coy.

This is the first time in our experience that we have asked a favor of this kind, and if you can grant it, we assure you that it will be greatly appreciated by us.

Yours very truly,

COREY BROS. CONSTRUCTION CO.

By _____,

President.

Filed July 1, 1912. A. L. Richardson, Clerk.

Plaintiff's Exhibit No. 86.
THE ARNOLD COMPANY,
Engineers Constructors,
Electrical—Civil—Mechanical,
181 La Salle Street,
Chicago.

November 6, 1909.

Corey Bros. Construction Company,
Mackay, Idaho.

Attention of Mr. W. W. Corey, President.

Gentlemen:—

In conformity with your request we have arranged to transfer Engineer Coy to other work and will place Mr. Frederick Greeley in charge. We may not be able to complete this change before the 15th of this month.

Hoping that the matter will be thus agreeably adjusted, we are,

Yours very truly,

THE ARNOLD COMPANY,
By **W. H. ROSECRANS,**
Chief-Engineer Hydraulic Dept.

Filed July 1, 1912. A. L. Richardson, Clerk.

[483]

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Plaintiff's Exhibit No. 88.

THE ARNOLD COMPANY,
Engineers Constructors,
Electrical—Civil—Mechanical,
181 La Salle Street,
Chicago.

March 3, 1910.

Corey Bros. Construction Company,
Mackay, Idaho.

Gentlemen:—

We have been advised that the five taintor gates complete for the diversion dam and intake works, Blaine Canal, along with the grid racks for the tunnel entrance—Mackay Dam, were shipped 22nd ult. from Indianapolis, Indiana. This material was shipped in two cars described as follows:

P. C. C. & St. L. car #939538.

Vandalia car #14422.

The routing was as follows:

Vandalia, Iowa Central, Santa Fe, Union Pacific.

Trusting the above information will assist you in locating this material, we are,

Very truly yours,

W. H. ROSECRANS,

Chief Engineer Hydro-Electric Dept.

AHM—S.

Filed July 1, 1912. A. L. Richardson, Clerk.
[484]

Plaintiff's Exhibit No. 89.
THE ARNOLD COMPANY,
Engineers Constructors,
Electrical—Civil—Mechanical,
181 La Salle Street,
Chicago.

August 18, 1909.

Mr. W. W. Corey, Prest.,
Corey Bros. Construction Co.,
Ogden, Utah.

Dear Sir:—

We are in receipt of your telegram of the 4th inst. reading as follows:—

“Place order for us for any material required in construction of Big Lost River Project.”

We have received several letters from our Resident Engineer, Mr. Raschbacker, in which he requests that we order in your name material to be used in connection with the carrying on of the Big Lost work. The orders that Mr. Raschbacker sent us cover reinforcing rods for concrete work and cement. Upon receipt of these letters we wired Mr. Raschbacker to get your written authority for placing these orders, which will explain Mr. Raschbacker's request for your authorization.

We will be very glad to render you such assistance as we can in connection with the purchasing of steel for reinforcing valves, and such other material as requires an engineering knowledge of conditions that are to be met, but we do not quite understand why you ask us to get quotations for you upon cement.

It occurs to us that you are really in a better position to get favorable quotations on material than we would be, as you are more familiar with the local markets. We do not want to assume the work incidental to placing the orders for material on this work, nor the work that would necessarily grow out of the placing of these orders incident to seeing that the orders are filled and the material delivered. You can readily see that this is going to require a considerable amount of attention and it is a service that we are not under contract to render, neither could we in reality afford to do it.

As stated above, we will be very glad to render you every assistance in the purchasing of special steel, valves, etc., that you are not in a position to handle, but on all your miscellaneous material we would request that you arrange for and order this direct as far as possible.

Yours very truly,

R. G. ARNOLD,

RGS/JMH.

Treasurer.

Filed July 1, 1912. A. L. Richardson, Clerk.
[485]

Plaintiff's Exhibit No. 90.

August 24th, 1909.

The Arnold Company,
181 La Salle St.,
Chicago, Illinois.

Gentlemen:—

We have placed an order with the Union Portland Cement Co. of this City for 6 cars of Cement

vs. Corey Bros. Construction Company et al. 551

@ \$2.84 per BBl. fob. the cars at Mackay and Moore, Idaho, for use on the Big Lost River Project.

The Union Portland Cement Co. of Ogden bid \$2.84 per BBl., and as that is as cheap as the lowest quotations received we would suggest that it would probably be more satisfactory to deal with them, as the freight haul is much shorter than from the other factories, so we should be able to get much more prompt deliveries on orders from them, than we could expect from the other factories.

Yours very truly,

COREY BROS. CONSTRUCTION CO.,

By _____,

President.

W.W.C./A.

Filed July 1, 1912. A. L. Richardson, Clerk.

[486]

Plaintiff's Exhibit No. 91.

Mackay, Idaho, July 31, 1909.

The Corey Bros. Construction Co.,

Mackay, Idaho.

Gentlemen:

Please send us at the earliest possible moment a complete list of your sub-contractors, giving their contracts on the various canals by station numbers and also those laterals, which properly belong to their contracts.

We also request that you notify your various camps and sub-contractors' camps that all bills for board against our engineering parties as well as all Force Account statements must be rendered and

forwarded to Goyne Drummond at Moore, Idaho, for approval by the 27th of each month in order to be returned with the monthly estimate and bills for that month. This is equivalent to starting the monthly accounts on the 27th instead of the 1st of each month. The above applies only to the canal lines and similar bills at the Mackay dam should be rendered to F. A. Coy on the 27th of each month.

Yours very truly,

THE ARNOLD COMPANY.

By H. G. RASCHBACHER,

HGR—M.

Filed July 1, 1912. A. L. Richardson, Clerk.
[487]

Plaintiff's Exhibit No. 92.

Trowbridge & Niver Co.

(Incorporated)

MUNICIPAL BONDS.

CHICAGO.

First National Bank Building.

Chicago, Ill., July 8, 1909.

Messrs. Corey Brothers,

Ogden, Utah.

Gentlemen:

We are in receipt of the estimates on account of your work at the Mackay Reservoir Dam and on the Big Lost River Irrigation Co. Canals, from The Arnold Company, totaling \$25,190.68, and you will find herewith our draft on the First National Bank of this city, to your order, for this amount.

vs. Corey Bros. Construction Company et al. 553

Kindly receipt voucher and return it to us, and oblige,

Yours very truly,
TROWBRIDGE & NIVER CO.,
D. N. NIVER, Vice-Pres.

DRN/F.

Encl.

Filed July 1, 1912. A. L. Richardson, Clerk.

Plaintiff's Exhibit No. 93.
TROWBRIDGE & NIVER CO.
Established 1893.
MUNICIPAL BONDS.
CHICAGO.

Long Distance Telephone:

Randolph 2791.

First National Bank Bldg., Chicago,

February 12, 1910.

Corey Bros. Construction Company,
Ogden, Utah.

Gentlemen:

Upon my return to the city this morning I had a letter from Drummond, in which he speaks of having notified you to push the work.

In explanation I wish to say that I think Mr. Corey and ourselves thoroughly understand each other on this situation. [488] I believe that he is, and has been, doing his best to complete the work on record time. We called the engineers to task pretty sharply for their delays in getting matters in shape, and so they probably took it upon themselves to rap the contractor a little.

While we are anxious to have this work completed in the near future, we believe Mr. Corey is doing everything he can in that line, and do not wish to appear to be nagging all the time.

Yours very truly,
TROWBRIDGE & NIVER CO.,
G. S. SPEER,
Vice-President.

GSS—AA.

Filed July 1, 1912. A. L. Richardson, Clerk.
[489]

Plaintiff's Exhibit No. 94.
TROWBRIDGE & NIVER CO.
Established 1893.
MUNICIPAL BONDS.
CHICAGO.

Long Distance Telephone:

Randolph 2791.

First National Bank Building, Chicago.

March 12, 1910.

Mr. W. W. Cory,
Ogden, Utah.

Dear Mr. Cory:

We regret very much to inform you that the Kenefick-Quigley Construction Co.'s bid was considerably under yours in all parts except the rock, where you seemed to break about even. We regret this on your account and partly upon our own account because of the very satisfactory way in which you have handled your other work. We would have been glad, indeed, to have seen you the General Contractor for the

Colorado Southern Irrigation Company Project. Although, of course, it cannot be anything but satisfaction to us viewed from the other standpoint to see the Colorado Southern Co. get such a satisfactory bid at this time.

Messrs. Brown and Register, and Register's engineers, were here for some time, during which time the entire situation was thoroughly canvased and it was agreed to let the work to the Kenefick Company, although the formal contract has not yet been executed. It was also agreed that the work would not all be let at this time but that the Company would proceed with the construction of the canals on the south side, and one reservoir which would be called the first unit of the system, that the Company would get this unit completed and some revenue coming in before it opened up the other work, and thus play safe having [490] water contracts on hand at all times to complete whatever work was started.

We are pleased to note that you are organizing your forces on the Lost River and that you will be at work in a short time with full forces. Have written the State Engineer of Idaho requesting him to make a trip of inspection in the near future and to report the progress that was being made, so that if there was reasonable assurance that water would be available for all the farmers who needed it by May 1st, that the Company could send out the necessary thirty days' notice to the land owners and thus come under the wire for the Spring of 1910. We sincerely trust that you will be able to convince the State Engineer that you will be able to deliver water by May 1st even though the reservoir and some other

parts of the project may not be entirely completed by that time.

This will make the quickest Carey Act project ever constructed and ought to be a splendid advertisement for both Corey Brothers and Trowbridge & Niver Company and we wish to compliment you on the way in which you have handled the work and only regret that you were not the successful bidder on the Colorado Southern project.

With kindest regards and sincere wishes that we may locate another project in the near future which we can work to mutual advantage, I am,

Yours very truly,

TROWBRIDGE & NIVER CO.,

G. S. SPEER,

Vice-President.

Filed July 1, 1912. A. L. Richardson, Clerk.
[491]

Plaintiff's Exhibit No. 95.
TROWBRIDGE & NIVER CO.
Established 1893.

MUNICIPAL BONDS.
CHICAGO.

Long Distance Telephone:

Randolph 2791.

First National Bank Building, Chicago.

March 29, 1910.

Mr. W. W. Corey,
Ogden, Utah.

Dear Corey:

Replying to your various telegrams, and those

received from Stephenson, Hurtt and Drummond.

We understand that it will be hardly possible for you to deliver water on all of the tract May 1st. Our instructions to Stephenson are to send out notices to the entrymen on all land where we are reasonably sure of being able to deliver water May 1st. You should then concentrate your forces on that portion of the system, leaving the remainder of the tract to be completed during the summer, at your leisure.

We are very anxious to deliver water to as much of the land as possible May 1st, but beyond this, are not anxious to push the work because the Company is not in position to deliver bonds at this time, and will not be for from thirty to sixty days.

We fully appreciate the strenuous efforts which you are putting forth for the completion of this work.

Yours very truly,

TROWBRIDGE & NIVER CO.,

G. S. SPEER,

Vice-President.

GSS-OC.

Filed July 1, 1912. A. L. Richardson, Clerk.
[492]

Defendants' Exhibit No. 34 is embodied in Plaintiff's Exhibit No. 23, being specifications attached thereto. [493]

Defendants' Exhibit No. 77.
FOR CAREY ACT LANDS.

No. _____

BIG LOST RIVER IRRIGATION COMPANY
BOISE, IDAHO.

SETTLER'S AGREEMENT—CAREY ACT

This Agreement, Made in duplicate this _____
between the Big Lost River Irrigation Company, a
corporation organized and existing under the laws of
the State of Idaho, party of the first part (for con-
venience hereinafter called "the company"), and

(for convenience hereinafter called "the pur-
chaser"), of _____

State of _____, party of the second part,
WITNESSETH:

That heretofore, to-wit, on May 27th, 1909, George S. Speer entered into a contract with the State of Idaho, acting by its State Board of Land Commissioners, whereby he bound himself to construct a system of canals, reservoir and irrigation works for the reclamation and irrigation of certain lands therein described and referred to, which said contract has been regularly and duly assigned to the Big Lost River Irrigation Company aforesaid and which contract and the assignment thereof is on file and of record in the office of the Register of the State Board of Land Commissioners of the State of Idaho, at Boise, Idaho.

That the company and its predecessor in interest

has heretofore entered upon and is now engaged in the work of constructing said canals, reservoir and irrigation works for the purpose of storing and diverting from Big Lost River and Antelope Creek waters thereof under the several appropriations heretofore made for that purpose; said appropriations being evidenced by Permits Nos. 1507, 1513, 1748, 4061, 4062 and 4063 issued by the State Engineer of the State of Idaho.

That the said State Board of Land Commissioners, pursuant to law and its rules and regulations, has notified first party that it may proceed to sell or contract rights to the use of water flowing and to flow through the said canals and irrigation works and rights to and in said system of irrigation works, pursuant to law and the terms of said contract with the State.

That the purchaser has made application to first party to be permitted to purchase, upon the terms hereinafter set forth, the rights and privileges by said contract guaranteed to the extent hereinafter named; which said application is hereby accepted by said first party subject to the approval of the State Board of Land Commissioners, whose approval, previous to the delivery thereof, has been, by its Register, endorsed hereon.

That, in consideration of the sum of ONE HUNDRED AND SIXTY DOLLARS (\$160.00), cash in hand paid this day by the purchaser to first party and in consideration of the covenants and agreements hereinafter contained, the purchaser hereby purchases water rights, mentioned in said contract

between said George S. Speer and the State of Idaho and subject to the terms of said contract, for the land hereinafter described to the extent of one-eightieth (1-80) of a cubic foot of water per second of time for each acre of such land.

In further performance of said contract with the State of Idaho, there is herewith issued to said purchaser Certificate No. ———, for Forty (40) shares of the capital stock of Lost River Water Company in form as follows, to wit:

Incorporated Under the Laws of the State of Idaho.
Number ———. 40 Shares.

LOST RIVER WATER COMPANY. .

This is to certify that _____
is the owner of Forty (40) shares of the capital stock of Lost River Water Company, transferable on the books of the company by endorsement hereon.

Said owner has purchased and is entitled to the use of one-eightieth (1-80) of a cubic foot of water per second of time per acre for the irrigation of and domestic uses on the following described lands:

Section _____, Township _____ North, of Range _____ East, Boise Meridian, in the County of _____, and State of Idaho.

This certificate entitles the owner hereof when the purchase price of the water rights hereinbefore referred to shall have been fully paid to a proportionate interest in the dam, canal, reservoir, water rights, irrigation works and other rights and franchises of Lost River Water Company, based upon the number of shares of stock finally issued to pur-

chasers of water rights in accordance with the contract between George S. Speer and the State of Idaho, dated May 27th, 1909, and heretofore assigned to the Big Lost River Irrigation Company.

IN WITNESS WHEREOF, the Lost River Water Company has caused this certificate to be sealed with its corporate seal and signed by its duly authorized officers this — day of —, 19—.

LOST RIVER WATER COMPANY.

By _____,
President.

Attest: _____,

Secretary.

The water which the purchaser shall have the right to use on account of said purchase of water rights shall be used upon and such water and water rights shall become dedicated and be appurtenant to the following described land and no other, to-wit:—

in Section _____, of Township _____ North, of Range _____ East, Boise Meridian, containing Forty (40) acres in _____ County, Idaho.

And the parties hereto expressly agree, as follows, to wit:

1. This agreement is made in accordance with the provisions of said contract between the State of Idaho and George S. Speer and assigned to first party, which, together with the laws of the State of Idaho, shall be regarded as defining the rights of the respective parties hereto.

2. The company agrees that so long as it retains control of Lost River Water Company, to-wit, so

long as it shall continue to vote a majority of the stock of said company as provided by said contract with the state, it will cause said company to keep and maintain the said irrigation system in good order and condition and cause any necessary repairs thereto to be made as soon as practicable and expedient.

Said Lost River Water Company is to have the power to levy and collect all necessary tolls, charges and assessments upon and from all purchasers of water rights, or their assigns, in proportion to their respective purchases or ownership of water rights, whether water is used or not, and the first party hereby agrees that no charges shall be made for the delivery of water from this date until the first day of May, 1910, and that, thereafter, the annual charge for maintenance shall not, while first party is in control of said Lost River Water Company, exceed the sum of fifty (50c) cents for each and every acre, to be charged against the entire acreage entered or for which water rights have been purchased irrespective of the irrigation thereof. The purchaser agrees to pay said charges at the rate of fifty (50c) cents *cents* per acre in advance at the office of Lost River Water Company on the first day of May of each year, without notice, if water is available for use for said year. But in case said Lost River Water Company shall estimate and fix said charges for any year at a less sum than fifty (50c) cents, such estimate to be made before the first day of May of such year, payment shall be made as aforesaid at the rate of such less sum per acre.

3. The purchase price of the water rights hereby purchased is the sum of ONE THOUSAND SIX HUNDRED DOLLARS (\$1600.00), and the balance thereof remaining due after the cash payment hereinbefore acknowledged, to-wit: The sum of ONE THOUSAND FOUR HUNDRED AND FORTY DOLLARS (\$1440.00), is due and payable as follows, to-wit:

	Due.	Principal.	Interest.	Amount.
1st Deferred Payment...	October 1st, 1910	\$80.00	\$36.00	\$116.00
2nd Deferred Payment...	October 1st, 1911	80.00	81.60	161.60
3rd Deferred Payment...	October 1st, 1912	120.00	76.80	196.80
4th Deferred Payment...	October 1st, 1913	120.00	69.60	189.60
5th Deferred Payment...	October 1st, 1914	120.00	62.40	182.40
6th Deferred Payment...	October 1st, 1915	120.00	55.20	175.20
7th Deferred Payment...	October 1st, 1916	160.00	48.00	208.00
8th Deferred Payment...	October 1st, 1917	160.00	38.40	198.40
9th Deferred Payment...	October 1st, 1918	160.00	28.80	188.80
10th Deferred Payment...	October 1st, 1919	160.00	19.20	179.20
11th Deferred Payment...	October 1st, 1920	160.00	9.60	169.60

Interest from May 1, 1910, at 6 per cent. per annum may be charged if water is available from said reservoir and canal for use during the irrigation season of 1910, and if not available for said season, interest shall commence when such water is available. But it is further understood and agreed that no payment other than the initial payment, and no interest shall be required to be paid under this contract until the water is available for distribution from said reservoir and canals at a point within one-half (1-2) mile of each legal subdivision of one hundred sixty acres, and such water must be available May first in order to make such payments become due, and all payments and interest provided in this contract shall be advanced in time according to the

delay in the delivery of the said water as aforesaid.

4. The purchaser hereby covenants and agrees that, upon default in the payment of any of the deferred payments above specified or of the interest thereon or of any annual charge, toll or assessment, as above mentioned, first party, its representatives or assigns, may declare the entire amount of the principal purchase price for said water rights due and may proceed, either in law or equity, to collect the same and to enforce any lien which it may have on the water rights hereby contracted to be sold or upon the land to which said water rights are dedicated as aforesaid, or may, at its option, proceed to enforce any remedy given by the laws of the State of Idaho to first party against the purchaser, and the purchaser further covenants that he will, and by these presents, does hereby assign, transfer and set over by way of mortgage or pledge to the first party to secure the payment of the amounts due and to become due on the purchase price of the water rights hereby purchased and all interest herein provided for, any and all right, title and interest in and to the lands above described which he now has or which may hereafter accrue to him under his contract with the State of Idaho or from any other source and, further, that, immediately upon transfer to him from the State of Idaho or the United States, of the legal title to the said lands or any part thereof, he will, upon demand of first party or its assigns, execute in proper form a mortgage or deed of trust with power of sale to secure the payments herein provided for; which said mortgage, the purchaser

hereby covenants and agrees shall be a first lien upon the lands so mortgaged superior to any and every incumbrance in favor of any person or persons whomsoever.

5. The purchaser agrees that, to further secure said payments, the said shares of stock in said Lost River Water Company shall be and they are hereby assigned and transferred to the first party with power to pledge the same, and said first party, its agents and assigns, are hereby authorized and empowered to vote said stock in such manner as it may deem proper at all meetings of the stockholders of said company until thirty-five (35%) per cent. of the purchase price, as hereinbefore set out, of water rights hereby purchased has been paid.

6. It is agreed that no water shall be delivered for use on the lands above described from said irrigation system while any installment of principal or interest above mentioned is due and unpaid or while any toll or assessment is due and unpaid to Lost River Water Company.

7. This contract may be assigned or pledged by first party and thereupon the payment of principal and interest, unless otherwise provided in such assignment or pledge, shall be due and payable to the assignee or pledgee, but the payment of tolls, assessments and charges for the delivery of water as aforesaid shall, unless otherwise provided, be paid to Lost River Water Company, and payments thereof may be enforced by it. [494]

8. This contract is made pursuant to and subject to the contract, above mentioned, between said

George S. Speer and the State of Idaho and under existing laws of said State and is to be construed in conformity with said contract and said laws.

9. All notices given to said purchaser by the State Board of Land Commissioners or by first party may be sent to said purchaser by mail addressed to his address first hereinbefore given.

10. No provisions hereof shall impair or affect the rights or remedies of the first party or its assigns under any statute of the United States or of the State of Idaho.

IN WITNESS WHEREOF, The parties have hereunto subscribed their names, and the company has caused its seal to be affixed, the day and year above written, in duplicate.

BIG LOST RIVER IRRIGATION COMPANY,

By _____,
President.

_____,
Purchaser.

By _____,
Attorney in Fact.

Attest: _____,
Assistant Secretary.

STATE OF IDAHO,

County of _____, —ss.

On this _____ day of _____, in the year 19____, before me, _____, a Notary Public in and for said State and County, personally appeared _____, known to me to be the person whose name is subscribed to the above instrument and acknowledged to me that he executed the same.

Witness my hand and official seal the day and year in this certificate first above written.

_____,
Notary Public.

STATE OF IDAHO,

County of _____, —ss.

On this ____ day of _____, in the year 19____, before me, _____, a Notary Public in and for said State and County, personally appeared _____, known to me to be the person whose name is subscribed to the above instrument as the attorney in fact of _____, and acknowledged to me that he subscribed the name of _____ thereto as principal and his own name as attorney in fact.

Witness my hand and official seal the day and year in this certificate first above written.

_____,
Notary Public.

STATE OF IDAHO,

County of _____, —ss.

