

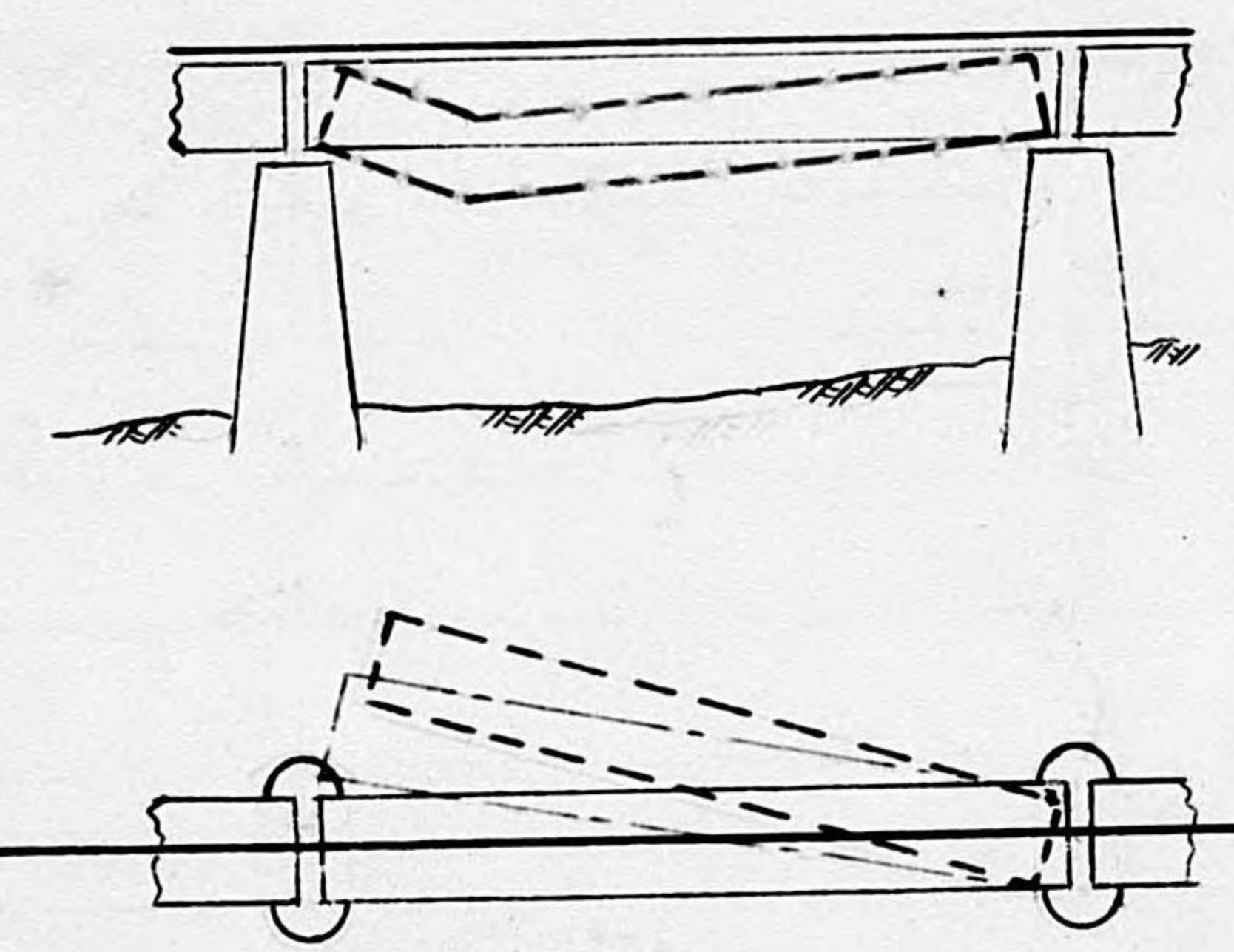
CHART SHOWING AIR-RAID DAMAGES
ON THE RY. BRIDGE OVER THE RIVER KOMARU