On this ____ day of _____, 19____, before me, _____, a Notary Public in and for the State and County aforesaid, personally appeared _____, known to me to be the President *Secretary* of the corporation that executed the foregoing instrument and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal the day and year in this certificate first above written.

_____,
Notary Public.

The foregoing contract is hereby approved, and has been registered this _____ day of _____, 19____.
STATE BOARD OF LAND COMMISSIONERS.

By _____,
Register.

Boise, Idaho, _____, 19____.

For value received this contract, principal and interest, is hereby assigned and transferred to

_____ by authority of a resolution of the Board of Directors of Big Lost River Irrigation Company.

BIG LOST RIVER IRRIGATION COMPANY.

By _____,
President.

Attest: _____,
Assistant Secretary.
No. _____.

Dated _____

CONTRACT
Big Lost River Irrigation Company
WITH

Reception No. _____.

State of Idaho,

County of _____, —ss.

I hereby certify that this instrument was filed for record at the request of Big Lost River Irrigation Company, at _____ o'clock _____ M., this _____ day of

_____, 19____, in my office, and duly recorded in
book _____ of Water Contracts at page _____.

_____,
Ex-Officio Recorder.

By _____,
Deputy.

Fees, \$_____.

No. 340. Filed Apr. 25, 1912. A. L. Richardson,
Clerk. [495]

Defendants' Exhibit No. 80.

CERTIFICATE OF CERTIFIED COPY.

STATE OF IDAHO.

DEPARTMENT OF STATE.

I, WILFRED L. GIFFORD, Secretary of State
of the State of Idaho, do hereby certify that the
annexed is a full, true and complete transcript of a
Certified Copy of the Articles of Incorporation of
the

LOST RIVER WATER COMPANY.

which was filed in this office on the First day of Sep-
tember, A. D. 1909, and admitted to record.

In Testimony Whereof, I have hereunto set my
hand, and affixed the Great Seal of the State. Done
at Boise City the Capital of Idaho, this Twelfth day
of April, in the year of our Lord one thousand nine
hundred and Twelve, and of the Independence of the
United States of America the One Hundred and
Thirty-sixth.

[Seal]

WILFRED L. GIFFORD,
Secretary of State. [496]

ARTICLES OF INCORPORATION
OF THE

LOST RIVER WATER COMPANY.

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, under the provisions of an Act of Congress approved August 16, 1894, commonly known as the "Carey Act," as amended, and pursuant to the laws of the State of Idaho and the rules and regulations of the State Board of Land Commissioners, one George S. Speer, on May 27th, 1909, entered into a contract with said State for the reclamation of certain lands situated in the counties of Blaine, Bingham and Fremont, in said State, and

WHEREAS, the said George S. Speer has sold and assigned all his right, title and interest in, to and under said contract and in the irrigation system and works therein provided to be constructed, together with all rights, franchises and privileges and all lands, water rights, rights of way, dams, reservoirs, main and lateral canals, constructed and to be constructed, and any and everything pertaining to and connected with said irrigation system to the Big Lost River Irrigation Company, a corporation organized under the laws of the State of Idaho, which corporation has succeeded to all the rights and privileges and has assumed all the obligations of said George S. Speer under his said contract with the State, and

WHEREAS, it is now proposed, pursuant to said contract with the State, to organize a corporation for the operation and management of the irrigation system to be constructed under said contract referred to;

NOW, THEREFORE, the undersigned have vol-

untarily associated themselves together to form a corporation under the laws [497] of the State of Idaho, and do hereby certify:

FIRST.

That the name of said corporation is LOST RIVER WATER COMPANY.

SECOND.

That the purpose for which said corporation is formed is;

1. To provide a method of transferring the ownership, control and management of the reservoirs, canals, irrigation system and works to be constructed by said Big Lost River Irrigation Company, its successors or assigns, and all water rights, rights of way, franchises and privileges pertaining thereto and connected therewith, as the said irrigation system and works shall be completed and turned over by said Big Lost River Irrigation Company, its successors or assigns, to this corporation; to determine the rights of said purchasers of shares and water rights as between themselves and between said purchasers and the said Big Lost River Irrigation Company, its successors or assigns; to operate and maintain said irrigation system and works as the same shall be completed and turned over to it during the period of construction and subsequent thereto; to levy and collect tolls, charges and assessments for the carrying on and maintaining of said irrigation system, and the management and operation thereof.

2. As the same shall be completed and turned over to it for operation by the said Big Lost River Irrigation Company, its successors or assigns, to dis-

tribute the waters of said irrigation system, among its stockholders; to maintain, operate and keep in repair said irrigation works; to fix, charge and collect from its stockholders, and all users of water from the said irrigation system, tolls, rentals, assessments and maintenance charges, based upon the number of shares of stock held by each person herein, or proportionate to the amount of water owned, or used, or the number of acres irrigated, or by any one, or more, or all of such methods, and to impose and collect fines and penalties for failure of its [498] stockholders, or water users, to pay the tolls, rentals, assessments or maintenance charges when due.

3. To acquire by purchase, lease or otherwise, to own, hold, sell, lease or otherwise dispose of such real and personal property or rights or interest therein, as may be necessary in transacting the business of this corporation.

THIRD.

That the place where the principal office of the company shall be located and where its principal business is to be transacted is Boise, Ada County, Idaho.

FOURTH.

That the term for which it is to exist is Fifty (50) years from and after the date of incorporation.

FIFTH.

That the number of directors of the company shall be five (5).

SIXTH.

That the amount of the authorized capital stock of the corporation shall be one hundred thousand

(\$100,000) dollars divided into one hundred thousand (100,000) shares with par value of one (\$1) dollar each.

SEVENTH.

That the amount of said capital stock actually subscribed, the names of the persons by whom the same has been subscribed and their residences are as follows:

Name.	Residence.	No. of Shares.
C. B. Hurtt,	Boise, Idaho	3
Louis N. Roos,	Boise, Idaho	1
B. W. Oppenheim,	Boise, Idaho	1
S. C. Champlain,	Boise, Idaho	1
N. M. Ruick,	Boise, Idaho	1

[499]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 1st day of September, 1909.

C. B. HURTT. (Seal)
LOUIS N. ROOS. (Seal)
B. W. OPPENHEIM. (Seal)
S. S. CHAMPLAIN. (Seal)
N. M. RUICK. (Seal)

[500]

State of Idaho,
County of Ada,—ss.

On this 1st day of September, 1909, before me, Frances E. Walker, a Notary Public in and for said state and county, personally appeared C. B. Hurtt, Louis N. Roos, B. W. Oppenheim, S. S. Champlain and N. M. Ruick, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate first above written.

(Notarial Seal) FRANCES E. WALKER,
Notary Public.

My Commission expires June 26, 1913.

State of Idaho,
County of Ada,—ss.

CERTIFICATE.

I, W. L. Cuddy, Ex-Officio Recorder in and for Ada County, State of Idaho, do hereby certify that the annexed is a full, true and correct copy of certain Articles of Incorporation of the LOST RIVER WATER COMPANY, Numbered 1224 as the same appears on file in my office.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official Seal this 1st day of Sept., A. D. 1909.

(Seal)

W. L. CUDDY,
Ex-Officio Recorder.
By Otto F. Peterson,
Deputy. [501]

ENDORSED. Copy 1224. 6491.
Certified Copy of the Articles of Incorporation of the
 LOST RIVER WATER COMPANY.

Dated _____, 1909.

State of Idaho,
County of Ada,—ss.

I hereby certify that this instrument filed for record at request of B. W. Oppenheim at 1 minute past 3 o'clock P. M., this 1st day of Sept., A. D. 1909, in

vs. Corey Bros. Construction Company et al. 575
my office and duly recorded in book — of — at
page —.

W. L. CUDDY,
Ex-officio Recorder.
By Otto F. Peterson,
Deputy.

Fees \$——.
DEPARTMENT OF STATE,
Secretary's Office.

Filed this 1st day of Sept., 1909, at 3:30 o'clock
P. M., and Recorded in Book Z of Dom. Corpns. on
page 438.

Records of the State of Idaho.

ROBERT LANSDON,
Secretary of State.
\$45.00.

Filed April 25, 1912. A. L. Richardson, Clerk.
[502]

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of First Meeting of Incorporators.

The first meeting of the incorporators of the Big
Lost River Irrigation Company was held on the 16th
day of July, 1909, at 11 o'clock A. M. at the office
of the company in Boise, Idaho, pursuant to a writ-
ten Waiver of Notice signed by all of the incorpo-
rators fixing said time and place.

The following incorporators were present in per-
son:

Name	Residence.	No. of Shares.
J. E. Clinton, Jr.,	Boise, Idaho.	1
C. B. Hurtt,	Boise, Idaho.	3
A. McPherson,	Twin Falls, Idaho.	1
N. M. Ruick,	Boise, Idaho.	1

On motion, Mr. C. B. Hurtt was elected chairman and Mr. N. M. Ruick was appointed Secretary of the meeting.

The Secretary reported that the Articles of Incorporation of the Company were filed in the office of the Recorder of Ada County, State of Idaho, on the 15th day of June, 1909, and on the same date a copy thereof, duly certified, was filed in the office of the Secretary of State of said State of Idaho, and the Secretary presented to the meeting a certified copy of said Articles of Incorporation.

The Secretary presented and read the Waiver of Notice of meeting, which was approved and ordered spread upon the minutes as follows:

“Big Lost River Irrigation Company.”

Waiver of notice of meeting of incorporators.

We, the undersigned, the incorporators and stockholders of the Big Lost River Irrigation Company, a corporation organized and existing under the laws of the State of Idaho, hereby waive notice of the time, place and purpose of the first meeting of the corporation and fix the 16th day of July, 1909, at 11 o'clock A. M. as the time and the office of the company in the City of [503] Boise, county of Ada, state of Idaho, as the place of said meeting and we do hereby waive all requirements of the statutes of Idaho as to the notice of this meeting and publication thereof and consent to the transaction of such business as

may come before said meeting.

Dated Boise, Idaho, July 16, 1909.

J. E. CLINTON, Jr.,
C. B. HURTT,
ALEX McPHERSON,
A. L. TUCKER,
B. W. OPPENHEIM,
N. M. RUICK,
LOUIS N. ROOS,

Stockholders and Incorporators.

The Secretary presented the following transfers of subscription:

One (1) share of stock from C. B. Hurtt to Louis N. Roos and one (1) share of stock from A. L. Tucker to B. W. Oppenheim.

On motion duly made and seconded, such transfers were approved and ordered filed.

The election of directors being in order, Messrs. McPherson and Ruick were appointed tellers and a vote by ballot being taken resulted as follows:

Name.	Residence.	No. of Shares.
J. E. Clinton, Jr.,	Boise, Idaho.	6
C. B. Hurtt,	Boise, Idaho.	6
Louis N. Roos,	Boise, Idaho.	6
B. W. Oppenheim,	Boise, Idaho.	6
N. M. Ruick,	Boise, Idaho.	6

The said five persons above named, having received the vote of a majority of the shares of the subscribed capital stock of said corporation, were declared duly elected directors to hold their offices until the next annual meeting for the election of directors and until their successors are elected and qualify.

The Secretary of the meeting presented a form of By-Laws for the regulation of the affairs of the company which were read article by article and adopted by the vote and assent of four-fifths ($\frac{4}{5}$), comprising six (6) shares out of a total of seven [504] (7) shares, of the subscribed capital stock of said corporation and the Secretary of the corporation was directed to copy such By-Laws, duly certified, in a book to be kept in the principal office of said corporation in this state to be known as the "Book of By-laws" of the Big Lost River Irrigation Company.

The following resolution was read:

Resolved that the Board of Directors are hereby empowered to repeal and amend the by-laws of this corporation and to adopt new by-laws at any regular meeting of said board or at a special meeting called for that purpose. A vote being taken on the question of the adoption of said resolution, (Corporate Seal.) the same was adopted by the vote of the holders of all of the subscribed capital stock of the corporation present at said meeting.

Upon motion duly recorded, it was

Resolved that the seal, an impression of which is hereunto affixed, be adopted as the corporate seal of the corporation.

A form of stock certificate was presented and, upon motion duly made and seconded, was adopted.

Upon motion duly made and seconded and by the affirmative vote of all present constituting the holders of four-fifths of the subscribed capital stock of said corporation, the following preambles and

resolutions were adopted.

Whereas, George S. Speer has offered to sell to this Company property as follows:

Boise, Idaho, July 12, 1909.

To the Board of Directors,
Big Lost River Irrigation Company,
Boise, Idaho.

Gentlemen:—

I hereby offer to sell to your company the Big Lost River Irrigation Project for the reclamation of approximately [505] one hundred thousand (100,000) acres of land under the Carey Act in the counties of Custer, Blaine, Bingham and Fremont in the State of Idaho, together with all property, real and personal water rights, rights of way for reservoirs and canals and any and all property, rights, privileges and franchises pertaining to or connected with the said irrigation project and to assign to your company in my contract with the State of Idaho executed and dated May 27th, 1909, for the reclamation of said lands:—all for the sum of nine hundred ninety-nine thousand three hundred (\$999,300.) dollars payable in full paid shares of the capital stock of your company at their par or face value.

There is attached hereto as a part of this proposal "Schedule A" containing a reference to the water rights and rights of way connected with said project; also "Schedule B" containing a list of obligations heretofore assumed by me in connection with said project, which liabilities and obligations your com-

pany is to assume as an additional consideration for the sale and transfer of said irrigation project.

Respectfully,

GEORGE S. SPEER.

And Whereas, it appears to the stockholders that such property is necessary for the business of this company and that the same is of the value of nine hundred ninety-nine thousand three hundred (\$999,300.) dollars.

Now, Therefore, be it

Resolved that the Board of Directors of this company be and they are hereby authorized and recommended to purchase the said property above mentioned for the said price and to issue and deliver to said George S. Speer full paid stock of the company to the amount of nine hundred ninety-nine thousand three hundred (\$999,300.) dollars in payment therefor. [506]

No further business was presented, and on motion the meeting adjourned.

N. M. RUICK,
Secretary.

Approved:

C. B. HURTT,
Chairman.

BIG LOST RIVER IRRIGATION COMPANY.

Consent of Stockholders on the Record.

We, the undersigned, constituting the incorporators and all the stockholders of the Big Lost River Irrigation Company, a corporation, organized and existing under the laws of the State of Idaho,

having been present at a meeting of the stockholders of said company held at the office of the company in the City of Boise, State of Idaho, on the 16th day of July, 1909, at 11 o'clock A. M., do hereby, on the record of such meeting, sign the written consent thereto; and we do hereby severally ratify and confirm any and all acts, doings and proceedings of such meeting, and particularly the transfers of stock by C. B. Hurtt to Louis N. Roos and by A. L. Tucker to B. W. Oppenheim, one (1) share each; the election of C. B. Hurtt, Louis N. Roos, J. E. Clinton, Jr., B. W. Oppenheim and N. M. Ruick, as directors of said company; the adoption of by-laws for the regulation of the affairs of the company in the form presented to and adopted by said meeting: extending authority to the Board of Directors to repeal and amend the By-laws of the corporation and to adopt new By-laws of the corporation and to adopt new By-laws at any regular meeting of said board or at a special meeting called for that purpose; adopting a seal for said corporation; adopting a form of stock certificate; accepting the offer of George S. Speer to convey to [507] said company, for a consideration of nine hundred ninety-nine thousand three hundred (\$999,300) Dollars in the full paid capital stock of this company, the Big Lost River Irrigation Project, so called, and the action taken fixing the value thereof at the sum stated and the resolution authorized and recommending to the board of directors of the company the purchase of said property at the price stated and the issuing and delivery of

stock in payment therefor.

Signed on the record this 16th day of July, 1909.

J. E. CLINTON, Jr.,
C. B. HURTT,
ALEX. McPHERSON,
N. M. RUICK,
B. W. OPPENHEIM,
LOUIS N. ROOS,
A. L. TUCKER,

Incorporators and Stockholders.

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of First Meeting of Directors.

The first meeting of the Board of Directors of the Big Lost River Irrigation Company was held at the office of the company in the City of Boise, State of Idaho, on the 16th day of July, 1909, at 11:30 o'clock in the forenoon.

Present, Messrs. C. B. Hurtt, Louis N. Roos, J. E. Clinton, Jr., B. W. Oppenheim and N. M. Ruick, constituting the entire membership of the board.

Mr. C. B. Hurtt was chosen temporary chairman and Mr. B. W. Oppenheim was appointed temporary Secretary of the meeting.

The Secretary presented and read a Waiver of Notice of the meeting signed by all the directors and the same was ordered filed and spread upon the minutes, as follows:

Big Lost River Irrigation Company,
Waiver of Notice of First Meeting of Board of
Directors.

We, the undersigned, directors of the Big Lost River [508] Irrigation Company, a corporation

organized and existing under the laws of the State of Idaho, hereby waive notice of the time and place of first meeting of the board of directors and of the business to be transacted at said meeting. We designate the 16th day of July, 1909, at 11:30 o'clock in the forenoon as the time and the office of the company in the city of Boise as the place of said meeting, the purpose of said meeting being the election of officers, the authorization of the issue of stock of the company, the authorization of the purchase of the Big Lost River Carey Act Irrigation Project pursuant to a proposal and offer made by George S. Speer and the payment therefor in the stock of this company, the purchase of any property necessary for the business of the company and the transaction of such other business as the board may deem proper.

Dated, Boise, Idaho, July 16, 1909.

C. B. HURTT,
J. E. CLINTON, Jr.,
N. M. RUICK,
B. W. OPPENHEIM,
LOUIS N. ROOS,

Directors.

The minutes of the first meeting of the incorporators were read.

The following gentlemen were unanimously chosen officers of the company to serve until the next annual meeting for the election of directors of the company

and until their successors are chosen and qualify:

President, C. B. Hurtt.

Vice-President, N. M. Ruick.

Secretary, B. W. Oppenheim.

Treasurer, E. C. Stoddard.

The President thereupon took the chair.

(Corporate Seal.) Upon motion duly made and seconded, it was

Resolved that a seal according to the design presented at this meeting, an impression of which is directed to be made in the margin of the minute book, be and the same is hereby adopted [509] as the seal of the corporation.

Upon motion duly made and seconded, it was

Resolved that the President and the Secretary be and they are hereby authorized to have engraved and printed and to issue certificates of stock in the form submitted at this meeting.

Upon motion duly made and seconded, it was

Resolved that Messrs. C. B. Hurtt, and J. E. Clinton, Jr., and N. M. Ruick, be and they are hereby designated members of the executive committee (Mr. Hurtt to be chairman thereof), with authority to exercise all the powers of the board in the current business of the company while the board is not in session.

The Secretary was directed to procure proper books for the corporation.

The proposition of George S. Speer to sell, transfer and assign to the company the Big Lost River Irrigation Project and to assign to the company his

contract with the State of Idaho was read and ordered spread upon the minutes as follows:

Boise, Idaho, July 12, 1909.

To the Board of Directors,
Big Lost River Irrigation Company,
Boise, Idaho.

Gentlemen:—

I hereby offer to sell to your company the Big Lost River Irrigation Project for the reclamation of approximately one hundred thousand (100,000) acres of land under the Carey Act in the counties of Custer, Blaine, Bingham and Fremont in the State of Idaho, together with all property, real and personal water rights, rights of way for reservoirs and canals and any and all property, rights, privileges, and franchises pertaining to or connected with the said irrigation project and to assign to your company my contract with the State of Idaho, executed and dated May 27, 1909, for the reclamation of said lands:—
[510] all for the sum of nine hundred ninety-nine thousand three hundred (\$999,300) dollars payable in full paid shares of the capital stock of your company at their par or face value.

There is attached hereto as a part of this proposal "Schedule A" containing a reference to the water rights and rights of way connected with said project; also "Schedule B" containing a list of obligations heretofore assumed by me in connection with said project, which liabilities and obligations your company is to assume as an additional consideration for

the sale and transfer of said irrigation project.

Respectfully,

GEORGE S. SPEER.

Upon motion duly made and seconded, it was

Resolved that the company accept the offer of George S. Speer to sell, transfer and assign the Big Lost River Irrigation Project, together with his contract with the State of Idaho, dated May 27, 1909, referred to in the resolution of the stockholders passed at the first meeting of the corporation authorizing the purchase, and as hereinbefore described in these minutes, and the Board of Directors do hereby adjudge and declare that said property is of the fair value of nine hundred ninety-nine thousand three hundred (\$999,300) dollars and that the same is necessary for the business of this company.

Further Resolved that the President and the Secretary be and they are hereby authorized and directed to issue to the order of said George S. Speer certificates of full paid capital stock of this company to the aggregate amount of nine hundred ninety-nine thousand three hundred (\$999,300) dollars as consideration for the sale, transfer and assignment to this company of the property referred to in the offer heretofore made by him which resolution was unanimously adopted. [511]

No further business was presented, and on motion the meeting adjourned.

B. W. OPPENHEIM,
Secretary.

Approved:

C. B. HURTT,
Chairman.

BIG LOST RIVER IRRIGATION COMPANY.
Minutes of Special Meeting of Board of Directors.
August 21, 1909.

A special meeting of the Board of Directors of the Big Lost River Irrigation Company, was held at the office of the company in the City of Boise, State of Idaho, on the 21st day of August, 1909, at 10:30 o'clock in the forenoon.

Present, Messrs. N. M. Ruick, Louis N. Roos, and B. W. Oppenheim, constituting a majority of the membership of said board.

In the absence of the President, Mr. C. B. Hurtt, the Vice-President, Mr. N. M. Ruick, acted as chairman and the Secretary Mr. B. W. Oppenheim, acted as Secretary of the meeting.

The Secretary presented and read a Waiver of Notice of the meeting signed by all the directors and the same was ordered filed and spread upon the minutes as follows:

Waiver of Notice of Meeting of Board of Directors.

We, the undersigned, directors of the Big Lost River Irrigation Company, a corporation organized and existing under the laws of the State of Idaho, hereby waive notice of the time, place and purpose of the meeting of the board of directors and of the

business to be transacted at said meeting and fix Saturday, [512] August 21st, 1909, at 10:30 o'clock A. M., as the time and the office of the company in the city of Boise, county of Ada, State of Idaho, as the place of said meeting. The purpose of said meeting being:

(1) Authorizing the execution, in its behalf, by the officers of the company of a contract with Corey Bros. for the construction of the irrigation works of the company on Big Lost River in Blaine and Custer Counties.

(2) Authorizing the company to borrow money to the present amount of two million (\$2,000,000.00) dollars and to issue its negotiable bonds therefor and authorizing and directing the proper officers of the company to execute, under the corporate seal, said bonds and a mortgage or deed of trust to secure the same.

(3) Transacting any other business that may be brought before said meeting.

Dated, Boise, Idaho, August 10, 1909.

J. E. CLINTON, Jr.,
LOUIS N. ROOS,
B. W. OPPENHEIM,
C. B. HURTT,
N. M. RUICK,

Directors.

The minutes of the first meeting of directors were read and approved.

The following resolution offered by Director Louis N. Roos was duly adopted.

Resolved that this company procure a loan in the

present amount of two million (\$2,000,000.00) dollars and issue its negotiable bonds therefor in the amount stated, said bonds to be dated July 1st, 1909, to bear interest at the rate of six (6%) per cent. per annum, payable semi-annually, both principal and interest payable in gold coin of present standard, said bonds to be of the denominations of \$1,000, \$500 and \$100 respectively and maturing serially as follows, to-wit: \$150,000 in amount thereof [513] on January 1st, 1915; \$200,000 in amount thereof on January 1st in each of the years 1916, 1917 and 1918; and \$250,000 in amount thereof on January 1st in each year beginning with the year 1919 and ending with the year 1923; that the president and secretary of the company be and they are hereby authorized and directed to execute under the corporate seal of the company said bonds and a mortgage or deed of trust securing the same on any or all of the property, real or personal, of this company and especially the property known as the Big Lost River Irrigation system and all rights of the company in connection therewith and all contracts executed by the **company** relating thereto, which mortgage or deed of trust shall run to the American Trust and Savings Bank and Frank H. Jones, both of Chicago, Illinois, as trustees, said mortgage or deed of trust to be substantially in the form of a draft thereof now presented to this board with this resolution; said bonds when properly executed to be delivered to the said trustees for certification and disposal in accordance with the terms of the deed of trust hereinbefore referred to.

The Secretary offered the following resolution which was duly adopted by the Board:

Resolved that the officers of the company be and they are hereby authorized to execute in behalf of the company a contract with Corey Bros. for the construction of the irrigation works of the company on Big Losr River in Blaine, Custer, Fremont and Bingham Counties in the State of Idaho.

There being no further business before the meeting, the meeting was declared adjourned.

N. M. RUICK,
Acting Chairman.

B. W. OPPENHEIM,
Secretary. [514]

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Special Meeting of Stockholders.

August 21st, 1909.

Minutes of the special meeting of stockholders of the Big Lost River Irrigation Company held at the office of the company at Boise, Idaho, on the 21st day of August, 1909, at 11:00 o'clock A. M., said meeting being held in accordance with the By-Laws, all stockholders being present, pursuant to a written consent signed by each of them as follows, to-wit:

BIG LOST RIVER IRRIGATION COMPANY.

Waiver of Notice of Special Meeting
of Stockholders, August 21st, 1909.

We, the undersigned, stockholders of the Big Lost River Irrigation Company, hereby consent to the holding of a special meeting of the stockholders of the said company at the office of the company at Boise, Idaho, on the 21st day of August, 1909, at the

hour of 11:00 o'clock A. M., for the purpose, among others, of considering, authorizing, ratifying and approving the execution of a mortgage or deed of trust and bonds of the company.

G. S. SPEER,
C. B. HURTT,
LOUIS N. ROOS,
B. W. OPPENHEIM,
J. E. CLINTON, Jr.,
N. M. RUICK,

Stockholders.

In the absence of the President, Mr. N. M. Ruick, Vice-President of the company, called the meeting to order the Secretary, Mr. B. W. Oppenheim, acting as Secretary of the meeting.

Mr. Louis N. Roos thereupon offered the following resolution and moved its adoption:

Whereas, the Board of Directors of this company did at a meeting held on the 21st day of August, A. D. 1909, at the office of the company at Boise, Idaho, adopt a resolution providing for [515] the issuance of bonds of the company of which Two Million (\$2,000,000.00) dollars in amount are to be presently executed and issued; said bonds to be dated July 1st, 1909, to bear interest at the rate of six (6%) per cent per annum payable semi-annually, both principal and interest payable in gold coin of present standard; said bonds being of the denomination of \$1000, \$500 and \$100, and maturing serially as follows, to-wit: \$150,000 in amount thereof on January 1st, 1915; \$200,000 in amount thereof on January 1st in each of the years, 1916, 1917 and 1918; and

\$250,000 in amount thereof on the first day of January in each year beginning with the year 1919, and ending with the year 1923; and said resolution further providing for the giving of a mortgage or deed of trust, securing the payment of said bonds, on any or all of the property, real or personal, of this company, and especially the property known as the Big Lost River Irrigation System and all rights of the company in connection therewith and all contracts executed by the company relating thereto, which mortgage or deed of trust shall run to the American Trust & Savings Bank and Frank H. Jones, both of Chicago, Illinois, as Trustees, and is to be substantially in the form of the draft thereof attached to said resolution of the Board of Directors and which resolution further provides for the disposition of said bonds when issued.

Now, Therefore, be it resolved that the said resolution of the Board of Directors of this company be and the same is hereby ratified, approved and confirmed, and the Board of Directors and Officers of the company are directed, authorized and empowered to carry out the terms of said resolution and from time to time to perform all the covenants and conditions of said bonds and of said mortgage and deed of trust; said resolution together with the resolution of the Board of Directors and the draft of the mortgage or deed of trust therein referred to having been fully and carefully read and considered said resolution was unanimously [516] adopted, all the Stockholders of the company voting in the affirmative.

There being no further business, the meeting adjourned.

B. W. OPPENHEIM,
Secretary.

Approved:

G. S. SPEER,
C. B. HURTT,
LOUIS N. ROOS,
B. W. OPPENHEIM,
J. E. CLINTON, Jr.,
N. M. RUICK.

(Being all of the stockholders of said company.)

BIG LOST RIVER IRRIGATION COMPANY.
Minutes of Special Meeting of Board of Directors.
August 27th, 1909.

A special meeting of the Board of Directors of the Big Lost River Irrigation Company was held at the office of the company in the City of Boise, State of Idaho, on the 27th day of August, 1909, at 10:30 o'clock in the forenoon.

Present, Messrs. C. B. Hurtt, N. M. Ruick, Louis N. Roos, and B. W. Oppenheim, constituting a majority of the membership of said board.

Mr. C. B. Hurtt, the President, acted as Chairman and the Secretary, Mr. B. W. Oppenheim, acted as Secretary of the meeting.

The Secretary presented and read a Waiver of Notice of the meeting signed by all the directors and the same was ordered filed and spread upon the minutes as follows:

Waiver of Notice of Meeting of Board of Directors.

We, the undersigned, directors of the Big Lost River Irrigation Company, a corporation organized and existing under the laws of the State of Idaho, hereby waive notice of the time, place and [517] purpose of the meeting of the board of directors and of the business to be transacted at said meeting and fix August 27th, 1909, at 10:30 o'clock A. M., as the time and the office of the company in the City of Boise, County of Ada, State of Idaho, as the place of said meeting. The purpose of said meeting being:

(1) Authorizing the company to borrow money to the present amount of two million (\$2,000,000) dollars and to issue its negotiable bonds therefor and authorizing and directing the proper officers of the company to execute, under the corporate seal, said bonds and a mortgage or deed of trust to secure the same.

(2) Transacting any other business that may be brought before said meeting.

Dated, Boise, Idaho, August 24th, 1909.

J. E. CLINTON, Jr.,
LOUIS N. ROOSE,
B. W. OPPENHEIM,
C. B. HURTT,
N. M. RUICK,

Directors.

The minutes of the last meeting of directors were read and approved.

The following resolution offered by Director Louis N. Roos, was duly adopted:

Resolved that this company procure a loan in the

present amount of two million (\$2,000,000) dollars and issue its negotiable bonds therefor in the amount stated, said bonds to be dated July 1st, 1909, to bear interest at the rate of six (6%) per cent. per annum, payable semi-annually, both principal and interest payable in gold coin of present standard, said bonds to be of the denominations of \$1,000, \$500 and \$100 respectively and maturing serially as follows, to-wit: \$150,000 in amount thereof on January 1st, in each of the years 1916, 1917 and 1918; and \$250,000 in amount thereof on January 1st in each year beginning with the year 1919 and ending with the year 1923; that the [518] president and secretary of the company be and they are hereby authorized and directed to execute under the corporate seal of the company said bonds and a mortgage or deed of trust securing the same on any or all of the property, real or personal, of this company and especially the property known as the Big Lost River Irrigation system and all rights of the company in connection therewith and all contracts executed by the company relating thereto, which mortgage or deed of trust shall run to the American Trust & Savings Bank and Frank H. Jones, both of Chicago, Illinois, as trustees, said mortgage or deed of trust to be substantially in the form of a draft thereof now presented to this board with this resolution; said bonds when properly executed to be delivered to the said trustees for certification and disposal in accordance with the terms of the deed of trust hereinbefore referred to.

There being no further business before the meeting the meeting adjourned.

Approved:

C. B. HURTT,

Chairman.

B. W. OPPENHEIM,

Secretary.

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Special Meeting of Stockholders.

August 27th, 1909.

Minutes of the special meeting of the stockholders of the Big Lost River Irrigation Company held at the office of the company at Boise, Idaho, on the 27th day of August, 1909, at 11:00 o'clock A. M., said meeting being held in accordance with the By-laws, all stockholders being present, pursuant to a written consent signed by each of them as follows, to-wit:

We, the undersigned, stockholders of the Big Lost River Irrigation Company, hereby consent to the holding of a special [519] meeting of the stockholders of the said company at the office of the company at Boise, Idaho, on the 27th day of August, 1909, at the hour of 11:00 o'clock A. M., for the purpose, among others, of considering, authorizing, ratifying and approving the execution of a proposed mortgage or deed of trust and bonds of the company.

Mr. C. B. Hurtt, President of the company, called the meeting to order, the Secretary, Mr. B. W. Oppenheim, acting as Secretary of the meeting.

Mr. Louis N. Roos, thereupon offered the following resolution and moved its adoption:

Whereas, the Board of Directors of this company

did at a meeting duly held on the 27th day of August, A. D. 1909, at the office of the company at Boise, Idaho, adopt a resolution providing for the issuance of bonds of the company of which Two Million (\$2,000,000) dollars in amount are to be presently executed and issued; said bonds to be dated July 1st, 1909, to bear interest at the rate of six (6%) per cent per annum, payable semi-annually both principal and interest payable in gold coin of present standard; said bonds being of the denominations of \$1,000, \$500 and \$100, and maturing serially as follows to-wit: \$150,000 in amount thereof on January 1st, 1915; \$200,000 in amount thereof on January 1st, in each of the years 1916, 1917 and 1918; and \$250,000 in amount thereof on the first day of January in each year beginning with the year 1919, and ending with the year 1923; and said resolution further providing for the giving of a mortgage or deed of trust, securing the payment of said bonds, on any or all of the property, real or personal of this company, and especially the property known as the Big Lost River Irrigation System and all rights of the company in connection therewith and all contracts executed by the company in connection therewith and all contracts executed by the company relating thereto, which mortgage or deed of trust shall run to the American Trust & Savings Bank and Frank H. Jones, both of Chicago, Illinois, as [520] Trustees, and is to be substantially in the form of the draft thereof attached to said resolution of the Board of Directors and which resolution further provides for the disposition of said bonds when issued.

Now Therefore, be it resolved that the said resolution of the Board of Directors of this company be and the same is hereby ratified, approved and confirmed, and the Board of Directors and Officers of the company are directed, authorized and empowered to carry out the terms of said resolution and from time to time to perform all the covenants and conditions of said bonds and of said mortgage and deed of trust; said resolution together with the resolution of the Board of Directors and the draft of the mortgage or deed of trust therein referred to having been fully and carefully read and considered, said resolution was unanimously adopted, all the Stockholders of the company voting in the affirmative.

There being no further business, the meeting adjourned.

B. W. OPPENHEIM,
Secretary.

Approved:

G. S. SPEER,
C. B. HURTT,
LOUIS N. ROOS,
B. W. OPPENHEIM,
J. E. CLINTON, Jr.,
N. M. RUICK,

(Being all the stockholders of said company.)

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BIG LOST RIVER IRRIGATION COMPANY.

**Minutes of Special Meeting of Board of Directors,
August 30, 1909.**

Minutes of a special meeting of the Board of Directors of the Big Lost River Irrigation Company,

held at the office of the company at Boise, Idaho, on the 30th day of August, 1909, at the hour of 4 o'clock P. M., said meeting being held in accordance with the By-laws of the company, all the Directors, to-wit: C. B. Hurtt, J. E. Clinton, Jr., Louis N. Roos, B. W. Oppenheim, and N. M. Ruick, being present and taking part in the meeting.

The President, Mr. C. B. Hurtt, called the meeting to order, the Secretary, Mr. B. W. Oppenheim, acting as Secretary of the meeting.

Mr. Roos offered the following Resolution and moved its adoption.

Whereas, it is for the best interests of the Company to presently borrow about the sum of Two Million (\$2,000,000) dollars to provide funds for the completion of the company's Irrigation System, including the purchase of rights of way and other property and to pay the outstanding indebtedness of the company and for other corporate purposes, and it is deemed advisable for said purpose that the Company issue negotiable bonds and give a mortgage or deed of trust on its said Irrigation system and on all of its personal property, notes, contracts and mortgages now owned or hereafter to be acquired or executed by it.

Now, Therefore, be it resolved, that the President and Secretary of the company be and they are hereby directed, authorized and empowered forthwith to execute on behalf of the company bonds of this company to the present amount of Two Million (\$2,000,000) dollars, said bonds to be dated July 1st, 1909, and to be of the denominations of \$1000, \$500

and \$100 each, consisting of 1000 bonds numbered consecutively from 1 to 1000, [522] inclusive, for the sum of \$100 each and 50 bonds numbered consecutively from 1001 to 1050, inclusive, for the sum of \$1,000 each, due January 1st, 1915; 200 bonds numbered consecutively from 1051 to 1250, inclusive, for the sum of \$1,000 each, due January 1st, 1916; 200 bonds numbered consecutively from 1251 to 1450, inclusive, for the sum of \$1,000 each, due January 1st, 1917; 200 bonds numbered consecutively from 1451 to 1650, inclusive, for the sum of \$1,000 each, due January 1st, 1918; 250 bonds numbered consecutively from 1651 to 1900, inclusive, for the sum of \$1,000 each, due January 1st, 1919; 500 bonds numbered consecutively from 1901 to 2400, inclusive, for the sum of \$500 each, due January 1st, 1920; 250 bonds numbered consecutively from 2401 to 2650, inclusive, for the sum of \$1,000 each, due January 1st, 1921; 250 bonds numbered consecutively from 2651 to 2900, inclusive for the sum of \$1,000 each, due January 1st, 1922; 250 bonds numbered consecutively from 2901 to 3150, inclusive, for the sum of \$1,000 each, due January 1st, 1923; said bonds numbered from 1901 to 3150 shall be redeemable at the option of the Company in their reverse numerical order on January 1st, 1910, or on any interest payment date thereafter upon the payment by the Company of the principal thereof, accrued interest and a premium of three (3%) per cent, of the principal; all of said bonds to bear interest at the rate of six (6%) per cent. per annum payable semi-annually and to be in such form and subject to such

terms and conditions as are recited in the mortgage or deed of trust hereto attached and in all respects in compliance with such mortgage or deed of trust; and,

Be it further Resolved that the President and Secretary of this company be and they are hereby directed, authorized and empowered to execute and deliver to The American Trust & Savings Bank and Frank H. Jones, both of Chicago, Illinois, as Trustees, a mortgage or deed of trust in substantially the form hereto [523] attached covering, conveying and mortgaging any or all of the property of this company, real and personal, including all of the water rights, permits and appropriations now owned or hereafter acquired by the company or hereafter acquired or constructed by it in the Counties of Blaine, Custer, Fremont and Bingham, in the State of Idaho, and any or all other property of the company now owned or hereafter owned by it, and said officers and their successors are hereby authorized to carry out on behalf of said company all the provisions of said mortgage or deed of trust and in all respects to comply with the same and each and every part thereof.

Be it Further Resolved, that the officers of the Company are authorized to procure the certification of said bonds by the said trustee by the deposit of contracts or mortgages and notes in accordance with the provisions of said deed of trust and to dispose of said bonds on the best terms obtainable by them.

After careful consideration of the said resolution and of the draft of mortgage or deed of trust therein

referred to, a copy of which is hereto attached, the said resolution was by vote unanimously adopted, all of the directors of the Company voting in the affirmative.

On motion, duly made, seconded and unanimously carried, the action of the President and Secretary of the Company in executing, sealing, acknowledging and delivering, in the name and on behalf of the company, on the 27th day of August, 1909, a mortgage or deed of trust to The American Trust and Savings Bank and Frank H. Jones, Trustees, on all the property, real and personal, rights, franchises, privileges, water rights, rights of way, contracts and other property of the company to secure [524] the bonds of the company in the present amount of two million (\$2,000,000) dollars be and the same is hereby approved, ratified and confirmed as and for the action of the company.

B. W. OPPENHEIM,
Secretary.

Approved:

C. B. HURTT,
J. E. CLINTON, Jr.,
LOUIS N. ROOS,
B. W. OPPENHEIM,
N. M. RUICK,

(Being all of the Directors of said Company.)

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Special Meeting of Stockholders.

August 30th, 1909.

Minutes of the special meeting of stockholders of the Big Lost River Irrigation Company held at the

office of the company at Boise, Idaho, on the 30th day of August, 1909, at 4:30 o'clock, P. M. said meeting being held in accordance with the By-Laws, all stockholders being present, pursuant to a written consent signed by each of them as follows, to wit:

We, the undersigned, stockholders of the Big Lost River Irrigation Company, hereby consent to the holding of a special meeting of the stockholders of the said company at Boise, Idaho, on the 30th day of August, 1909, at the hour of 4:30 o'clock, P. M. for the purpose, among others, of considering, authorizing, ratifying and approving the execution of a proposed mortgage or deed of trust and bonds of the company.

Mr. C. B. Hurtt, President of the company, called the meeting to order, the Secretary, Mr. B. W. Oppenheim, acting as Secretary of the meeting.

[525]

Mr. Louis N. Roos thereupon offered the following resolution and moved its adoption:

Whereas, the Board of Directors of this company did at a meeting duly held on the 30th day of August, A. D. 1909, at the office of the company at Boise, Idaho, adopt a resolution providing for the issuance of bonds of the company of which Two Million (\$2,000,000) dollars in amount are to be presently executed and issued; said bonds to be dated July 1st, 1909, to bear interest at the rate of six (6%) per cent per annum, payable semi-annually, both principal and interest payable in Gold Coin of present standard; said bonds being of the denominations of \$1,000, \$500 and \$100, and maturing serially as fol-

lows, to wit: \$150,000 in amount thereof on January 1st in each of the years 1916, 1917 and 1918; and \$250,000 in amount thereof on the 1st day of January in each year beginning with the year 1919, and ending with the year 1923; and said resolution further providing for the giving of a mortgage or deed of trust, securing the payment of said bonds, on any or all of the property, real or personal, of this company, and especially the property known as the Big Lost River Irrigation System and all rights of the company in connection therewith and all contracts executed by the company relating thereto, which mortgage or deed of trust shall run to the American Trust & Savings Bank and Frank H. Jones, both of Chicago, Illinois, as Trustees, and is to be substantially in the form of the draft thereof attached to said resolution of the Board of Directors and which resolution further provides for the disposition of said bonds when issued.

Now, Therefore, be it resolved that the said resolution of the Board of Directors of this company be and the same is hereby ratified, approved and confirmed, and the Board of Directors and officers of the company are directed, authorized and empowered [526] to carry out the terms of said resolution and from time to time to perform all the covenants and conditions of said bonds and of said mortgage and deed of trust; said resolution together with the resolution of the Board of Directors and the draft of the mortgage or deed of trust therein referred to having been fully and carefully read and considered said resolution was unanimously adopted, all the

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stockholders of the company voting in the affirmative.

On motion, duly made, seconded and unanimously carried, the action of the President and Secretary of the Company in executing, sealing, acknowledging and delivering, in the name and on behalf of the company, on the 27th day of August, 1909, a mortgage or deed of trust to The American Trust and Savings Bank and Frank H. Jones, Trustees, on all the property, real and personal, rights, franchises, privileges, water rights, rights of way, contracts and other property of the company to secure the bonds of the company in the present amount of two million (\$2,000,000) dollars be and the same is hereby approved, ratified and confirmed as and for the action of the company.

There being no further business, the meeting adjourned.

B. W. OPPENHEIM,
Secretary.

Approved:

C. B. HURTT,
J. E. CLINTON, Jr.,
LOUIS N. ROOS,
B. W. OPPENHEIM,
N. M. RUICK,
G. S. SPEER,

(Being all the stockholders of said company.)

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Special Meeting of Board of Directors.

September 7th, 1909.

Special meeting of the Board of Directors of the Big Lost River Irrigation Company held at its office in the City of Boise, State of Idaho, on the 7th day of September, 1909, at 2 o'clock, P. M. Present, Mr. C. B. Hurtt, Louis N. Roos, J. E. Clinton, Jr., B. W. Oppenheim and N. M. Ruick.

The president, Mr. C. B. Hurtt, acted as chairman, and the secretary, Mr. B. W. Oppenheim, acted as secretary of the meeting.

The secretary presented and read a waiver of notice of the meeting signed by all the directors, and the same was ordered filed and spread upon the minutes as follows:

BIG LOST RIVER IRRIGATION COMPANY.

Waiver of Notice of Meeting of Board of Directors.

We, the undersigned, comprising the Board of Directors of the Big Lost River Irrigation Company, hereby waive notice of the time, place and purpose of the special meeting of the Board of Directors of the company, and hereby consent to the holding of said special meeting at the office of the company in Boise, Idaho, on the 7th day of September, 1909, at the hour of 10 o'clock, A. M. for the purpose of,

(1) Authorizing and directing the president and secretary of the company, under the seal of the corporation, to request and direct The American Trust and Savings Bank, of Chicago, Illinois, Trustee, to certify all the bonds of this company heretofore issued as rapidly as settlers contracts are deposited

with said Trustee, and to deliver said bonds to Trowbridge & Niver Company, First National Bank Building, Chicago, Illinois.