- (1) NOs. 7. 12. 17 and 18 were damaged by air-raid of July 16. 1945
- (2) NOs. 3. 6. 9. 15. 17. 30. 31. and 32 were damaged by air-raids of August 7. and 8. 1945

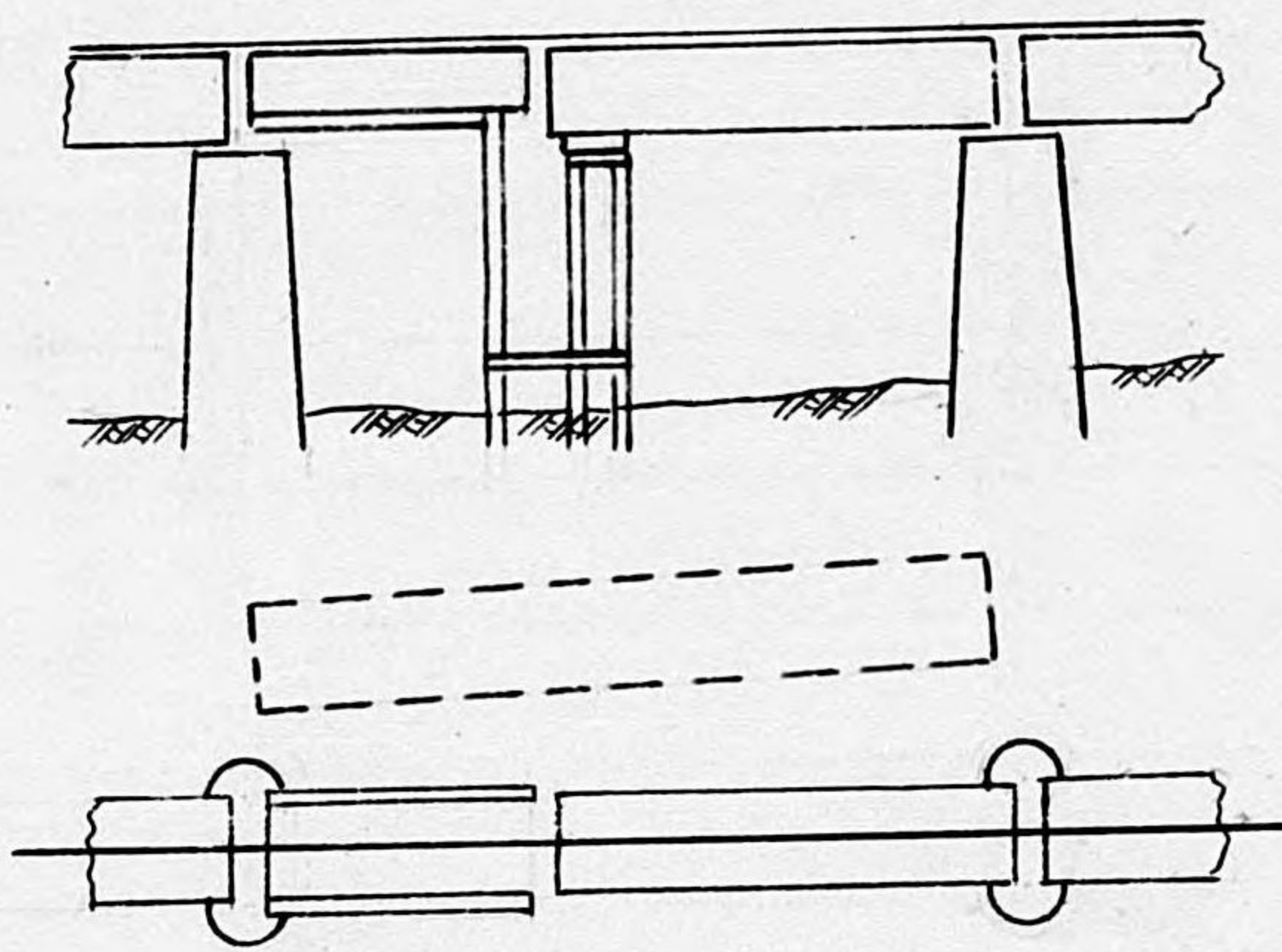