(2) Transacting any other business that may be brought [528] before said meeting.

Dated, Boise, Idaho, September 7th, 1909.

J. E. CLINTON, Jr.,
C. B. HURTT,
LOUIS N. ROOS,
B. W. OPPENHEIM,
N. M. RUICK.

The following resolution offered by director N. M. Ruick, was duly adopted:

“Resolved, That the President and Secretary of the Company, under the seal of the corporation, request The American Trust & Savings Bank, of Chicago, Illinois, Trustee, to certify all bonds of this company heretofore issued as rapidly as settlers contracts are deposited with the said trustee, and to deliver said bonds to Trowbridge & Niver Company, First National Bank Building, Chicago, Illinois.”

On motion the chairman and secretary were instructed to forward a certified copy of said resolution, together with the direction therein mentioned, to the American Trust & Savings Bank of Chicago, Illinois.

There being no further business before the meeting the meeting was declared adjourned.

Approved:

C. B. HURTT,

Chairman.

B. W. OPPENHEIM,

Secretary. [529]

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Special Meeting of Board of Directors.

September 17, 1909.

Special meeting of the Board of Directors of the Big Lost River Irrigation Company held at its office in the City of Boise, State of Idaho, on the 17th day of September, 1909, at 10 o'clock A. M.

Present, C. B. Hurtt, Louis N. Roos, J. E. Clinton, Jr., N. M. Ruick, and B. W. Oppenheim.

The Secretary presented and read a waiver of the meeting signed by all of the Directors and the same was ordered filed and spread upon the minutes, as follows:

“Big Lost River Irrigation Company. Waiver of Notice of Meeting of Board of Directors.”

We, the undersigned, comprising the Board of Directors of the Big Lost River Irrigation Company, hereby waive notice of the time, place and purpose of the special meeting of the Board of Directors of the Company and hereby consent to the holding of said special meeting at the office of the company in Boise, Idaho, on the 17th day of September, 1909, at the hour of ten o'clock A. M. for the purpose of

(1) Of having and considering reports of officers.

(2) Receiving and acting upon resignations of officers and directors and electing successors.

(3) Transacting any other business that may be

brought before said meeting.

Dated at Boise, Idaho, September 17, 1909.

C. B. HURTT,
LOUIS N. ROOS,
J. E. CLINTON, Jr.,
B. W. OPPENHEIM,
N. M. RUICK,

Directors. [530]

The minutes of the last meeting were read and approved.

The resignation of N. M. Ruick as Vice-President and Director was presented, read and accepted.

The resignation of B. W. Oppenheim as Secretary and Director was presented, read and accepted.

On motion of J. E. Clinton, Jr., seconded by Louis N. Roos, G. S. Speer and John P. Roos, Jr., were elected directors to serve the unexpired terms of Ruick and Oppenheim.

On motion, duly seconded, J. E. Clinton, Jr., was unanimously elected Vice-President to serve the unexpired term of N. M. Ruick.

On motion, duly seconded, John P. Roos, Jr., was unanimously elected Secretary to serve the unexpired term of B. W. Oppenheim.

On motion of G. S. Speer, seconded by J. E. Clinton, Jr., the following resolution was adopted:

Whereas certain preliminary, verbal and written contracts have heretofore been entered into regarding the sale of bonds of this company, and with C. B. Hurtt and Clinton, Hurtt & Co., regarding the sale of Water Contracts, etc.,

Resolved, that the officers of this Company are

hereby authorized to negotiate, prepare and execute formal contracts covering the same.

No further business appearing, the meeting was declared adjourned.

Approved:

C. B. HURTT,

Chairman.

JOHN P. ROOS, Jr.,

Secretary. [531]

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Regular Quarterly Meeting of Board of Directors.

October 5, 1909.

Regular quarterly meeting of the Board of Directors of the Big Lost River Irrigation Company was held at its office in the City of Boise, State of Idaho, on the 5th day of October, 1909, at ten o'clock A. M.

Present, Messrs. C. B. Hurtt, J. E. Clinton, Jr., Louis N. Roos, G. S. Speer and John P. Roos, Jr.

The Minutes of the last meeting was read and approved.

The resignation of Mr. E. C. Stoddard as Treasurer was presented, read and on motion of G. S. Speer seconded by J. E. Clinton, Jr., accepted.

On motion of Louis N. Roos seconded by J. E. Clinton, Jr., John P. Roos, Jr., was elected Treasurer to serve the unexpired term of Mr. Stoddard.

In accordance with a resolution adopted at a special meeting of the Board of Directors on September 17, 1909, the following agreement has been entered into:

This agreement made and entered into this 18th

day of September, 1909, by and between the Big Lost River Irrigation Company, a corporation, organized under the laws of the State of Idaho, the party of the first part, and C. B. Hurtt of Boise, Idaho, the party of the second part and G. S. Speer of Chicago, Illinois, the party of the third part, Witnesseth, That:

Whereas the party of the second part on or about the third day of February, 1909, entered into an agreement with the party of the third part, Wherein and Whereby C. B. Hurtt became the sales agent for the land and water rights and town lots in what is known as the "Big Lost River Irrigation Project," constructed by the party of the first part hereto, which said agreement was thereafter accepted and approved by the said party of the first part; and
[532]

Whereas, it has been mutually agreed between the parties hereto that certain changes should be made in said agreement.

Now, Therefore, in consideration of the premises and the covenants and agreements hereinafter contained and in consideration of the sum of Ten Dollars (\$10.00) to first party paid by the party of the second part, the receipt whereof is hereby acknowledged, the parties hereto have agreed and hereby do agree as follows:

First: It is mutually agreed that the terms of the said agreement of February 3rd, 1909, in relation to the sale of water rights for school lands or lands owned by the State of Idaho and not segregated under the Act of Congress known as the Carey Act, are hereby modified so that the commission to be paid

the party of the second part for water rights sold for such lands shall be Three and 50/100 Dollars (\$3.50) per acre; such commission to be paid in the same manner as commissions earned on the sale of water rights for Carey Act lands.

Second: The party of the second part in the sale of water rights for lands in private ownership and lands held under the public land laws of the United States and susceptible of irrigation from the irrigation works of first party, shall be entitled to the same commission and payable in the same manner as provided in said contract of February 3rd, 1909, in the sale of water rights for Carey Act lands.

Third: The promissory notes given to the party of the second part by the party of the first part for commissions earned by second party, as provided in said agreement of February 3, 1909, shall bear interest at six per cent (6%) per annum from the date when the water contracts upon which said commissions were earned begin to bear interest. [533]

Fourth: That in lieu of the twenty five per cent (25%) commission to be paid the party of the second part under said agreement of February 3, 1909, on the sale of town lots, it is hereby agreed that the said second party shall receive a commission of twenty per cent (20%) of the gross amount at which said lots are sold, and thirty three and one-third per cent (33 $\frac{1}{3}$ %) of the advance in price of town lots over the price at which such lots are first placed on the market.

Attached hereto is a copy of the said agreement of February 3, 1909, which said agreement is hereby

modified and superseded by this agreement in so far as the terms hereof conflict with or modify the said agreement of February 3, 1909. In all other respect the said agreement last above mentioned remains in full force and effect.

It is mutually agreed and understood that the agreement this day entered into and the said agreement of February 3, 1909, shall terminate and each party hereto be released from the terms thereof, at the end of five years from the date hereof, except as to the payment of commissions earned by the party of the second part before the expiration of such period.

In witness whereof, the said party of the first part has hereunto caused its name to be subscribed by its President, attested by its Secretary, and the party of the second part, and the said party of the third part have hereunto set their hands and seals, in duplicate, the day and year first above written.

BIG LOST RIVER IRRIGATION CO.

By C. B. HURTT, (Signed)

President.

Attest: JOHN P. ROOS, Jr., (Signed)

Secretary.

C. B. HURTT. (Seal)

G. S. SPEER. (Seal)

Boise, Idaho, February 3, 1909.

Mr. G. S. Speer,
Chicago, Ill.

Dear Sir:—

I will undertake to act as the sales agent for the land and water rights within the boundaries of the land situated in Fremont and adjacent Counties, State of Idaho, segregated under what is known as the "Big Lost River Irrigation Project" and also all town lots included in any town site or town sites located in connection with such project, within or without the above boundaries, upon the following terms and conditions:

That I or such company or corporation as I may organize for that purpose, shall have the exclusive agency of such lands, water rights and town lots.

You to lay out and establish such town site or town sites, within or adjacent to the boundaries above mentioned, as to you may seem most advantageous.

That this proposal is made on the basis that all water rights for such land shall be sold at such price or prices as may be fixed by the Company constructing such works, not exceeding, however, the price stated in the contract between such company and the State of Idaho.

I contract and agree to be prepared to begin selling said lands and water rights within ten days from the date the price for water rights is fixed by the State Land Board and a contract is signed between the State of Idaho and the Irrigation Company, and I agree to maintain sufficient selling force to sell said land and water rights fast enough to provide at all

times sufficient water contracts to collateral the bonds of the Irrigation Company so that eighty per cent (80%) of the face value of said bonds will be sufficient to pay all engineering and construction charges of the Company as fast as the same may become due. [535]

That the price at which town lots shall be sold shall be agreed upon within sixty (60) days from the date of the filing of the Townsite plats with the County Clerk.

That such water rights shall be sold for a cash payment of not to exceed ten per cent of the contract price and the remainder in deferred payments, no such deferred payment to exceed ten per cent of the purchase price. All deferred payments to draw interest at the rate of six per cent. per annum.

You are to furnish all maps, plats and tracings, etc., of the lands and townsites and all other data and information as may be necessary for the sale of the lands, water rights and town lots.

That you will set 4x4 stakes at each section corner and each quarter section corner, properly marked upon such land.

That I shall receive as compensation for services in the sale and advertising of such lands and water rights, the sum of Seven Dollars (\$7.00) per acre, Two Dollars (\$2.00) per acre in cash from first payment; the remaining Five Dollars (\$5.00) to be payable pro rata as the deferred payments on said land and water rights are paid, but the obligation of the Irrigation Company to pay this remaining Five Dollars is to be evidenced by the Company's promissory

notes maturing serially on an average of ninety days after the respective deferred payments on land and water rights are due; All notes maturing more than three years after date of issue are to draw interest at rate of six per cent. per annum.

That on the sales of town lots, I shall receive as compensation a commission of twenty-five per cent of the gross amount at which such lots are sold. Forty per cent. of such commission shall be paid in cash out of the first payment on each sale and the remaining sixty per cent of such commission shall be paid in town lot contracts or mortgages to be properly assigned to me [536] when demanded or as sales are made.

That upon the acceptance of this proposal, I will take complete charge of the sales of such land and water rights upon the above and foregoing terms and will employ a sufficient number of men to properly handle such work and will do proper advertising in connection therewith.

It is further understood that the proposal when accepted by you shall constitute a contract and shall bind each of us, and also our respective heirs, executors, administrators, successors and assigns.

Yours truly,

(Signed) C. B. HURTT.

The above and foregoing proposal is hereby accepted this 3rd day of February, 1909.

(Signed) G. S. SPEER.

No further business appearing, the meeting was declared adjourned.

C. B. HURTT,
Chairman.

JOHN P. ROOS, Jr.,
Secretary.

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Annual Meeting of Stockholders.

January 11, 1910.

The regular annual meeting of the stockholders of the Big Lost River Irrigation Company was held at the office of the Company, Room 307 Boise City National Bank Building, City of Boise, State of Idaho, on January 11, 1910, at two o'clock P. M.

The President, Mr. C. B. Hurtt, called the meeting to order [537] and directed the Secretary to call the roll and canvass the stock represented, which was as follows:

C. B. Hurtt.....	2	Shares
J. E. Clinton, Jr.....	1	“
Louis N. Roos.....	1	“
G. S. Speer.....	1	“
John P. Roos, Jr.....	1	“
Western Mortgage & Loan Co.		
By John P. Roos, Jr., Sec.	9900	

The Secretary reported that 9906 shares of stock were represented and the same being more than a majority the meeting was proceeded with.

The Secretary presented and read Waiver of Notice of the meeting signed by all stockholders and the same was ordered filed and spread upon the minutes as follows:

Waiver of Notice of Annual Meeting of Stockholders.

We, the undersigned, stockholders of the Big Lost River Irrigation Company, hereby waive notice of the time, place and purpose of the annual of the stockholders of the company, and hereby consent to the holding of said annual meeting at the office of the Company at Boise, Idaho, on January 11th, 1910, at two o'clock P. M.

And we do hereby waive all requirements of the statutes of Idaho as to the notice of this meeting and publication thereof; and consent to the transaction of such business as may come before said meeting.

Dated at Boise, Idaho, January 11, 1910.

C. B. HURTT,
 J. E. CLINTON, Jr.,
 LOUIS N. ROOS,
 G. S. SPEER,
 JOHN P. ROOS, Jr.,

WESTERN MORTGAGE & LOAN CO.

By JOHN P. ROOS, Jr.,

Sec'y. [538]

The minutes of the first incorporators' meeting were read and on motion duly approved.

The election of Directors was then taken up and Messrs. Louis N. Roos, and J. E. Clinton, Jr., appointed tellers and a vote by ballot being taken, resulted as follows:

C. B. Hurtt.....	9906 Shares
J. E. Clinton, Jr.....	9906
Louis N. Roos.....	9906

G. S. Speer.....9906

John P. Roos, Jr.....9906

The five persons above named having received the vote of all stock present, were declared duly elected Directors for the ensuing year or until their successors are elected and qualify.

No further business being presented, the meeting, on motion, was declared adjourned.

JOHN P. ROOS, Jr.,
Secretary.

C. B. HURTT,
Chairman.

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Meeting of Board of Directors, January 11, 1910.

Regular meeting of Board of Directors of the Big Lost River Irrigation Company was held at its office, Room 307 Boise City National Bank Bldg. in the City of Boise, State of Idaho, on the 11th day of January, 1910, at three o'clock P. M.

Present, C. B. Hurtt, Louis N. Roos, J. E. Clinton, Jr., and John P. Roos, Jr., Absent, G. S. Speer.

The minutes of the last meeting were read and approved.

The following gentlemen were unanimously chosen officers of the Company to serve until the next annual meeting for the election of Directors of the company or until their successors are chosen and qualify.

President, C. B. Hurtt.

Vice-President, J. E. Clinton, Jr.

Secretary, John P. Roos, Jr.

Treasurer, John P. Roos, Jr. [539]

And all being present entered upon the discharge of their duties as such officers.

The President reported that pursuant to previous understanding he had issued to the order of Trowbridge & Niver Company, checks of the Company aggregating \$29,000.00 as an additional bonus on bond sales.

Whereupon the following resolution was offered and upon motion was unanimously adopted.

Resolved, that the action of the President in paying to Trowbridge & Niver Company, or *tiehr* order as an extra and additional bonus for the sale of the bonds of this Company, the sum of \$29,000.00 (Twenty-nine Thousand Dollars), is hereby ratified, approved and confirmed and the President is hereby further authorized, empowered and instructed to pay to said Trowbridge & Niver Company, or order, the further sum of \$21,000.00 (Twenty-one Thousand Dollars) for services rendered as aforesaid, in addition to all other commissions heretofore authorized.

No further business appearing the meeting was declared adjourned.

JOHN P. ROOS,
Secretary.

C. B. HURTT,
Chairman.

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Special Meeting of Stockholders.

March 12, 1910.

A special meeting of the Stockholders of the Big Lost River Irrigation Company was held at its office

in the City of Boise, State of Idaho, on the 12th day of March, 1910, at ten o'clock A. M. [540]

All stockholders being present the meeting was proceeded with.

The Secretary presented and read a Waiver of Notice of the meeting signed by all stockholders and the same was ordered filed and spread upon the minutes as follows:

Waiver of Notice of Special Meeting of Stockholders.

We, the undersigned stockholders of the Big Lost River Irrigation Company hereby consent to the holding of a special meeting of the Stockholders of said Company at the office of the Company at Boise, Idaho, on the 12th day of March, 1910, at ten o'clock A. M., for the purpose, among others, of considering, authorizing, ratifying and approving the execution of a mortgage or deed of trust and bonds of the Company.

Dated at Boise, Idaho, March 12, 1910.

C. B. HURTT,
J. E. CLINTON, Jr.,
LOUIS N. ROOS,
G. S. SPEER,
JOHN P. ROOS, Jr.,

WESTERN MORTGAGE & LOAN CO.,

By JOHN P. ROOS, Jr., Sec'y.

The minutes of the last meeting were read and approved.

Mr. Louis N. Roos offered the following resolution, which was, on motion, unanimously adopted.

Resolved, by the stockholders of the Big Lost River Irrigation Company, in stockholders' meeting

duly assembled, that the Board of Directors of this Company are hereby authorized to borrow the sum of \$400,000.00 for such time and at such rate of interest as they may deem best, to be used for the purpose of completing, equipping and operating its irrigation system within the Counties of Blaine, Bingham, Custer and Fremont, in the State of Idaho, and for the general uses of the Company, and in evidence thereof to issue the bonds of the Company, and to secure the same by mortgage or deed of trust of all or any part or portion of its corporate property, whether real, personal or mixed, which the Company now owns or may hereafter acquire; subject however, to all rights therein existing under the first *first* mortgage or [541] deed of trust made by this Company, bearing date July 1, 1909, securing the \$2,000,000.00 of 6% bonds therein authorized to be presently issued and such additional bonds as may be issued under the provisions thereof, which said new mortgage or deed of trust shall bear the date of the 1st day of January, A. D. 1910.

There being no further business the meeting adjourned.

JOHN P. ROOS, Jr.,
Secretary.

C. B. HURTT,
Chairman.

BIG LOST RIVER IRRIGATION COMPANY.
Minutes of Special Meeting of Board of Directors.
March 12, 1910.

A special meeting of the Board of Directors of the Big Lost River Irrigation Company was held at its office in the City of Boise, State of Idaho, on the

12th day of March, 1910, at eleven o'clock A. M.

Present: Messrs. C. B. Hurtt, J. E. Clinton, Jr., Louis N. Roos, G. S. Speer and John P. Roos, Jr.

The Secretary presented and read a Waiver of Notice of the meeting signed by all of the Directors and the same was ordered filed and spread upon the minutes as follows:

Waiver of Notice of Special Meeting of Directors.

We, the undersigned, Directors of the Big Lost River Irrigation Company, a corporation organized and existing under the laws of the State of Idaho, hereby waive notice of the place and purpose of the meeting of the Board of Directors and of the business to be transacted at said meeting and fix Saturday, March 12, 1910, at eleven o'clock A. M., as the time and the office of the Company in the City of Boise, County of Ada and State of Idaho, as the place of said meeting, the purpose being the authorization of the Company to borrow money to the amount of \$400,000.00 and to issue Collateral Trust Bonds therefor; the [542] authorizing and directing the proper officers of the Company to execute, under the corporate seal, said bonds and a mortgage or deed of trust, to secure the same; and the transaction of such other business as may be brought before said meeting.

Dated at Boise, Idaho, March 12, 1910.

C. B. HURTT,
J. E. CLINTON, Jr.,
LOUIS N. ROOS,
G. S. SPEER.
JOHN P. ROOS, Jr.,
Directors.

On motion of J. E. Clinton, Jr., seconded by G. S. Speer, the following resolution was unanimously adopted:

Resolved by the Board of Directors of the Big Lost River Irrigation Company:

First: That the resolution passed and adopted by the stockholders of this Company, at their meeting held this day, relating to the issue of bonds of the Company to the amount of \$400,000.00 be duly performed, effectuated and fulfilled and the same is hereby approved, ratified and adopted.

Second: That the President and Secretary of this Company be, and they hereby are authorized and directed, in its behalf and under its corporate seal, to execute and deliver to The American Trust & Savings Bank and Frank H. Jones, both of Chicago, Illinois, as Trustees, a mortgage or deed of trust to bear the date of January 1st, A. D. 1910, and to be known as "Collateral Trust Mortgage," and substantially of the tenor and draft thereof now submitted to this meeting, or of such tenor and form as the said President and Secretary may deem proper (and their execution of any such deed of trust shall be conclusive evidence of their approval of the same), upon all or any part or portion of the corporate property, whether real, personal or mixed, which the Company now owns or may hereafter acquire, subject to all rights therein existing under the First Mortgage or deed of Trust, bearing date of July 1, A. D. 1909, heretofore executed by [543] this Company, to secure the \$2,000,000.00 of 6% bonds therein authorized to be presently issued, and such

additional bonds as may be issued under the provisions thereof, which said Collateral Trust Mortgage shall secure an issue of bonds to be dated January 1, 1910, and to be known and designated as "Big Lost River Irrigation Company, Collateral Trust Bonds," not exceeding in the aggregate the principal sum of \$400,000.00 and payable in gold coin of the United States, of, or equal to, the present standard of weight and fineness, at the American Trust & Savings Bank in the City of Chicago, Illinois.

Third: The said bonds shall bear interest at the rate of six per centum (6%) per annum, until said principal sum shall have been paid such interest to be paid semi-annually, on the first day of January, and the first day of July, in each year; both principal and interest of said bonds shall be made payable without deduction for any tax, or taxes, or stamp duties, which this Company may be required to pay, or to retain therefrom, under or by reason of any present or future law of the United States or of any State, territory, county or municipality thereof, the Company hereby agreeing to pay off such tax or taxes, and stamp duties; such bonds shall be of the denomination of \$500.00 each, shall be numbered from one (1) to eight hundred (800) inclusive, and shall be due and payable January 1, 1920, said bonds numbered 1 to 600, shall be redeemable at the option of the Company, in their reverse numerical order, on January 1, 1915, or on any interest payment date thereafter before maturity, at par, accrued interest and a premium of three (3) per cent; said bonds numbered 601 to 800 shall be redeemable at the op-

tion of the Company, in their reverse numerical order, on any interest payment date before maturity, at par, accrued interest and a premium of three (3) per cent.

Fourth: That the President and Secretary of this Company shall execute in the name and in behalf of this Company and under [544] its corporate seal, such bonds to be secured by the said Collateral Trust Mortgage, in the aggregate amount of \$400,000.00. The coupons to be attached to said bonds shall be for the sum of \$15.00 each and shall be authenticated by the fac-simile signature of the treasurer of this Company.

Fifth: That all of said bonds after being executed by the officers of the Company shall be delivered to The Americian Trust & Savings Bank, Trustee, which shall at once certify and issue to the Treasurer of the Company, or to such persons as he may, in writing designate, any or all of the said bonds.

Sixth: That the said bonds and the coupons thereto attached shall be in substantially the following form, to-wit:

United States of America,

No. ———.

State of Idaho.

Big Lost River Irrigation Company.

\$500.

Collateral Trust Bond.

\$500.

Know all men by these presents, that the undersigned, Big Lost River Irrigation Company, a corporation organized and existing under and by virtue of the laws of the State of Idaho, for value received, acknowledges itself to owe and hereby promises to

pay to the bearer hereof the sum of five hundred (\$500) dollars on the first day of January, A. D. 1920, together with interest thereon from the date hereof until paid at the rate of six (6) per cent. per annum payable semi-annually on the first days of January and July in each year upon the presentation and surrender of the annexed interest coupons as they severally become due. Both principal and interest are payable in gold coin of the United States of America, of, or equivalent to, the present standard of weight and *fairness*, at The American Trust & Savings Bank in the City of Chicago, Illinois.

Both principal and interest are payable without deduction for any tax, charge or assessment whatever which the undersigned [545] may be required or permitted to pay or retain therefrom by any statute law, ordinance or regulation.

This bond is one of a series of bonds of said Big Lost River Irrigation Company of like date, tenor and effect, save as to number and redemption provision, numbered consecutively from one (1) to eight hundred (800) inclusive, issued and to be issued to an amount not exceeding in the aggregate the principal sum of four hundred thousand dollars, all of which bonds are equally secured by a mortgage or deed of trust of even date herewith, executed, acknowledged, delivered and recorded according to the laws of the State of Idaho, by the undersigned to said The American Trust & Savings Bank and Frank H. Jones, both of Chicago, Illinois, as Trustees, conveying to said Trustees, in trust certain property in said mortgage, or deed of trust described to which

mortgage or deed of trust reference is hereby made for a description of the property mortgaged or pledged, the nature and extent of the security and the rights of the holders of bonds under the same.

In case of default in the performance of the covenants of said mortgage or deed of trust continuing for the period therein mentioned, the principal of this bond may be declared due in the manner and upon the conditions prescribed therein.

This bond shall not become obligatory for any purpose until authenticated by the signature of said The American Trust & Savings Bank, or of its successor or successors in trust to the Trustee's Certificate endorsed hereon.

In Witness Whereof, said Big Lost River Irrigation Company has caused this bond to be signed by its President and attested by its Secretary under its corporate name and seal and the interest coupons thereto attached to be authenticated by the fac-simile signature of its Treasurer this 1st day of January, A. D. 1910. [546]

BIG LOST RIVER IRRIGATION CO.

By C. B. HURTT,
President.

Attest:

_____,
Secretary.

(Form of Coupon.)

No. _____

\$15.00

On the first day of January, July, 19—, the Big Lost River Irrigation Company, a corporation, of

the State of Idaho, promises to pay to bearer the sum of Fifteen Dollars, in United States Gold Coin, at The American Trust & Savings Bank in the City of Chicago, Illinois, being six months interest due that day on its Collateral Trust Bond of January 1, 1910, No. _____.

_____,
Treasurer.

Trustee's Certificate.

Chicago, Illinois,

This is to certify that this bond is one of the bonds described in the mortgage or deed of trust within mentioned.

AMERICAN TRUST & SAVINGS BANK,

Trustee,

By _____,

Secretary.

Bonds numbered 1 to 600, inclusive, shall contain the following clause:—

“This bond may be redeemed at the option of the Company, on January 1, 1915, or any interest payment date thereafter before maturity, at par, accrued interest and a premium of three per cent.” [547]

Bonds numbered 601 to 800, inclusive, shall contain the following clause:

This bond may be redeemed, at the option of the Company, on any interest payment date before maturity, at par, accrued interest and a premium of three per cent.

No further business appearing the meeting adjourned.

JOHN P. ROOS, Jr.,
Secretary.

C. B. HURTT,
Chairman.

BIG LOST RIVER IRRIGATION COMPANY.

**Minutes of Special Meeting of Board of Directors.
May 31, 1910.**

A special meeting of the Board of Directors of the Big Lost River Irrigation Company was held at its office in the City of Boise, State of Idaho, on the 31st day of May, 1910, at eleven o'clock A. M.,

Present, J. E. Clinton, Jr., Louis N. Roos, and John P. Roos, Jr.; Absent, C. B. Hurtt and G. S. Speer.

In the absence of the President, Mr. C. B. Hurtt, the Vice-President, Mr. J. E. Clinton, Jr., presided.

The Secretary presented and read a waiver of the meeting signed by all of the Directors, and the same was ordered filed and spread upon the minutes as follows:

BIG LOST RIVER IRRIGATION COMPANY.

Waiver of Notice of Special Meeting of Directors.

We, the undersigned, Directors of the Big Lost River Irrigation Company, a corporation organized and existing under the laws of the State of Idaho, hereby waive notice of the place and purpose of the meeting of the Board of Directors and of the business to be transacted at said meeting and fix Tuesday, May 31, 1910, at eleven o'clock A. M. as the time and the office of the Company in the City of Boise,

County of Ada, and State of Idaho, [548] as the place of said meeting, the purpose being the receiving and acting upon the resignation of directors and the electing of successors, and the transacting of such other business as may be brought before said meeting.

Dated at Boise, Idaho, May 31, 1910.

C. B. HURTT,
J. E. CLINTON, Jr.,
G. S. SPEER,
LOUIS N. ROOS,
JOHN P. ROOS, Jr.,
Directors.

The minutes of the last meeting were read and approved.

The resignation of Mr. G. S. Speer as a Director of this Company was presented, read and on motion, accepted.

Upon motion, Mr. W. E. Corey of Ogden, Utah, was elected as a Director to serve the unexpired term of Mr. G. S. Speer.

The Secretary offered the following resolution, which on motion was duly adopted:

Resolved, That all resolutions heretofore passed by this Board and all instructions heretofore given by this Company to The American Trust and Savings Bank of Chicago, Illinois, authorizing, directing or instructing said The American Trust & Savings Bank to deliver to the Trowbridge & Niver Company, a corporation organized under the laws of the State of New Jersey, and doing business in the City of Chicago, State of Illinois, the bonds of the Big Lost

River Irrigation Company without collecting or receiving payment therefor at the time of such delivery, be and the same are hereby rescinded and annulled.

Be it further resolved that the said The American Trust and Savings Bank be and hereby is authorized, instructed and directed to deliver to the order of the said Trowbridge & Niver Company, or such other party or parties as the Treasurer of this Company may in writing designate, all bonds authorized to be issued by this Company after the same have been duly certified as required by the Trust Deed securing the same upon the payment to said The American Trust & Savings Bank for the use and benefit of this [549] Company, of a sum or amount equal to Eighty per cent (80%) of the par value of the bonds so delivered (together with all accrued interest thereon); And all moneys so received shall be payable upon the order check or draft of the Big Lost River Irrigation Company, signed by John P. Roos, Jr., Treasurer, and countersigned by C. B. Hurtt, President of said Company, or any successor, Treasurer or President of said Company.

Mr. George F. Sprague was appointed General Manager of this Company at a salary of \$300.00 per month and expenses.

The President and Secretary were authorized and instructed to execute and deliver upon the delivery to the Big Lost River Irrigation Company of all the right, title and interest to what is known as the "Tombs Ditch," water contracts of this Company, as follows:

A free or paid up Water Right to what is known

as the "Tombs Ranch" described as being Lots 3 & 4, SW./4 SW./4, & SW./4 SE./4, Sec. 7,-3-26-

A free or paid up Half Water Right to Ralph J. LaFever, on the NE./4, Sec. 18-3-26- consisting of 160 acres.

A free or paid up Half Water Right to Melvin D. Sweet on the SE./4, Sec. 18-3-26, consisting of 160 acres.

A Half price or Twenty (20) Dollars per acre Water Right to Agnes B. Fleischer on the NE./4, Sec. 17-3-26, consisting of 160 acres.

A Half price or Twenty (20) Dollars per acre Water Right to Louis A. Lafferty on the E. 1/2 SE./4 and SW./4, SE./4, Sec. 10-3-26, consisting of 120 acres.

A Water Right at the rate of Thirty-seven (37) Dollars per acre to Ralph J. LaFever on Lots 3, 4, 5 and SE./4 NW./4, Sec. 6-3-26, containing 159 acres. [550]

The Secretary was instructed to issue and deliver to Geo. F. Sprague, Trustee, the remainder of the unissued stock of this Company.

The Secretary was authorized and instructed to deed to the Arco Townsite Company all lots which have been transferred from them to the Big Lost River Irrigation Company for right of way purposes, and to accept from them a deed conveying a right of way forty-five (45) feet wide through the townsite as the line of Canal now runs.

No further business appearing, the meeting was declared adjourned.

J. E. CLINTON, Jr.,
Chairman.

JOHN P. ROOS, Jr.,
Secretary.

BIG LOST RIVER IRRIGATION CO.

**Minutes of Special Meeting of Board of Directors.
June 27, 1910.**

A special meeting of the Board of Directors of the Big Lost River Irrigation Company was held at its office in the City of Boise, County of Ada and State of Idaho, on the 27th day of June, 1910, at four thirty o'clock P. M.

Present, C. B. Hurtt, Louis N. Roos, and John P. Roos, Jr., Absent, J. E. Clinton, Jr., Unqualified, W. E. Corey.

The Secretary presented and read a Waiver of the meeting signed by all of the Directors and the same was ordered filed and spread upon the minutes as follows: [551]

Waiver of Notice of Special Meeting of Directors.

We, the undersigned Directors of the Big Lost River Irrigation Company, a corporation, organized and existing under the laws of the State of Idaho, hereby waive notice of the meeting of the Board of Directors and of the business to be transacted at said meeting and fix Monday, June 27, 1910, at four thirty P. M. as the time and the office of the Company in the City of Boise, County of Ada and State of Idaho, as the place of said meeting, the purpose being the authorization of J. E. Clinton, Jr., Vice-

President of the Company to borrow the sum of Fifty Thousand Dollars (\$50,000) and to pledge Settlers Contracts to secure such loan and the transaction of such other business as may be brought before said meeting.

Dated at Boise, Idaho, June 27, 1910.

C. B. HURTT,
LOUIS N. ROOS,
JOHN P. ROOS, Jr.,
J. E. CLINTON, Jr.,
Directors.

The minutes of the last meeting were read and approved.

Upon motion of Louis N. Roos, seconded by C. B. Hurtt, the following resolution was adopted:

Resolved that J. E. Clinton, Jr., Vice-President of the Big Lost River Irrigation Company, be and he is hereby authorized to negotiate a loan or loans in behalf of this Company not to exceed Fifty Thousand Dollars (\$50,000) and to pledge Settlers' Contracts now owned or hereafter acquired by the Company in such amount or amounts as may be necessary to secure such loan or loans.

The Secretary offered the following resolution which, on motion was duly adopted:

Resolved, that all resolutions heretofore passed by this board and all instructions heretofore given by this Company to the American Trust & Savings Bank of Chicago, Illinois, [552] authorizing, directing or instructing said The American Trust & Savings Bank to deliver to the Trowbridge & Niver Company, a corporation, organized under the laws

of the State of New Jersey, and doing business in the City of Chicago, State of Illinois, and C. B. Hurtt, President of the Big Lost River Irrigation Company, be, and the same are hereby recinded and annulled.

Be it further Resolved that the said The American Trust & Savings Bank be, and hereby is authorized, instructed and directed to deliver to Jas. E. Clinton, Jr., or Order, or such other party or parties as the Treasurer of this Company, may in writing, designate, all bonds authorized to be issued by this Company, after the same have been duly certified as required by the first and second mortgage trust deeds securing the same without collecting or receiving payment therefor at the time of such delivery.

The Secretary offered the following resolution which on motion, was duly adopted:

Resolved, that J. E. Clinton, Jr., Vice-President, of the Big Lost River Irrigation Company, be and hereby is authorized to use all bonds received by him as Collateral securing any loan or loans which he may make in behalf of this Company.

No further business being presented the meeting adjourned.

JOHN P. ROOS, Jr.,

Secretary.

C. B. HURTT,

Chairman.

BIG LOST RIVER IRRIGATION COMPANY.

Minutes of Special Meeting of Board of Directors.

July 14, 1910.

A special meeting of the Board of Directors of the Big Lost River Irrigation Company was held at its office in the City of Boise, County of Ada and State

of Idaho, on the 14th day of July, 1910, at four o'clock P. M. [553]

Present, C. B. Hurtt, James E. Clinton, Jr., Louis N. Roos, and John P. Roos, Jr.,

Absent, W. E. Corey, unqualified.

The Secretary presented and read a Waiver of the meeting signed by all qualified Directors and the same was ordered filed and spread upon the minutes as follows:

BIG LOST RIVER IRRIGATION COMPANY.

Waiver of Notice of Special Meeting of Directors.

We, the undersigned Directors of the Big Lost River Irrigation Company, organized and existing under the laws of the State of Idaho, hereby waive notice of the place and purpose of the meeting of the Board of Directors and of the business to be transacted at said meeting and fix Thursday, July 14, 1910, at four o'clock P. M., as the time and the office of the Company in the City of Boise, County of Ada and State of Idaho, as the place of said meeting, the purpose being the authorization of C. B. Hurtt, President of this Company, to obligate it as he may deem best to secure the necessary funds for the completion of the system, and the transaction of such other business as may be brought before said meeting.

Dated at Boise, Idaho, July 14, 1910.

J. E. CLINTON, Jr.,

C. B. HURTT,

LOUIS N. ROOS,

JOHN P. ROOS, Jr.,

Directors.

The minutes of the last meeting were read and approved.

The Secretary offered the following resolution which, on motion was duly adopted:

Resolved by the Directors of the Big Lost River Irrigation Company, that authority be, and hereby is given to Mr. C. B. Hurtt, President of this Company, to obligate this Company as he may deem necessary, to secure funds for the completion of this [554] Company's Irrigation System.

No further business being presented the meeting adjourned until 2 o'clock P. M. Monday July 25, 1910.

J. E. CLINTON, Jr.,
Chairman.

JOHN P. ROOS, Jr.,
Secretary.

BIG LOST RIVER IRRIGATION COMPANY,

Minutes of Adjourned Meeting, July 25, 1910.

Pursuant to adjournment, the Directors of the Big Lost River Irrigation Company met at the office of the Company at 2 o'clock P. M. Monday July 25, 1910.

Present, Jas. E. Clinton, Jr., Louis N. Roos, and John P. Roos, Jr.

In the absence of Mr. C. B. Hurtt, President, Mr. J. E. Clinton, Jr., Vice-President, presided.

The minutes of the previous meeting were read and approved.

As Mr. W. E. Corey who was elected as a Director of this Company has declined to qualify as such officer, Mr. George F. Sprague was unanimously

elected as such Director to serve until the next annual election for Directors or until his successor qualifies.

On motion the meeting was adjourned to meet at Room 1245 First National Bank Building, Chicago, Illinois, at 2 o'clock P. M. Saturday July 30, 1910.

J. E. CLINTON, Jr.,
Chairman. [555]

JOHN P. ROOS, Jr.,
Secretary.

Chicago, Ill., July 30, 1910.

The minutes of the adjourned meeting were read and approved.

In the absence of the Secretary Mr. J. E. Clinton, Jr., was appointed Secretary of the meeting, he with Mr. C. B. Hurtt and Geo. F. Sprague being present and making a quorum.

The resignation of Louis N. Roos was read and accepted and E. W. Hanna was duly elected in his place.

There being no further business, the directors' meeting adjourned to convene again at 1245 First Nat. Bank Bldg., Chicago, Ill., Tuesday, August 2, 1910.

C. B. HURTT,
President.

Attest: J. E. CLINTON, Jr.
Temporary Secretary.

BIG LOST RIVER IRRIGATION COMPANY.
Minutes of Special Meeting of Board of Directors.
Jan. 16, 1911.

Pursuant to written call and waiver of notice, the

Board of Directors of the Big Lost River Irrigation Company met in its office in the Boise City National Bank Building, City of Boise, State of Idaho, on the 16th day of January, 1911, at 11:30 o'clock A. M. Those present were C. B. Hurtt, J. E. Clinton, Jr., and John P. Roos, Jr.

The Secretary presented a call and written waiver of notice of the meeting signed by all of the Directors, and the same was ordered filed and spread upon the minutes as follows:

We, the undersigned, Directors of the Big Lost River Irrigation Company, a corporation, organized and existing under the laws [556] of the State of Idaho, hereby waive notice of the place, and purpose of the meeting of the Board of Directors, and of the business to be transacted at said meeting and fix Monday, January 16, 1911, at 11:30 o'clock A. M. as the time and the office of the Company in the City of Boise, County of Ada and State of Idaho, as the place of said meeting, the purpose being the consideration of the assigning of a certain claim against the State of Idaho for \$4660.00, and the transaction of such other business as may be brought before said meeting.

Dated at Boise, Idaho, January 16, 1911.

C. B. HURTT.

J. E. CLINTON, Jr.

JOHN P. ROOS, Jr.

GEORGE F. SPRAGUE.

EUGENE W. HANNA.

The matter of assigning a claim against the State of Idaho for \$4660.00 was presented and upon motion of Mr. J. E. Clinton, Jr., seconded by Mr. C. B.

Hurt, the following resolution was unanimously adopted.

Resolved, that the President and Secretary of this Company be and are hereby authorized to assign to Mr. N. M. Ruick, a certain claim against the State of Idaho for \$4660.00; said claim being for monies advanced on July 17, 1909, by us to the said State, to procure the survey of certain lands included within the Big Lost River Irrigation Project, with full power to sue for, collect, receipt for, discharge, sell and assign the same.

No further business appearing, the meeting was declared adjourned.

C. B. HURTT,
Chairman.

Attest: JOHN P. ROOS, Jr.,
Secretary. [557]

[Title of Court and Cause.]

Opinion.

H. H. HENDERSON, Attorney for the Plaintiff and the Intervenor.

LYNNE FOX CLINTON, Attorney for the Defendant Big Lost River Irrigation Co.

MAYER, MEYER, AUSTRIAN & PLATT, RICHARDS & HAGA, N. M. RUICK, and A. C. MILLER, Attorneys for the American Trust & Savings Bank, and Frank H. Jones, Trustees.

CLARK & BUDGE, Attorneys for Certain Other Defendants.

DIETRICH, District Judge:

This action was brought by Corey Bros. Construc-

tion Company, a Utah corporation, to foreclose a mechanic's lien upon a partially constructed irrigating system belonging to the defendant Big Lost River Irrigation Company, an Idaho corporation, [558] (hereinafter referred to as the Irrigation Company). Jurisdiction rests upon diversity of citizenship, the requisite amount being involved. The defendants American Trust & Savings Bank and Frank H. Jones (hereinafter referred to as the mortgagee), are the trustees named in a trust deed covering the system, and given to secure an issue of bonds, a large part of which has been sold. The irrigation system is what is popularly known as a "Carey Act Project," constructed under a contract entered into by the State of Idaho with one George S. Speer on the 27th of May, 1909, pursuant to the provisions of Section 4 of an Act of Congress approved August 18, 1894 (28 Stat. 422), as amended by the Act of June 11, 1896 (29 Stat. 413-434), and Section 3 of the Act of March 3, 1901 (31 Stat. 1188), and of sections 1613 to 1634, inclusive, of the Idaho Revised Codes. Speer was the vice-president of a corporation known as Trowbridge & Niver, of Chicago, who were engaged in selling irrigation and other bonds, and apparently, as the representative of this company, he entered into the contract with the State for the purpose of promoting the project and selling to the public the bonds to be issued upon the system. The plan was to secure the contract with the State, and thereupon organize a corporation, in whose name the project was to be carried on, cause it to issue bonds secured by a trust deed upon the system, and sell

the bonds as rapidly as money was needed to pay the contractor, who was to do the construction work under the supervision of Arnold & Company, an engineering company, also of Chicago. Accordingly, on June 15, 1909, Speer caused the defendant Irrigation Company to be organized, with a capital stock of \$1,000,000.00, substantially all of which was, about thirty days later, issued to him in exchange for his contract with the State. In the meantime he and those who were to be associated with him in the organization of the Irrigation Company, in order to avoid delay, had a verbal agreement with the plaintiff by which it was to do the construction work, and accordingly it at [559] once began to assemble its material and workmen, and it actually commenced construction work about June 15th. A writing was drafted at the time of the oral agreement, incorporating the substantial provisions thereof, and this was, without change, later executed by the Irrigation Company and sent to Utah, where it was executed by the plaintiff on or about August 26, 1909. The written agreement between the Irrigation Company and Arnold & Company, covering engineering services, was executed on the — day of ———, 1909. A trust deed covering all of the property of the Irrigation Company, to secure a \$2,000,000.00 issue of bonds bearing date July 1, 1909, was executed August 27, 1909, and was filed for record in Bingham and Blaine counties September 3, 1909, and in Custer and Fremont counties a few days later. While not very material, it may be noted that another trust deed, securing an additional bond issue of \$400,000.00, was

executed January 1, 1910, and shortly thereafter placed on record in the several counties named. All the bonds were delivered to Trowbridge & Niver to be sold by them as the fiscal agents of the Irrigation Company. Under its contract, the plaintiff was to be paid as the work progressed ninety per cent upon monthly estimates to be furnished by the engineer. The mode of procedure actually followed was for Arnold & Company's chief representative in the field to send to his company at Chicago such an estimate, which was thereupon approved by their engineer having supervision of that class of work, and after such approval the estimate was passed to Trowbridge & Niver, and out of the proceeds of bond sales they paid the amount thereof directly to the plaintiff, charging the same to the Irrigation Company. The earlier estimates appear to have been promptly paid, but as time went on Trowbridge & Niver, who were also promoting other projects, became embarrassed, and finally fell into insolvency. Much of the money coming into their hands from the sale of bonds they properly applied to the discharge of the Irrigation Company's obligations, but, as now appears, a considerable [560] amount was wrongfully appropriated to other purposes. For want of funds to enable it to proceed, and also because of the disapprobation of the State with the manner in which some of the work was being done, the plaintiff ceased work on August 15, 1910. Asserting that there was a balance due to it approximating \$525,000.00, in due time, and in compliance with the statutes of Idaho, it filed in the proper recorder's offices its claim of lien, and com-

menced this suit for the foreclosure of the same, on October 15, 1910, and upon its application a receiver was appointed to take charge of all the property, on the 29th day of May, 1911.