① KOMARU GAWA



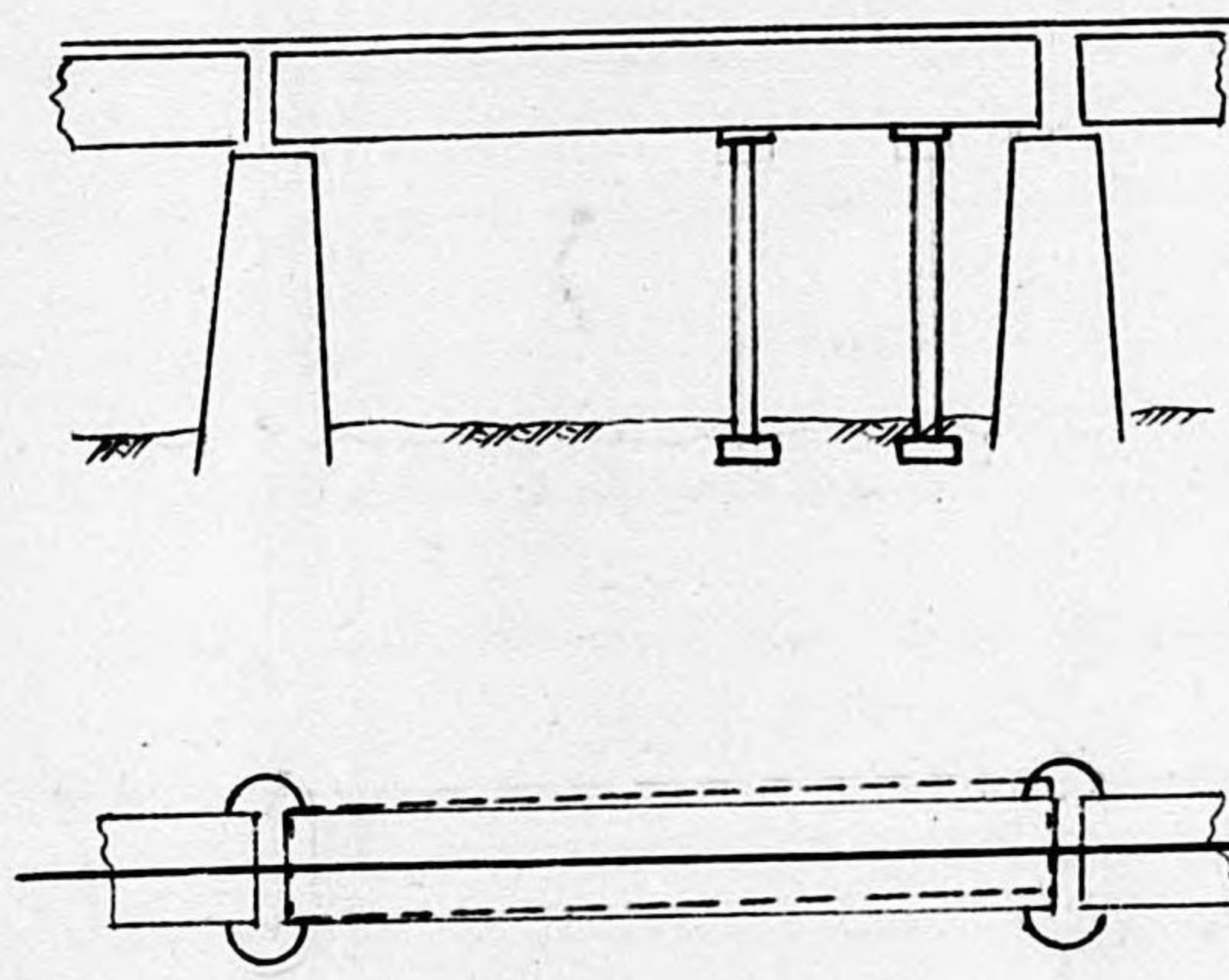
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