The intervenor, the Union Portland Cement Company, is a Utah corporation, and seeks the foreclosure of a lien for material furnished to the Irrigation Company through the plaintiff for the construction of the system. The plaintiff's contract with the Irrigation Company did not cover the cement required for the concrete work, and at the time it entered into the oral agreement with the promoters of the Irrigation Company there was an understanding that it would, for and upon behalf of the Irrigation Company, purchase the necessary cement. Accordingly it had a verbal agreement with the intervenor pursuant to which the latter commenced to furnish cement for the work, and actually delivered a consignment thereof upon the ground on September 2, 1909, although the agreement with the Irrigation Company, which was identical with the oral understanding, was not signed until some time later. It continued to furnish cement until the 25th of June, 1910. Claiming that there was a balance due to it of \$13,774.56, it in due time filed its claim of lien therefor, and commenced an action for the foreclosure thereof on October 22, 1910. It was originally named as a defendant in this suit, but, having been dismissed therefrom, by leave of Court, it filed its complaint in intervention on January 4, 1912, during the pendency of the receivership. [561]

The other parties defendant claim liens as subcon-

tractors under the plaintiff.

Such, in briefest outline, is a sketch of the origin of the controversy; the other facts can be more profitably adverted to in connection with the discussion of the several questions to which the issues were reduced in the argument upon the final submission.

JURISDICTION.

The first point urged by the mortgagee is that the Court is without jurisdiction because the Union Portland Cement Company and certain subcontractors under the plaintiff, all residents and citizens of the state of Utah, were originally made parties defendant, together with the present defendants, and that therefore there was wanting the requisite diversity of citizenship. Without objection upon the part of anyone, the plaintiff took a voluntary dismissal as to these parties, and, as has already been stated, the Union Portland Cement Company thereafter came in by intervention. The contention is that all of these claimants so dismissed from the suit are not only proper and necessary, but indispensable parties, and that their presence would be fatal to our jurisdiction. But in the first place it is to be observed that they are not present, and in no manner is their absence pleaded as a defense. Defendants should, upon a proper showing of the facts, have demanded that such claimants, if any there be, be made parties, and in response to such demand the Court could have made such order as was appropriate, and if, after any such parties were brought in, it appeared that their presence left the case without the requisite diversity of citizenship, it would then have

been proper to move for a dismissal. *Shields vs. Barrows*, 58 Fed. 129. But nonjoinder is not pleaded, and we cannot properly presume or assume the existence of liens the nature of which is such as to make the holders thereof indispensable parties, or that the presence of such persons would oust the Court of jurisdiction. [562] It is entirely possible that if the subcontractors had been brought in it would appear that their interests are of such character that, for jurisdictional purposes, they should be aligned with the plaintiff against the defendants, rather than with the defendants against the plaintiff. However that may be, as the case now stands, with the parties before it, the Court appears to have jurisdiction, for there are both the requisite diversity of citizenship and the necessary value of the matter in dispute. But if the point were properly presented by the pleadings, the result I am inclined to think would be the same. The controlling question then would be whether or not, in a suit brought by a contractor to foreclose a mechanic's lien, all other lien claimants are indispensable parties. It may readily be conceded that they are necessary parties, and it is much to be regretted that after a receiver was appointed, thus making it possible for all to come in and have their liens adjudicated, the interested parties did not take the proper steps to bring about that result. Clearly, however, the Union Portland Cement Company is not an indispensable party. The source of its claim is entirely distinct from that of the plaintiff; it asserts a lien upon the same property, and that is all. In like manner sev-

eral mortgagees may hold liens upon the same property, but it would not be contended that in a foreclosure suit brought by any one of them it is indispensable that all others be made parties. Neither a prior nor a subsequent mortgagee is an indispensable party; the only indispensable party is the owner of the title of the mortgaged property. Subsequent mortgagees are usually made parties in order that their claims may be foreclosed, but plainly the Court can enter a decree foreclosing the interest of the owner without prejudice to their rights, and "the relation of an indispensable party to the suit must be such that no decree can be entered in the case which will do justice between the parties actually before the Court without injuriously affecting the rights of such absent parties." *Wolterman vs. Canal-Louisiana Bank*, 215 [563] U. S. 33. The mere convenience of the parties who are before the Court is insufficient to render absent parties indispensable. *United States vs. Allen*, 179 Fed. 13. It may well be that the case of a subcontractor presents additional considerations, but it is thought that they all relate not to the question of "indispensableness," but only to the degree of inconvenience.

PLAINTIFF'S CAPACITY TO CONTRACT.

The objection under this head is that plaintiff, being a foreign corporation, and, as is claimed, having failed to comply with the laws of Idaho relating to foreign corporations doing business within the State, prior to the oral agreement entered into about June 15, 1909, was without the capacity to contract, under Section 10 of Article XI of the Constitution of

Idaho, and statutes enacted to give effect thereto. It is not thought necessary to analyze the record for the purpose of determining whether the plaintiff was actually in default, for, assuming the correctness of the defendants' contention in that respect, the fact furnishes no bar to the maintenance of this suit. A contract made by a noncomplying corporation is not void, but such corporation is by the statute denied a remedy in the Idaho courts; the contract may be sued upon and enforced in other courts of competent jurisdiction. It has been so decided in this court (*Colby vs. Cleaver*, 169 Fed. 206), and no substantial reason is advanced for abandoning the position. From certain expressions found in the opinions of the Supreme Court of Idaho in *Katz vs. Herrick*, 12 Idaho, 1, 86 Pac. 873, it is ingeniously argued that the laws of Idaho, as thus authoritatively construed, are identical with the statutes which, in *Diamond Glue Co. vs. United States Glue Co.*, 187 U. S. 611, were held to declare such contracts unenforceable in the federal as well as in the state courts. It is not pretended that in phraseology the two statutes are the same, but only that the Idaho statute, with the supposed construction of the Idaho court, is equivalent to that of Wisconsin. But, of course, the Idaho court, in using the general expressions relied upon, had [564] no reference to the federal courts or the courts of other States. It was considering an actual, not a moot, question. The last expression of its latest decision upon the point makes this view perfectly clear. In *Valley Lumber Co. vs. Driessel*, 13 Idaho, 662, 667, 93 Pac. 765, it is said: "The Court

did not hold in that case (*Katz vs. Herrick*) that such contracts were void, *but held that such contracts were not enforceable in the courts of this state by the noncomplying corporation*" (italics ours). This is exactly the holding of *Colby vs. Cleaver*, and without a strain is the only meaning that can be drawn from the language of the statute, which, as was remarked in that case, gives evidence of having been carefully chosen to express with precision the intention of the legislature to exclude certain features which it was thought might imperil the validity of the entire legislation.

IS A CAREY ACT PROJECT LIENABLE.

The next objection urged by the mortgagee is that irrigation works constructed under the provisions of the Carey Act are not subject to a mechanic's lien. It is conceded that such structures are within the literal terms of the lien laws, but it is argued that because such statutes in their original form were enacted prior to the passage of the Carey Act, it is not to be presumed that the legislature intended to extend the lien to structures of this character. The point has been ruled adversely to the present contention both by the Supreme Court of Idaho and by this court. *Nelson-Bennett Co., et al. vs. Twin Falls L. & W. Co.*, 14 Idaho, 5, 93 Pac. 789; *Pacific Coast Pipe Co. vs. Kings Hill Irrigation & Power Company*, (opinion filed in this court December 15, 1911). It is urged that the question presents a different aspect here because it is raised by the mortgagee, but when the argument is analyzed it is found that no consideration is advanced which could not with equal

or greater reason be brought forward by the constructing or owning company. [565] If it be conceded that in contracts for the construction of such projects the personal status and responsibility of the construction company are material considerations, and if the state has the right to insist that the particular company with which it contracts shall perform, and if therefore it need not recognize an assignee, the reasoning, when carried to its logical conclusion, is quite as cogent against a mortgage as against a mechanic's lien. It is immaterial that the mortgage may have been approved by some officer of the state, for of what advantage can that fact be to the state in case such mortgage is foreclosed, and what assurance has the state that a purchaser at a sale following a mortgage foreclosure will be any more to its liking than the purchaser at a sale under the foreclosure of a mechanic's lien? Nor does the fact that the constructing or owning company has executed a large number of contracts to divers persons for the sale of water rights in the system, go to the validity of the lien, however much it may impair the value thereof. As to both these contentions it is sufficient to say that neither the state nor the purchasers of water rights are before the Court, and therefore such rights as they may have will not be affected by a foreclosure decree. These are matters of no concern to the defendant. If, as argued, most of the water rights have been sold, and such rights are exempt from the plaintiff's lien, and if therefore a lien upon the canal system is upon an empty shell, of little or no value, and if the state is

not bound to recognize the purchaser at a foreclosure sale as the successor in interest to all of the construction company's rights, then, to be sure, there is need for solicitude on the part of the plaintiff, but not on the part of the mortgagee. The defendants' appeal to considerations of public policy is not highly persuasive. While the irrigation company is a quasi-public corporation, the service it renders is in character essentially the same as that of irrigation companies diverting and distributing water for irrigation purposes under the general laws [566] of the state, and in the one case no more than in the other is the public interest or the public welfare involved. I am therefore unable to see why we should with violence read into the comprehensive language of the statutes an exception in the one case if not in the other. It is of no consequence that "Carey Act Projects" were unknown when the lien statutes were enacted. Neither were railroads and telegraph lines known when the Constitution of the United States was adopted, but such instrumentalities are not therefore exempt from the operation on the interstate commerce clause of the Constitution. As I read Sections 5110 and 5111 of the Idaho Revised Codes, they clearly evince an intention on the part of the legislature to confer the right of lien upon all persons furnishing material or performing labor, except only such as are protected by the faith and credit of the public. By the latter section structures belonging to counties, cities, towns, and school districts, are expressly declared to be lienable for the claims of subcontractors, materialmen and laborers.

Original contractors are excepted, presumably for the reason that they may enforce their contracts against such municipal corporations by ordinary process, and of course they stand in no danger of loss on account of the insolvency of their debtors; they are therefore without need of protection by lien. Such being the declared policy of the State, the supposed reasons for which it was held in certain cases cited by the mortgagee that railroads were not subject to seizure and judicial sale, are inapplicable. It may be added that there is no purpose here, as in some of the railroad cases, to sell a portion only of a system and by dismemberment to destroy or greatly impair its value. The foreclosure of the plaintiff's lien will leave the entire system intact, and it will remain quite as serviceable to the public as it is under the present ownership. [567]

PERFORMANCE OF A CONTRACT.

The most serious consideration is presented by the contention that the plaintiff has not substantially performed its contract with the Irrigation Company, and that for that reason it is entitled to no relief of any kind. The right of the mortgagee to interpose this defense is questioned by the plaintiff, but I am inclined to think that it is quite as available to the mortgagee as to the Irrigation Company. It is to be added, however, that in the absence of fraud or collusion between the plaintiff and the Irrigation Company (of which there are here no proofs) the defendant mortgagee is bound by the construction which they placed upon the doubtful or uncertain provisions of the contract and by any waiver on the

part of the Irrigation Company of the strict performance thereof. Phillips on Mechanics' Liens (3d Ed.), Sec. 254. The evidence offered by the mortgagee tending to show defective work is voluminous and relates to features both of the dam and of the appurtenant canals. But as was frankly stated at the argument by counsel for the mortgagee, the defects, if any, in the distributing system are in any view of the case of a less serious nature than those in the dam; hence the latter alone need be discussed, for it follows as a matter of course that if these more important considerations do not afford a defense, then there is none in this branch of the case. It cannot be doubted that the dam as constructed is substantially wanting in efficiency for the purpose for which it was designed, and the only question is whether the blame therefor rests upon the plaintiff or upon the Irrigation Company and its engineer, Arnold & Company. Preliminarily, referring to an incidental question touching the burden of proof and the probative value of the certificates of the engineer upon which payments were made to the plaintiff from time to time as the work progressed, it is held that the burden was upon the plaintiff to make a *prima facie* showing of the substantial performance of its contract, [568] and further that the engineer's certificates are *prima facie* evidence of the amount of work done by, and of the amount of money due to, the plaintiff. The questions are of little importance at this time, for in any view the plaintiff made a *prima facie* case. It is further clear that if the plaintiff substantially com-

plied with the contract up to the time it wholly abandoned the work it was, by reason of the failure of the Irrigation Company to make payments, justified in declining to proceed further, and is entitled to compensation at the stipulated rate for the work actually performed.

THE DAM.

From the contract it is learned that the dam was designed to intercept and impound the water flowing in the Big Lost River. It is about 2,000 feet in length, terminating at one end in a rocky bluff adjacent to the river bed, and upon the other side of the river resting upon a gradual slope. It was contemplated that the maximum height of the embankment would be ——— feet, and the extreme width at the base ——— feet. It was in the main to be constructed of earth, but was to have a concrete core. It is recited and provided in the specifications that: "The solid rock at one end of the dam stands on a very steep slope, the lower part of which is covered with float rock, which will have to be excavated in order to allow the foundation of the concrete core-wall at the end of the dam to be bedded in solid rock. Along the river bed and on the opposite side of the rock there is a layer of gravel of varying thickness, averaging about fifteen feet. Underneath the gravel is a bed of impervious clay and gravel. From the base of the rock bluff, sheet piling is to be driven in the clay extending across the river and part way up the slope. From the termination of the sheet piling a trench is to be dug through the layer of gravel, and this trench back filled with material, making a bond

with the impervious material underlying the thin gravel layer at the higher elevations. The main fill is to be earth embankment, the upstream face protected by riprap." Even [569] with the comparatively shallow body of water impounded by the partially completed structure there is an excessive and dangerous subterranean discharge arising from percolation through the embankment itself, either due to the want of compactness, or the artificial structure not having been laid deep enough to make a close bond with a stratum of impervious material, the water percolates into the gravelly bed of the reservoir, and then seeps out beneath the base of the core-wall and constructed embankment.

Touching the embankment itself, the mortgagee assails the work of the plaintiff in two principal particulars: It is asserted (1) that the material was not deposited or put in place in the manner called for by the contract, and (2) that it was not properly "puddled." Confining our attention now to the first head, it is found that the earth embankment was formed by the use of steam shovels and cars, the material being procured within the reservoir site just above the dam and deposited in layers or lifts about fifteen feet deep to the full length and width of the embankment as designed. As I construe the specifications, they direct that to commence one of these lifts two trestles for the support of tracks shall be constructed substantially parallel to the core-wall, one along the lower toe and one along the upper toe of the embankment, and that from the cars passing over these trestles material shall be dumped until a

fill is raised to the level of the tracks, and thereupon the tracks shall be gradually shifted as there is need toward the core-wall, the plan being always to dump the material toward the center of the dam both from the lower and the upper trestle. So dumped the material would continuously fall upon a slope determined by the angle of repose, the object being to place all sloping strata toward the center of the embankment. It is further directed that care be taken to protect the concrete core against unequal earth pressure. Unquestionably to some extent the plaintiff deviated from the course thus prescribed, [570] in that, instead of erecting a trestle strong enough to carry its cars to the lower toe of the embankment it constructed a narrow fill diagonally from the upper toe to the lower toe, which it used as a roadbed for the track in the place of a trestle. This fill or roadbed was constructed by commencing it at the upper toe and elongating it diagonally toward the lower toe, as already stated, by dumping material from a car pushed out upon a temporary trestle, which, by shifting, was kept just in advance of the completed portion of the fill. The material used in making these diagonal fills was similar to that entering into all other parts of the dam, and consisted of a mixture in varying proportions of fine earth and sand, and gravel ranging from small pebbles to units several inches in diameter. The theory urged by the mortgagee is that by reason of the manner in which the material was deposited in these diagonal fills there was almost a complete separation of the fines from the coarse, and that the stratum of coarse

gravel and cobble stones thus formed, in effect constitutes a blind drain through which the water freely percolates. It is impracticable to analyze in detail the testimony adduced in support of this theory, and it must suffice to say that from the entire record, and in the light of reason and common observation, I am unable to escape the conviction that certain of the experts who testified upon behalf of the mortgagee sought to attach altogether too much importance to this feature of the work. It may be conceded that if this method had been generally adopted in the construction of the dam its efficiency and strength might have been measurably impaired. But such construction was limited and exceptional, and what was done was with the full knowledge and approbation of the chief representative in the field of Arnold & Company, if not of their managing engineer at Chicago. Moreover, it may be remarked in passing that in the method prescribed by the specifications for depositing the material there is no protection [571] against the separation of the coarse from the fines. Dumped upon the upper surface of a precipitously sloping embankment, the constant tendency would be for the finer particles to lodge near the top, and for the larger units upon becoming detached to roll to the bottom, thus forming a horizontal stratum of coarse material separating the upper and nether lifts. But however that may be, and if it be assumed that the engineer was without the power to authorize the deviation complained of, I am satisfied that this feature contributes little, if anything, to the inefficiency of the structure.

Passing now to the matter of puddling, we find that the specifications contain this provision: "The method of puddling this material shall be as follows: It is the intention to thoroughly wet the interior portion of the dam throughout a section of embankment which extends for a distance of thirty feet each side of the core-wall at the base of the dam, to the maximum height, with a width of six feet of wetted section on the crest of the dam, the limits being defined for various elevations of dam by straight lines drawn between these points. Such labor must be performed and plant furnished to carry out this wetting continuously during the forming of the embankment as is satisfactory to the engineer. The cost of this wetting, plus ten per cent, will be paid as hereinafter specified." It will be observed that the wetting or puddling was to be done by the plaintiff upon a "force account"; that is, it was to be paid the actual cost plus ten per cent. Clearly, it had no incentive to slight or economize upon the work; every incentive was the other way, for the larger the expenditure upon this account the larger its net profit. Moreover, the contract furnishes no clear or definite standard of the measure of the plaintiff's duty. Whether at any time the puddling was reasonably sufficient was a matter of judgment, and the question was one [572] peculiarly for the decision of a representative of the Irrigation Company, for upon it fell the burden of paying the expense. The puddling was to be such as was "satisfactory to the engineer." Arnold & Company's representative was upon the ground all the

time, and expressed no dissatisfaction with what was done; indeed, he in a large measure directed the work. Suppose the plaintiff, conceiving that that which was being done was insufficient, had insisted upon incurring a much larger expense, over the objection of the engineer; would it not have found his disapproval an insurmountable obstacle to the recovery of compensation? At least it is thought to be clear that in a matter of this character it was wholly justified in submitting to the judgment and in following the direction of the engineer in charge.

I am convinced that the vital defect in the dam is the absence of a bond between the superstructure and an impervious stratum underlying the bed of the reservoir, and that therefore it is of slight importance how the material in the earth embankment was deposited, or how much or how little puddling was done. While there may be very little direct evidence to this effect, from the testimony of the mortgagee's engineers touching the practicability of rendering the dam serviceable and from other features of the record, the inference is unavoidable that no alterations of or additions to the structure would avail unless connection were in some way made with an impervious foundation, and the uncertainty whether such a bond is feasible makes it doubtful whether the structure is of any value at all. The mortgagee seeks to attach to the plaintiff the responsibility for the defect, but in this view I am unable to concur. While it is true that by certain general language of the contract it is directed that the artificial structure be connected with an im-

pervious stratum, the drawings attached, by unmistakable marks and notations indicate the depth [573] to which it was contemplated the excavation should be made. In work of such importance it was but reasonable for the plaintiff to assume that before these plans were drafted and before the contract was executed the engineers for the Irrigation Company had, by borings or other means, informed themselves of the nature of the subjacent strata, and had intelligently decided that the site was practicable, and that the depth noted upon the plans was at least probably sufficient. But apart from this consideration Arnold & Company, the engineer, was at all times represented upon the ground, and by one of such representatives the plaintiff was specifically informed as to the depth the concrete core should be sunk, and his successor was present when the excavations were made and the foundation was laid, and either expressly or tacitly gave his approval. Indeed there is no suggestion that the plaintiff deceived the engineers or deviated from their instructions, but when analyzed the argument is that it should, upon its own responsibility, have determined whether the material was suitable for a foundation or not. It is important to note in this connection that under the contract the plaintiff was not being paid a lump sum for the job, but its compensation was to be at a stipulated rate per cubic yard. There is no intimation that at such price the work could not be profitably done, and consequently there could have been no motive of self-interest actuating the plaintiff to curtail the extent of it. It would be

wholly unreasonable and highly unjust to require it, in the face of explicit instructions of the engineer, to exercise its own judgment as to the necessary depth for the core-wall. It would have pursued such a course at the greatest peril, for in seeking recovery for the extra work thus done it could have been assailed with the charge that its motive for violating the instructions of the engineer was to increase the yardage, to its pecuniary advantage, and it might be a matter of the greatest difficulty to show that the engineer's judgment was erroneous. But however that may be, I [574] have no hesitation in holding that the plaintiff was wholly justified in abiding by the decision and following the directions of the engineer in a matter of discretion so peculiarly involving the exercise of judgment and professional skill. The plaintiff was not an expert in the art of dam building, and did not represent itself to be such; it did not assume to underwrite but only to execute the plans adopted by the Irrigation Company. The construction and interpretation of these plans it was obligated to take, and it did take, from the engineer employed and designated by the Irrigation Company to perform that function and to supervise the work.

There is no merit in the contention that the plaintiff was bound to procure, and could be protected only by, a written interpretation and written instructions from the chief or consulting engineer of Arnold & Company in Chicago. The Irrigation Company designated the corporation Arnold & Com-

pany as its engineer, and Arnold & Company maintained upon the project a corps of engineers, the chief of whom is to be regarded as having had charge of the work in the field. He assumed and exercised the right of directing the work, and of giving instructions to the plaintiff, and by the plaintiff he was recognized as having authority so to do. True, it was understood both by himself and the plaintiff that he was subject to the superior authority of the home office and of the chief engineer of Arnold & Company in charge of irrigation projects, but it is clear that by all parties in interest he was regarded as the representative of Arnold & Company in the field, and that his instructions while acting within the scope of his authority to supervise the work under the contract, were binding until they were revoked or modified by his superiors. Arnold & Company's governing board was not in the field; its chief engineer was in Chicago most of the time, and was upon the ground only upon two or three different occasions. The Irrigation Company, through Trowbridge & [575] Niver, its fiscal agents, and through Arnold & Company, its engineer, was urging the plaintiff to rush the dam to completion. How was the plaintiff to procure the judgment of an engineer thousands of miles away in Chicago as to the sufficiency of any given stratum to serve as the foundation for the dam? The puddling which was going on continuously was to be done to the satisfaction of the engineer. If Rosecrans in Chicago is deemed to be the only engineer having power to pass upon the sufficiency of the work how

was the plaintiff to secure an expression of his satisfaction with the puddling and with the other work in the course of construction? Enough has been said to make it clear that for the purpose of interpreting and applying the provisions of the contract to the conditions upon the ground as there was need from day to day as the work progressed, authority was vested in the chief engineer upon the ground; such must have been the understanding of all parties.