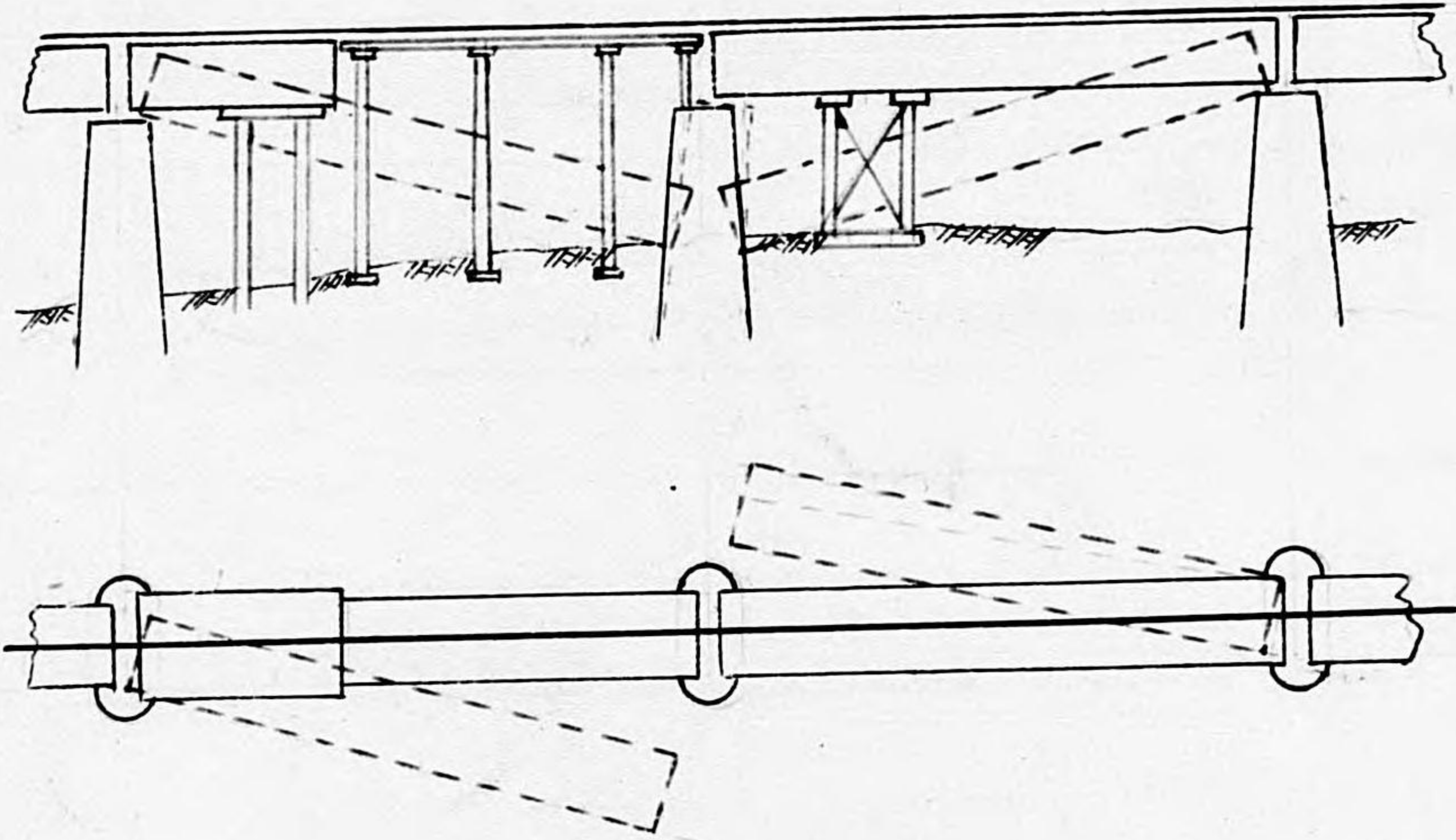
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