My conclusion upon the whole matter is that the responsibility for the inefficiency of the dam does not rest upon the plaintiff, but is apparently chargeable to a want either of skill or of care upon the part of the engineer. I say *apparently* chargeable to the engineer, for in view of the fact that Arnold & Company is not a party to this suit, but has pending in this court an action for the recovery of compensation under its contract with the Irrigation Company, it would not be proper to form an unqualified opinion touching its rights or to indulge in the expression of criticism warranted by the present record, but which might turn out to be harsh or unjust in the light of the explanation or showing it may be able to make when it has its day in court.

For the foregoing reasons the decree will be in favor of the plaintiff and the intervenor. Minor questions relating to the exact amount due to each of these parties, including attorneys' fees, are reserved for further consideration. In the meantime the [576] solicitor for the prevailing parties will draft a form of decree and submit the same to other counsel in the case.

(Although the general conclusion herein expressed has already been announced, in view of the large interests involved, I have thought it to be due to the parties briefly to indicate the reasons for such conclusion; hence this opinion, the preparation of which has been delayed by the press of other duties.)

Dated this 4th day of November, 1912.

[Endorsed]: Filed September 4, 1912. [577]

[Final Decree.]

*In the District Court of the United States, in and for
the District of Idaho, in the Ninth Circuit.*

COREY BROS. CONSTRUCTION COMPANY, a
Corporation,

Plaintiff,

vs.

BIG LOST RIVER IRRIGATION COMPANY, a
Corporation, THE CONTINENTAL AND
COMMERCIAL TRUST AND SAVINGS
BANK (Formerly THE AMERICAN
TRUST AND SAVINGS BANK), a Cor-
poration, NEPHI HANSEN and EPH-
RIAM HANSEN, Copartners Under the
Firm Name and Style of HANSEN BROS.,
K. L. MOLEN and R. E. KUTLER, Copart-
ners Under the Firm Name and Style of
MOLEN & KUTLER, J. W. CURD and N.
FOSS, Copartners Under the Firm Name
and Style of CURD & FOSS, K. L. MOLEN
and JESSE MOLEN, Copartners Under the

Firm Name and Style of MOLEN & MOLEN,
DAVID CHAMBERLAIN and THOMAS
CHAMBERLAIN, Copartners Under the
Firm Name and Style of CHAMBERLAIN
BROS., FRANK HESS, S. H. WALTON,
F. L. PINNEY, WILLIAM MOONEY and
FRANK H. JONES,

Defendants,

And

UNION PORTLAND CEMENT COMPANY, a
Corporation,

Intervener.

This cause came on regularly to be heard at this September term of court, 1912, upon the pleadings and evidence and upon all the records on file, and was argued by counsel, and thereupon, on consideration thereof, and the Court being fully advised in the premises, it was ORDERED, ADJUDGED AND DECREED as follows, to wit:

1. That the plaintiff, Corey Bros. Construction Company, do have and recover from the defendant, Big Lost River [578] Irrigation Company, the sum of \$522,884.03, together with interest thereon at the rate of seven per cent per annum from the 15th day of August, 1910, making a total of \$609,444.03; and also \$16,000.00 as attorney's fees. That the intervener, Union Portland Cement Company, do have and recover from the defendant, Big Lost River Irrigation Company, the sum of \$13,774.56, together with interest thereon at the rate of seven per cent per annum from the 15th day of August, 1910, making a total of \$16,054.40; and also \$1,000.00 as attorneys'

fees. And that the plaintiff, Corey Bros. Construction Company, and the intervener, Union Portland Cement Company, do have and recover from the defendant, Big Lost River Irrigation Company, their costs of suit, taxed at \$500.00.

2. IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the plaintiff, Corey Bros. Construction Company, and the intervener, Union Portland Cement Company, are entitled to and have a first charge and lien for the security and payment of the above sums of money, upon the following described property, to wit:

All of the following lands in Custer County, State of Idaho: The Northeast Quarter of the Southeast Quarter (NE. $\frac{1}{4}$ SE. $\frac{1}{4}$) of Section Three (3), Lot Three (3) of Section Four (4), the Southeast Quarter of the Northeast Quarter (SE. $\frac{1}{4}$ NE. $\frac{1}{4}$) of Section Five (5), the Northwest Quarter of the Northwest Quarter (NW. $\frac{1}{4}$ NW. $\frac{1}{4}$), and the South Half of the Northwest Quarter (S. $\frac{1}{2}$ NW. $\frac{1}{4}$) of Section Eleven (11), Township Seven (7) North, Range Twenty-three (23) East; the Southwest Quarter (SW. $\frac{1}{4}$) of Section Thirty-three (33), Township Eight (8) North, Range Twenty-three (23) East, Boise Meridian, in all 405.25 acres, more or less, which lands upon the construction of the Company's impounding dam will be flooded, and will then become and thereafter be lands under water, forming an integral part of said irrigation system.

All the reservoirs, dams, canals, ditches laterals, head-gates, [579] coulees, draws, flumes, rights of

way and of flowage, easements, permits, privileges and franchises for dams, reservoirs, canals, ditches, and laterals, and, in general, the entire irrigation works, project, and system in Blaine, Bingham, Custer and Fremont Counties, State of Idaho, consisting of about two hundred miles of main and lateral canals and ditches, commonly known as the Big Lost River Irrigation System, together with all franchises and powers, privileges and appurtenances connected therewith.

All the right to divert and use the waters of the Big Lost River and Antelope Creek in the State of Idaho, and all other rights under the following permits:

Permit No. 1507, to appropriate the waters of Big Lost River and its tributaries to an amount equivalent to a continuous flow of one thousand (1,000) cubic feet per second, as the same appears of record in the office of the State Engineer of the State of Idaho in Book 5 of Permits, at page 1507;

Permit No. 1513, to appropriate the waters of Antelope Creek to an amount equivalent to a continuous flow of one hundred (100) cubic feet per second, as the same appears of record in the office of the State Engineer of the State of Idaho in Book 5 of Permits, at page 1513;

Permit No. 1748, to appropriate the waters of Big Lost River and its tributaries to an amount equivalent to a continuous flow of two hundred (200) cubic feet per second, as the same appears of record in the office of the State Engineer of the State of Idaho, in Book 6 of Permits, at page 1748;

Permit No. 4061, being an amendment to Permit No. 1507, to appropriate the waters of the Big Lost River and its tributaries, as the same is of record in the office of the State Engineer of the State of Idaho, in Book 11 of Permits, at page 4061. [580]

Permit No. 4062, being an amendment of Permit No. 1513, to appropriate the waters of Antelope Creek, as the same appears of record in the office of the State Engineer of the State of Idaho, in Book 11 of Permits, at page 4062.

Permit No. 4063, being an amendment to Permit No. 1748, to appropriate the waters of the Big Lost River and its tributaries, as the same appears of record in the office of the State Engineer of the State of Idaho, in Book 11 of Permits, at page 4063.

Permit No. 4946, to appropriate the waters of Big Lost River and its tributaries to an amount equivalent to a continuous flow of one thousand (1,000) cubic feet per second, as the same appears of record in the office of the State Engineer of the State of Idaho, in Book 14 of Permits, at page 4946.

Permit No. 4960, to appropriate the waters of Antelope Creek to an amount equivalent to a continuous flow of five hundred (500) cubic feet per second, as the same appears of record in the office of the State Engineer of the State of Idaho, in Book 14 of Permits, at page 4960.

Permit No. 4101, to the Mackay Irrigation Company, Limited, for water out of Big Lost River, as the same appears of record in the State Engineer's office of the State of Idaho.

That certain right of way for the Big Lost River

Reservoir situated in Townships 7 and 8 North, Range 23 east, Boise Meridian, Custer County, State of Idaho, approved by the Acting Secretary of the Interior, August 2d, 1906, for a more particular description of which reservoir reference is hereby made to the map and field-notes thereof filed in the United States Land Office at Hailey, Idaho, on the first day of August, 1905, and to the field-notes of the survey thereof, with witness points and witness corners of Townships 7 and 8 North, Range 23 East, Boise Meridian, filed in said office July 13th, 1908; and to the amended map and amended field-notes [581] showing the definite location of said reservoir, filed in the United States Land Office at Hailey, Idaho, on the 18th day of June, 1909.

That certain right of way for the Big Lost River Canals, situated in Townships 3, 4, 5 and 6 North, Ranges 25, 26 and 27 East, Boise Meridian, in Blaine and Custer Counties, State of Idaho, approved by the Acting Secretary of the Interior August 2d, 1906, for a more particular description of which right of way reference is hereby made to the map and field-notes thereof, filed in the United States Land Office at Hailey, Idaho, on the first day of August, 1905.

That certain right of way for the Lower Big Lost River Reservoir in Sections 21 and 28, Township 3 North, Range 27 East, Boise Meridian, approved by the Secretary of the Interior on April 27, 1906, for a more particular description of which reservoir reference is hereby made to the map and field-notes thereof, filed in the United States Land Office at Hailey, Idaho.

That certain right of way for the Lower Big Lost River Canals, situated in Township 3 North, Range 27 East, Boise Meridian, in Blaine County, State of Idaho, approved by the Commissioner of the General Land Office by letter F, dated April 20th, 1906, for a more particular description of which right of way reference is hereby made to the map and field-notes thereof, filed in the United States Land Office at Hailey, Idaho.

That certain right of way for the Antelope Reservoir situated in Township 4 North, Range 24 East, Boise Meridian, in Blaine and Custer Counties, State of Idaho, application for which was filed in the United States Land Office, Hailey, Idaho, on June 18th, 1909, for a more particular description of which reservoir reference is hereby made to the map and field-notes thereof filed in said land office on said day. [582]

All the rights, grants, interests, privileges, easements and franchises acquired by the Big Lost River Irrigation Company under or in that certain contract dated May 27th, 1909, made by and between the State of Idaho, through its State Board of Land Commissioners, and George S. Speer, and by said George S. Speer transferred and assigned to the Big Lost River Irrigation Company, for the construction of an irrigation system and works for the reclamation under the provisions of the Carey Act of approximately one hundred thousand (100,000) acres of land in the Big Lost River Valley in the Counties of Custer, Blaine, Bingham and Fremont in the State of Idaho; as well as any amendment to the above mentioned

present contract, for the construction of irrigation works and systems in Idaho under the Carey Act, constituting extensions or additions to its said present system.

All right, title, and interest in and to said Idaho State Desert Land List No. 31, made by George S. Speer under the name of G. S. Speer to the State Board of Land Commissioners of Idaho, for the irrigation of the lands mentioned in said list, which said list is on file with the State Board of Land Commissioners of the State of Idaho.

Also all lands mentioned in Segregation List No. 8, which are more fully described in those articles of agreement made on the 27th day of February, A. D. 1907, by and between E. A. Hitchcock, Secretary of the Interior, for and on behalf of the United States of America, party of the first part, and Frank R. Gooding, Governor of the State of Idaho, for and on behalf of the State of Idaho, party of the second part, for a more full description of which lands reference is hereby made to said articles of agreement as they appear on file and of record with the State Board of Land Commissioners of the State of Idaho.

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Also all lands mentioned in Segregation List No. 18, which lands are more fully described in those articles of agreement made and entered into on the second day of July, A. D. 1908, by and between Frank Pierce, Acting Secretary of the Interior, for and on behalf of the United States of America, party of the first part, and Hon. F. R. Gooding, Governor, for and on behalf of the State of Idaho, party of the

second part, and for a more full description of said lands reference is hereby made to said articles of agreement as they appear of record and on file with the State Board of Land Commissioners of the State of Idaho.

3. IT IS FURTHER ORDERED, ADJUDGED AND DECREED, That the liens of the plaintiff, Corey Bros. Construction Company, and the intervener, Union Portland Cement Company, are valid and subsisting liens upon all the property hereinbefore described and are prior and superior to the mortgage liens held by the defendants, The Continental and Commercial Trust and Savings Bank, formerly the American Trust and Savings Bank, and Frank H. Jones, one of which Trust Deeds bears date of July first, 1909, and was recorded in the office of the County Recorder of Bingham and Blaine Counties on the third day of September, 1909, and recorded in the office of the County Recorder of Fremont County, on the fourth day of September, 1909, and in the office of the County Recorder of Custer County on the eighth day of September, 1909, which mortgage or trust deed was given to secure two million dollars' worth of bonds; and also that certain trust deed which bears date of January first, 1910, given to secure \$400,000.00 worth of bonds, and which was thereafter filed in the County Recorder's office of the Counties of Blaine, Bingham, Fremont, and Custer, of the State of Idaho, and in which the defendants, Continental and Commercial Trust and Savings Bank, formerly the American Trust and Savings Bank, and Frank H. Jones, are named as

trustees. That the said mechanics' liens of the plaintiff, Corey [584] Bros. Construction Company, and the intervener, Union Portland Cement Company, are superior to and prior to any of the claims or liens of the other defendants hereinbefore named.

4. IT IS FURTHER ORDERED, ADJUDGED AND DECREED, That the defendant, Big Lost River Irrigation Company, shall, within five days after the entry of this decree, pay or cause to be paid to the Clerk of this Court, for the use and benefit of the plaintiff, Corey Bros. Construction Company, and the intervener, Union Portland Cement Company, the sums of money hereinbefore mentioned, together with interest thereon, from the date of the entry of this decree to the time of payment of said money. That unless said payment as hereinbefore provided shall be made by the defendant, Big Lost River Irrigation Company, or by any other defendants in this cause, or by anyone in their behalf, within the time and in the manner directed aforesaid, that all the property hereinbefore described be sold as hereinafter directed, to satisfy said claims of the plaintiff, Corey Bros. Construction Company, and said intervener, Union Portland Cement Company, and that under and by said sale all equity of redemption of the defendants, and of any and all persons claiming by, through, or under said defendants, or either of them, or represented by any of the parties hereto, of, in, and to said property, lands, rights, and franchises, be foreclosed and cut off and forever barred, and that said property

be sold as an entirety and in one parcel, without valuation, appraisement or redemption, at public auction, to the highest bidder or bidders, at the courthouse in Hailey, County of Blaine, State of Idaho, on a day or days to be fixed by the Special Master of this Court, and public notice of such sale and the time and place thereof, together with the manner and the terms upon which said sale is to be conducted, shall be given by said Special Master in the manner following, to wit: By advertisement, which shall describe briefly the property to be sold, [585] the terms of this decree, the time and place at which the sale is to be made, and the terms and conditions upon which it is to be conducted, which advertisement shall be published once a week in two newspapers published in the Counties of Blaine and Bingham, in the State of Idaho, for a term of four weeks preceding the day of sale, the first publication of which shall be at least thirty days before the day of sale. The said Special Master shall have the power and right to adjourn and postpone said sale from time to time, and may without further notice proceed with the said sale, on any date to which the same may have been adjourned, and may, at his option, give such further notice of sale in addition to the notice above described as he may think proper or as the plaintiff and intervenor may request. That any party to this action may become a bidder or purchaser at said sale. That said sale shall be for cash, ten per cent to be payable at the time of said sale and the balance to be paid at the time of the confirmation by this Court of said sale. That if the plaintiff, Corey

Bros. Construction Company, and the intervener, Union Portland Cement Company, or either of them, shall bid in said property, then and in that case said bidder or bidders shall be entitled to have their judgments, or so much thereof as may be necessary, credited upon such bid instead of paying cash. But in the event said property shall be bid in by the plaintiff, Corey Bros. Construction Company, or by the intervener, Union Portland Cement Company, or said parties shall both bid in said property, then in that case said bidder or bidders shall pay to the Special Master making said sale sufficient moneys to pay, satisfy and discharge any unpaid compensation which has been or shall be allowed by the Court to the Receiver herein, and all unpaid indebtedness, obligations and liabilities, if any there be, which have been legally contracted or incurred by said Receiver at any time before the confirmation of said sale; and shall also pay [586] in sufficient money to pay the cost of making said sale and all the expenses of the Special Master incurred herein, and also sufficient moneys to pay the fees allowed to plaintiff's and intervener's counsel.

5. IT IS FURTHER ORDERED, ADJUDGED AND DECREED, That the funds arising from the sale of said premises shall be applied as follows: To the payment of the proper costs of this suit; Receiver's compensation, including attorneys' fees for said Receiver, and all obligations of said Receiver legally incurred; and the expenses of the sale herein; and the payment of the taxes due on said property; and also the attorneys' fees allowed for the foreclos-

ing of said mechanic's lien; and the balance realized on the said sale shall be applied to the payment of the principal and interest so found due to the plaintiff, Corey Bros. Construction Company, and the intervener, Union Portland Cement Company, and if, after making the foregoing payments, there shall be any surplus remaining, then the same shall be held and applied as the Court shall thereafter order and direct.

6. IT IS FURTHER ORDERED, ADJUDGED AND DECREED, That upon the payment of the purchase price by the purchaser or purchasers of said property, that said Special Master shall execute and deliver a deed, conveying the property purchased, to said purchaser, or purchasers, or his or their successors or assigns, and upon the execution and delivery of such deed the grantee thereunder shall be let into the possession of the premises conveyed. This possession shall, nevertheless, be subject to the condition that this Court may retake and recall the property conveyed, in case the purchaser or purchasers, his or their successors or assigns, shall fail to pay any balance on the purchase price remaining unpaid, or to settle the claims of the Receiver, or to comply with any other [587] provision contained in this decree. That the purchaser or purchasers, and his or their successors or assigns, shall, after such delivery of the premises, hold and enjoy and possess said premises and property and all the rights, privileges and immunities and franchises thereto appertaining, free and clear of any lien or liens of the trust deeds or mortgages held by the

Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees, which trust deeds bear date of July first, 1909, for \$2,000,000.00, and January first, 1910, for \$400,000.00, and that said purchaser or purchasers shall thereupon be entitled to have and to hold the said premises so conveyed, free and discharged from all the liens of all the parties to this suit, and those claiming under them.

7. IT IS FURTHER ORDERED, ADJUDGED AND DECREED, That the defendant, Big Lost River Irrigation Company, at the time of the execution of the said deed by said Special Master, as a further assurance to the purchaser or purchasers, execute its deed or join with said Special Master in the execution of the deed to be made by him, and shall thereby convey and release to the purchaser or purchasers, and his or their successors or assigns, all its right, title and interest in and to the property conveyed by said Special Master to the said purchaser or purchasers.

8. IT IS FURTHER ORDERED, ADJUDGED AND DECREED, That in case the proceeds of said sale shall prove to be insufficient to provide for the payment in full of the sums hereinbefore mentioned and described, then said Special Master shall find and report to this Court the amount of such deficiency or deficiencies and the person or persons to whom such deficiency or deficiencies are payable, and such report being confirmed by this Court, such person or persons as may be found thereby to be entitled to the terms of the said deficiency or deficiencies,

shall have judgment therefor [588] against the defendant, Big Lost River Irrigation Company, for such amount so found to be payable, and shall be entitled to execution therefor, pursuant to the rules and practice of this Court.

9. IT IS FURTHER ORDERED, ADJUDGED AND DECREED, That JAMES E. CLINTON, Receiver in this Action, be, and he is hereby appointed Special Master, to execute this decree and make the said sale, and execute and deliver the deeds of conveyance of the property sold, to the purchaser or purchasers thereof. As soon as any sale shall have been made by the said Special Master in pursuance of this decree, he shall report the same to this Court for confirmation, and shall from time to time thereafter make such further supplemental reports as shall be necessary to keep the Court and the parties to this suit properly advised of his proceedings in the execution of this decree.

Dated this 27th day of December, A. D. 1912.

FRANK S. DIETRICH,
Judge.

[Endorsed]: Filed December 27, 1912. [589]

[Title of Court and Cause.]

Petition for Appeal.

COME NOW the defendants, Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees, and conceiving themselves aggrieved by the decree made and entered on the 27th day of

December, A. D. 1912, in the above-entitled cause, do hereby appeal from said order and decree to the United States Circuit Court of Appeals for the Ninth Circuit, for the reasons specified in the Assignment of Errors, which is filed herewith, and said defendants pray that this appeal may be allowed and that citation issue as provided by law, and that a transcript of the record, proceedings and papers upon which said decree was based, duly authenticated, may be sent to the United States Circuit Court of Appeals for the Ninth Circuit. [590]

MAYER, MEYER, AUSTRIAN & PLATT,

Chicago, Illinois,

AMOS C. MILLER,

Chicago, Illinois,

RICHARDS & HAGA,

Boise, Idaho,

Solicitors for Defendants, Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees.

AMOS C. MILLER,

O. O. HAGA,

Of Counsel for said Defendants.

Order Allowing Appeal.

And now, to wit, on the 26th day of March, 1913, IT IS ORDERED that the petition be granted and the appeal allowed, as prayed for.

FRANK S. DIETRICH,

District Judge.

[Endorsed]: Filed March 26, 1913. [591]

[Title of Court and Cause.]

Assignment of Errors.

And now come the defendants, The Continental and Commercial Trust and Savings Bank, and Frank H. Jones, as Trustees, and having prayed an appeal to the United States Circuit Court of Appeals for the Ninth Circuit from the decree entered in the above cause on the 27th day of December, A. D. 1912, say, that the said decree made and entered as afore-said is erroneous and unjust to these defendants, and particularly in this:

1. Because the District Court erred in adjudging and decreeing that the plaintiff, Corey Bros. Construction Company, recover of the defendant Big Lost River Irrigation Company the sum of \$522,884.03 with interest, making a total of \$609,444.03, and the sum of \$16,000.00 as attorneys' fees, and in [592] adjudging that the plaintiff was entitled to recover either of said sums, or any part thereof.

2. Because the said Court erred in adjudging that the Union Portland Cement Company recover of the defendant, Big Lost River Irrigation Company, \$13,774.56, together with interest, making a total of \$16,054.40, and \$1,000.00 attorneys' fees, and in adjudging that the plaintiff was entitled to recover either of said sums, or any part thereof.

3. Because said Court erred in adjudging that the plaintiff, Corey Bros. Construction Company, and the intervener, Union Portland Cement Company, recover of the defendant the costs of the suit, taxed at \$500.00.

4. Because the said Court erred in adjudging and decreeing that the said Corey Bros. Construction Company are entitled to and have a first lien for the security and payment of said sums upon the property described in the final decree herein.

5. Because the said Court erred in adjudging and decreeing that the said Corey Bros. Construction Company and Union Portland Cement Company are entitled to a lien upon the contract dated May 27th, 1909, between the State of Idaho and George S. Spear, and by Spear transferred to the Big Lost River Irrigation Company, for the construction of an irrigation system and works, and the reclamation under the Carey Act of approximately 100,000 acres of land in the Big Lost River Valley, and the amendments to said contracts; and in adjudging that said contract be sold for the payment of the claims of said Corey Bros. Construction Company and Union Portland Cement Company.

6. Because the said Court erred in adjudging and decreeing that said Corey Bros. Construction Company and Union Portland [593] Cement Company are entitled to a lien for the payment of the sums due them upon the Idaho State Desert Land List No. 31, made by George S. Spear, under the name of G. S. Spear; and in adjudging that said list be sold for the payment of the claims of said Corey Bros. Construction Company and Union Portland Cement Company.

7. Because said Court erred in adjudging and decreeing that said Corey Bros. Construction Company and Union Portland Cement Company are en-

titled to a lien for the payment of said claims on all lands in Segregation List No. 8, described in the agreement of the 27th day of February, 1907, between E. A. Hitchcock, Secretary of the Interior, on behalf of the United States and Frank R. Gooding, on behalf of the State of Idaho; and in adjudging that said lands be sold for the payment of the claims of Corey Bros. Construction Company and Union Portland Cement Company.

8. Because said Court erred in adjudging and decreeing that the said Corey Bros. Construction Company and Union Portland Cement Company are entitled to a lien for the payment of their said claims on all lands mentioned in Segregation List No. 18, more fully described in the agreement dated July 2, 1908, between Frank Pierce, Acting Secretary of the Interior, on behalf of the United States, and the Hon. F. R. Gooding, Governor of Idaho, on behalf of the State of Idaho, and in decreeing that said lands must be sold for the payment of such claims.

9. Because said Court erred in adjudging and decreeing that Corey Bros. Construction Company and Union Portland Cement Company have liens on the property described in said decree superior to the mortgage liens held by the Continental and Commercial [594] Trust and Savings Bank and Frank H. Jones, under two trust deeds, one of which is dated July 1st, 1909, recorded in the office of the County Recorder of Bingham and Blaine Counties, September 4th, 1909, and of Custer County, September 8th, 1909, which trust deed was given to secure

Two Million Dollars (\$2,000,000.00) of bonds; and the other of which trust deed bears date of January 1st, 1910, given to secure Four Hundred Thousand Dollars (\$400,000.00) of bonds, and thereafter filed in the County Recorder's office in the Counties of Bingham, Blaine, Fremont and Custer, the same parties being trustees.

10. Because the said Court erred in adjudging and decreeing that unless payment be made of the claims of the said Corey Bros. Construction Company and Union Portland Cement Company within five days, the property described in said decree be sold, and that by said sale the equity of redemption of defendants and all persons claiming by, through or under them, in and to said property, lands, rights and franchises be cut off and barred.

11. Because the Court erred in not fixing and determining the amount of the unpaid indebtedness, obligations and liabilities legally contracted or incurred by the Receiver, and in not decreeing that such ascertained amounts be paid by Corey Bros. Construction Company or Union Portland Cement Company, or the one of them who shall bid at the sale provided for in said decree, in the event that either of the said parties shall bid at the said sale.

12. Because the said Court erred in adjudging and ordering that upon the payment of the purchase price by the purchaser or purchasers at such sale, said Special Master shall execute and deliver a deed conveying the property described in the decree and sold at the said sale to the purchaser or purchasers.

13. Because the said Court erred in adjudging that such purchaser or purchasers might be let into possession of the property as described in the decree and sold at said sale before the entire purchase price was paid or the claims of the Receiver settled.

14. Because the said Court erred in adjudging and decreeing that the purchaser at such sale shall hold and possess the property rights, privileges and franchises described in the decree and to be sold at the sale free and clear of the lien of the aforesaid trust deeds.

15. Because the said Court erred in adjudging and decreeing the Big Lost River Irrigation Company should execute its deed, or join with the Special Master in the execution of a deed to be made by him, conveying or leasing to the purchaser or purchasers at the said sale, all its right, title and interest in and to the property to be sold at said sale.

16. Because the said Court erred in appointing James E. Clinton, Receiver of the Big Lost River Irrigation Company, Special Master to execute said decree and make said sale.

17. Because the said Court erred in not specifically exempting from the property upon which said Corey Bros. Construction Company and said Union Portland Cement Company are entitled to a lien for the payment of their said claims, and which property is decreed to be sold to satisfy said claims, all contracts by settlers upon the lands irrigated and to be irrigated by said Big Lost River Irrigation Company's works, and said Big Lost River Irrigation Company; and in not exempting from the said prop-

erty to be sold all sums still due upon said contracts.

18. Because the said Court erred in finding that Corey Bros. Construction Company had complied or specifically complied [596] with its contract with the Big Lost River Irrigation Company for the construction of the dam and irrigation works and canals.

19. Because the said Court erred in not finding that the said Corey Bros. Construction Company failed to comply with the said contract with the Big Lost River Irrigation Company in failing to dump all materials toward the core-wall or center of the dam from a trestle in either toe thereof and parallel thereto; in failing to properly wet or puddle the materials of which said dam was composed; in failing to sink or extend the core-wall of said dam to impervious material; in failing to extend the back-filled trench down to impervious material, or to material that would sufficiently hold water; in dumping excavated rock within the lines of the dam and so near the core-wall thereof as to interfere with proper puddling and settling of the material; in excavating borrow-pits too near the dam; in failing to drive sheet piling to impervious material below the dam; and that by reason of such failures on the part of Corey Bros. Construction Company the said dam failed to hold water, and failed to fulfill the purpose for which it was made, and resulted in the State of Idaho stopping the work upon such dam, and thereby rendering useless and unavailable all the work done upon such irrigation system.

20. Because the said Court erred in not finding that said Corey Bros. Construction Company com-

mitted such material departures from its contract with the Big Lost River Irrigation Company for the construction of the dam and controlling works and system of canals and laterals that the said dam and irrigation system were rendered useless for the purpose for which they were designed, and resulted in the work thereon being stopped by the State of Idaho and the system being left in an unfinished [597] condition so that it is useless as an irrigation system.

21. Because the said Court erred in not finding that said Corey Bros. Construction Company failed to employ, in constructing the dam and reservoir and irrigation system, workmanship which was first class, or competent supervision, but that on the contrary it furnished inferior workmanship, and the work was so poorly supervised that the said dam and reservoir and irrigation system failed to fulfill the purpose for which it was designed.

22. Because the said Court erred in not finding and decreeing that said Corey Bros. Construction Company entered into the contract in question with the Big Lost River Irrigation Company for the construction of the Big Lost River reservoir, dam and irrigation system at a time when the said Corey Bros. Construction Company had not complied with the laws of the State of Idaho relating to foreign corporations, or secured a license to do business within the State of Idaho; and that said Corey Bros. Construction Company, pursuant to the contract, entered upon the execution of said contract within the State of Idaho before it, the said Corey Bros. Construction Company, had complied with said laws of the State

of Idaho relating to foreign corporations, or secured such license, and that thereby the said Corey Bros. Construction Company is barred from maintaining a suit upon said contract.

23. Because the said Court erred in not holding that the contract bearing date August 26th, 1910, between Corey Bros. Construction Company and the Big Lost River Irrigation Company for the construction of the Big Lost River reservoir, dam and irrigation system was by reason of the fact that the said Corey Bros. Construction Company had not, when it entered into and [598] began the execution of said contract, complied with the laws of Idaho relating to foreign corporations, or secured a license to do business in the State of Idaho.

24. Because the said Court erred in not holding that it was without jurisdiction in this cause, because the record shows that there are indispensable parties whose interests are adverse to those of the complainant and whose residence and citizenship are the same as that of the plaintiff, but which parties have not been made defendants.

25. Because the said Court erred in holding that the irrigation works constructed under the provisions of the Carey Act are subject to mechanics' liens and may be sold to satisfy the claim of a contractor who has furnished labor and material in the construction of the same.

26. Because the said Court erred in finding that the deviations from the contract of the Big Lost River Irrigation Company by the Corey Bros. Construction Company was acquiesced in or waived by

the said Irrigation Company.

27. Because the said Court erred in holding that the failure of the dam constructed by said Corey Bros. Construction Company for the Big Lost River Irrigation Company on its said contract, was due solely to the absence of a bond between the superstructure and an impervious stratum underneath.

28. Because the said Court erred in finding that the failure of said Corey Bros. Construction Company to construct a sufficient bond between the superstructure of the dam in question and the impervious stratum underneath was waived or acquiesced in by said Big Lost River Irrigation Company.

29. Because the said Court erred in holding that the Corey Bros. Construction Company was not, and did not represent itself [599] to be, an expert in dam building.

30. Because said Court erred in holding that the resident engineers employed by the Arnold Company and stationed upon the work being conducted by the Corey Bros. Construction Company in the construction of the irrigation works of the Big Lost River Irrigation Company, had authority to authorize deviations from its said contracts by said Corey Bros. Construction Company, and that such deviations might be lawfully authorized by Arnold & Company, or their agents, otherwise than in writing.

31. Because the said Court erred in holding that the inefficiency of the dam in question was not due to the manner in which Corey Bros. Construction Company executed its contract and performed such construction work, but to the lack of skill or care of the

engineer, Arnold & Company.

WHEREFORE, these defendants pray that said decree be reversed and set aside and the District Court directed to dismiss complainant's bill and the bill in intervention filed by the Union Portland Cement Company.

MAYER, MEYER, AUSTRIAN & PLATT,
Chicago, Illinois,
AMOS C. MILLER,
Chicago, Illinois,
RICHARDS & HAGA,
Boise, Idaho,

Solicitors for Defendants, Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees.

AMOS C. MILLER,
O. O. HAGA,

Of Counsel for said Defendants. [600]

Service of the foregoing Assignment of Errors, and receipt of copy thereof, admitted this 26th day of March, 1913.

H. H. HENDERSON,
Solicitors for Complainant, and Union Portland Cement Company, Intervener.

[Endorsed]: Filed March 26, 1913. [601]

[Title of Court and Cause.]

Bond on Appeal.

KNOW ALL MEN BY THESE PRESENTS, That we, the Continental and Commercial Trust and Savings Bank, a corporation, and Frank H. Jones,

all of Chicago, State of Illinois, as Trustees, and as principals in this obligation, and the Boise Title and Trust Company, a corporation, with its principal place of business at Boise, Idaho, as surety, are held and firmly bound unto the above named Corey Bros. Construction Company, complainant, and to the Union Portland Cement Company, intervener, in the above-entitled suit, in the sum of Five Hundred Dollars (\$500.00) to be paid to the said Corey Bros. Construction Company and the said Union Portland Cement Company as their respective interests may appear, and for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our successors and assigns, [602] jointly and severally firmly by these presents.

Sealed with our seals and dated this 26th day of March, 1913.

The conditions of this obligation are such that:

WHEREAS, the above named, The Continental and Commercial Trust and Savings Bank and Frank H. Jones, as Trustees, have prosecuted an appeal to the United States Circuit Court of Appeals for the Ninth Circuit, to reverse the decree made and entered in the above-entitled suit in the Circuit Court of the United States for the District of Idaho, Southern Division, on the 27th day of December, 1912.

NOW, THEREFORE, if the above-named appellants, the Continental and Commercial Trust and Savings Bank and Frank H. Jones, as Trustees, shall prosecute their said appeal to effect and answer all costs if they fail to make their said plea good, then the above obligation shall be void; otherwise, the same

shall be and remain in full force and virtue.

IN WITNESS WHEREOF, the said principals have caused their respective names to be hereunto subscribed, and the said Boise Title and Trust Company, surety, has caused its name to be hereunto subscribed by its duly authorized officers and its corporate seal affixed.

THE CONTINENTAL AND COMMERCIAL TRUST AND SAVINGS BANK,
Trustee.

By O. O. HAGA,
Its Solicitor.

FRANK H. JONES,
Trustee.

By O. O. HAGA,
His Solicitor.

[Seal] BOISE TITLE AND TRUST COMPANY,

By S. H. HAYS,
President.

Attest: RAYMOND S. HOOVER,
Secretary.

Approved, March 26, 1913.

FRANK S. DIETRICH,
Judge.

[Endorsed]: Filed Mar. 26, 1913. [603]

[Title of Court and Cause.]

Stipulation Relative to Record on Appeal.

It is hereby stipulated and agreed, by and between The Continental and Commercial Trust and Savings

Bank and Frank H. Jones, appellants, and Corey Bros. Construction Company and the Union Portland Cement Company, appellees, through their respective solicitors, that in order to save expense in the printing and certification of the record, and to avoid encumbering the record with papers and documents not pertinent to the questions raised on appeal, the following portions of the record, and no more, shall be transcribed, certified and transmitted to the Clerk of the United States Circuit Court of Appeals for the Ninth Circuit by the Clerk of the United States District Court for the District of Idaho, under the appeal taken by the said appellants herein, and shall be included in the printed record on said appeal.

[604]

1. The original Bill of Complaint filed by Corey Bros. Construction Company.

2. Answer of Big Lost River Irrigation Company to complainant's Bill of Complaint.

3. Answer of The Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees, and all amendments thereto, to complainant's Bill of Complaint.

4. Bill in Intervention of Union Portland Cement Company.

5. Answer of Big Lost River Irrigation Company to said Bill in Intervention.

6. Answer of said Trustees to said Bill in Intervention.

7. Order Appointing Receiver of Big Lost River Irrigation Company.

8. Record or statement of evidence settled and

allowed by the judge of said District Court, and all exhibits thereto attached.

9. Opinion of Court filed in said cause.

10. Decree.

11. All papers filed for perfecting the appeal (assignment of errors, petition for appeal, order allowing appeal, bond, citation, and all orders made in connection therewith).

12. This stipulation.

13. It is stipulated and agreed that on the 27th day of November, 1910, Corey Bros. Construction Company, complainant in said suit, filed an amended Bill of Complaint, being similar in all respects to the original complaint, except that the following parties were made defendants in said Bill: Big Lost River Irrigation Company, a corporation; The Continental and Commercial Trust and Savings Bank, a corporation; Union Portland Cement Company, a corporation; J. M. Bate and Joseph Bate, copartners [605] under the firm name and style of Bate & Bate; Nephi Straw, A. W. Cherrington and James Miller, copartners under the firm name and style of Straw, Cherrington and Miller; F. C. Gammell and James Straw, Jr., copartners under the firm name and style of Gammell & Straw; Nephi Hansen and Ephriam Hansen, copartners under the firm name and style of Hansen Bros.; K. L. Molen and R. E. Kutler, copartners under the firm name and style of Molen & Kutler; J. W. Curd and N. Foss, copartners under the firm name and style of Curd & Foss; K. L. Molen and Jesse Molen, copartners under the firm name and style of Molen & Molen; David Chamber-

lain and Thomas Chamberlain, copartners under the firm name and style of Chamberlain Bros.; A. C. Bird, Frank Hess, S. H. Walton, F. L. Pinney, Wm. Mooney, Goyne Drummond and Frank H. Jones. And said complainant alleged in the usual form that said defendants were citizens as follows, viz.: Big Lost River Irrigation Company, citizen of Idaho; The Continental and Commercial Trust and Savings Bank, citizen of Illinois; Union Portland Cement Company, citizen of Utah; J. M. Bate and Joseph Bate, citizens of Utah; Nephi Straw, A. W. Cherrington and James Miller, citizens of Utah; F. C. Gammell and James Straw, Jr., citizens of Utah; Nephi Hansen and Ephriam Hansen, citizens of Idaho; K. L. Molen and R. E. Kutler, citizens of Idaho; J. W. Curd and N. Foss, citizens of Idaho; K. L. Molen and Jesse Molen, citizens of Idaho; David Chamberlain and Thomas Chamberlain, citizens of Idaho; A. C. Bird, citizen of Utah; Frank Hess, S. H. Walton, F. L. Pinney and Wm. Mooney, citizens of Idaho; Goyne Drummond, citizen of Wyoming, and Frank H. Jones, citizen of Illinois.

It is further stipulated, that replications were duly filed to the answers referred to in this stipulation, and that [606] thereafter, on the 21st day of January, 1911, on motion of the solicitor for Corey Bros. Construction Company, an order was entered dismissing said amended bill as to the defendants, Union Portland Cement Company, J. M. Bate and Joseph Bate, Nephi Straw, A. W. Cherrington, James Miller, F. C. Gammell, James Straw, Jr., A. C. Bird and Goyne Drummond.

It is further stipulated and agreed that all original exhibits introduced in the above-entitled cause, including the depositions of the witnesses and the testimony and affidavits introduced as evidence by consent of the parties, shall be transmitted to the Clerk of the United States Circuit Court of Appeals for the Ninth Circuit before the hearing of the cause in said Court, and the same may be used upon the argument or the hearing of said cause in said court, and shall be considered as part of the record on appeal therein as fully and to the same extent as if transcribed and printed in the record. And appellants shall have the right, and they may be so required to do by appellees if deemed necessary, to print as part of the record on appeal any exhibit and any other part of the record not hereby expressly authorized to be transcribed and printed.

Dated this 26th day of March, 1913.

H. H. HENDERSON,

Solicitor for Complainant and for Intervener, Union
Portland Cement Company.

MAYER, MEYER, AUSTRIAN & PLATT,

AMOS C. MILLER,

RICHARDS & HAGA,

Solicitors for the Continental and Commercial Trust
and Savings Bank and Frank H. Jones, Trustees.

[Endorsed]: Filed March 23, 1913. [607]

Citation.

THE UNITED STATES OF AMERICA,—ss.
To Corey Bros. Construction Company and Union
Portland Cement Company, Greeting:

You are hereby cited and admonished to be and appear at the United States Circuit Court of Appeals for the Ninth Circuit, to be held at the city of San Francisco in the State of California, within thirty (30) days from the date of this Writ, pursuant to an appeal filed in the Clerk's office of the District Court of the United States for the District of Idaho, Southern Division, wherein Corey Bros. Construction Company is plaintiff and the Big Lost River Irrigation Company, the Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees, et al., are defendants, and the Union Portland Cement Company is intervener, to show cause, if any there be, why the judgment, order or decree in said appeal mentioned, should not be corrected, and speedy justice should not be done to the parties in that behalf.

Witness, the Honorable EDWARD D. WHITE, Chief Justice of the Supreme Court of the United States of America, this 26th day of March, one thousand nine hundred and thirteen, and of the Independence of the United States, the one hundred and thirty-seventh year.

FRANK S. DIETRICH,
United States District Judge for the District of
Idaho.

Attest: A. L. RICHARDSON,
Clerk.

Service of the foregoing Citation and receipt of copy thereof admitted this 26th day of March, 1913.

H. H. HENDERSON,
Solicitor for Corey Bros. Construction Company and
Union Portland Cement Company. [608]

[Endorsed]: Filed March 26, 1913. [609]

[Title of Court and Cause.]

Order Relative to Exhibits on Appeal.

On motion of Messrs. Richards & Haga, of counsel for the Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees, it is ordered that in addition to the transcript of the record on appeal in this suit, the Clerk of this Court transmit to the Clerk of the United States Circuit Court of Appeals for the Ninth Circuit at San Francisco, California, all the original exhibits in this suit, to be by him safely kept and returned to this Court upon the final determination of the appeal in this suit in said Circuit Court of Appeals.

Dated this 29th day of March, 1913.

(Signed) FRANK S. DIETRICH,
Judge.

[Endorsed]: Filed March 29, 1913. [610]

Return to Record.

And thereupon it is ordered by the Court that a transcript of the record and proceedings in the cause aforesaid, together with all things thereunto relating, be transmitted to the said United States Circuit

Court of Appeals for the Ninth Circuit, and the same is transmitted accordingly.

[Seal]

Attest: A. L. RICHARDSON,

Clerk. [611]

[Clerk's Certificate of District Court to Transcript of Record.]

[Title of Court and Cause.]

I, A. L. Richardson, Clerk of the District Court of the United States for the District of Idaho, do hereby certify the foregoing transcript of pages numbered from 1 to 612, inclusive, to be full, true and correct copies of the original Bill of Complaint, Answer of Big Lost River Irrigation Company to complainant's Bill of Complaint, Answer of The Continental and Commercial Trust and Savings Bank and Frank H. Jones, Trustees, and all amendments thereto, to complainant's Bill of Complaint, Bill in Intervention of Union Portland Cement Company, Answer of Big Lost River Irrigation Company to said Bill in Intervention, Answer of said Trustees to said Bill in Intervention, Order Appointing Receiver of Big Lost River Irrigation Company, Record of statement of evidence settled and allowed by the Judge of said District Court, and all exhibits thereto attached, Opinion of [612] Court filed in said cause, Decree, Petition for Appeal, Assignment of Errors, Order Allowing Appeal, Bond, Stipulation relative to Record on Appeal, Original Citation, Return to Record and Clerk's Certificate, in the above-entitled cause, and that the same together constitute the transcript of

the record herein upon appeal to the United States Circuit Court of Appeals for the Ninth Circuit.

I further certify that the cost of the record herein amounts to the sum of \$250.00, and that the same has been paid by the appellant.

Witness my hand, and the seal of said Court, affixed at Boise, Idaho, this 29th day of March, 1913.

[Seal]

A. L. RICHARDSON,

Clerk. [613]

[Endorsed]: No. 2264. United States Circuit Court of Appeals for the Ninth Circuit. Continental and Commercial Trust and Savings Bank, a Corporation, and Frank H. Jones, Trustees, Appellants, vs. Corey Bros. Construction Company, a Corporation, and Union Portland Cement Company, a Corporation, Appellees. Transcript of Record. Upon Appeal from the United States District Court for the District of Idaho, Southern Division.

Filed April 4, 1913.

FRANK D. MONCKTON,

Clerk of the United States Circuit Court of Appeals
for the Ninth Circuit.