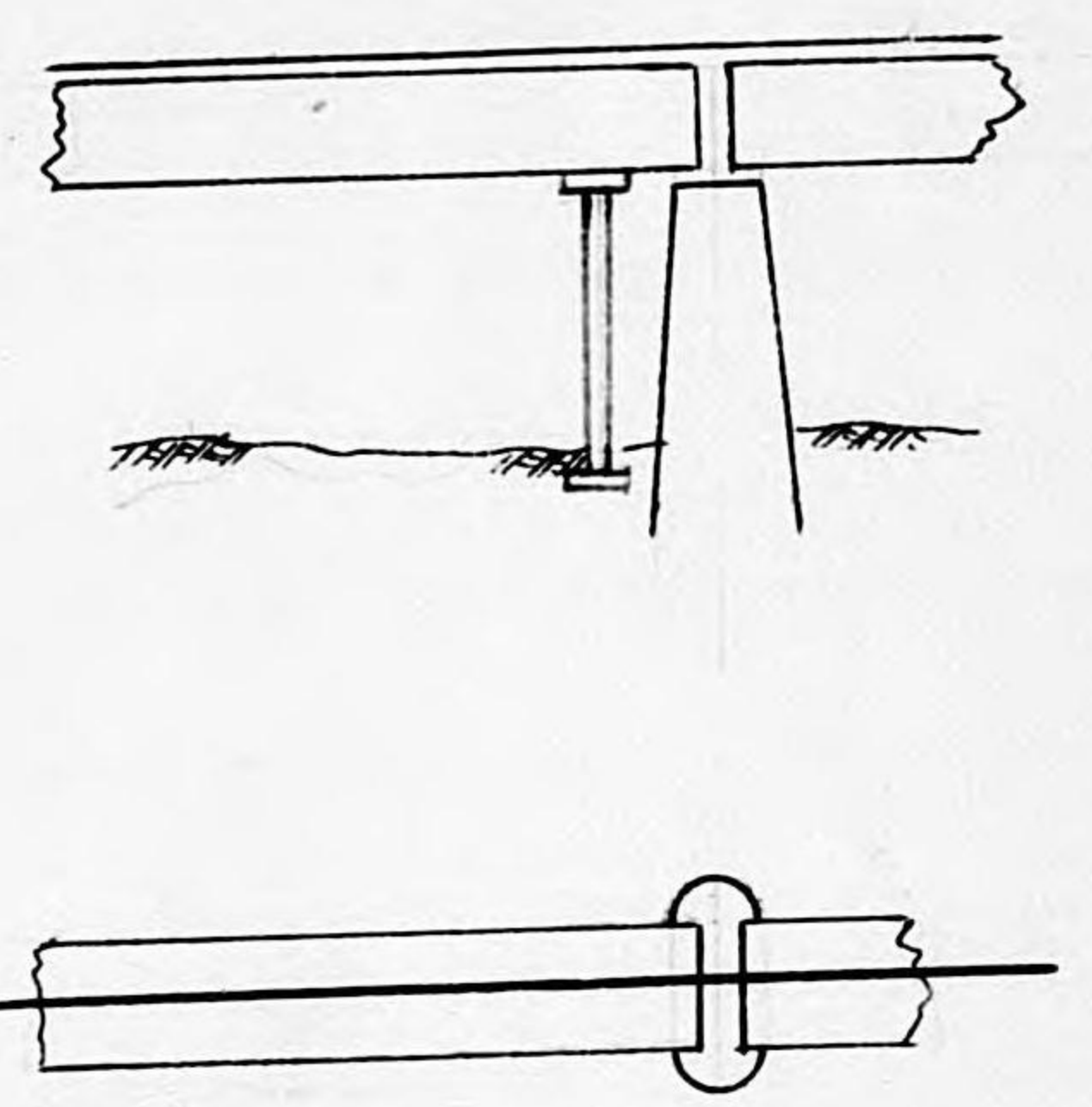
NO 7



NO 9

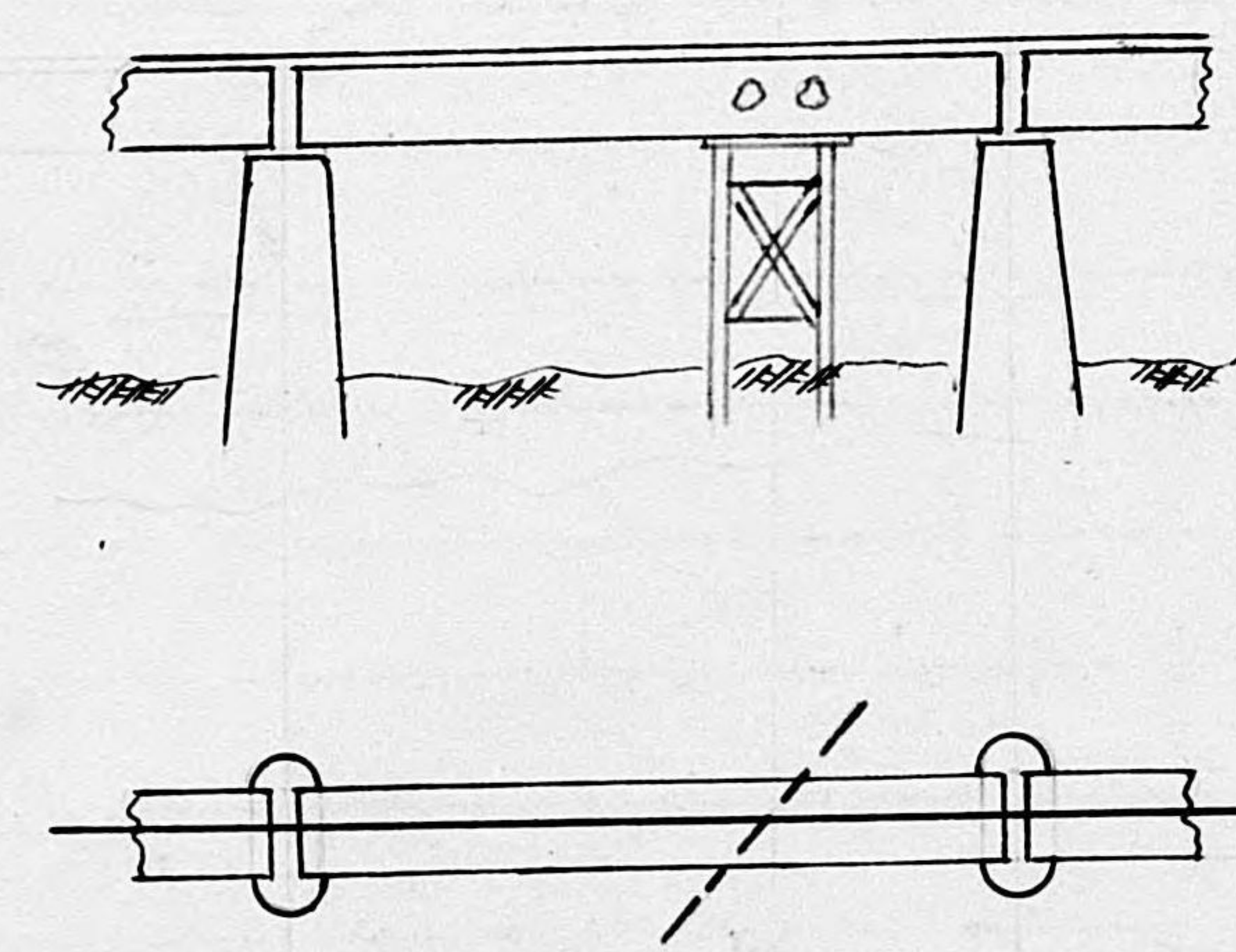


NO 10

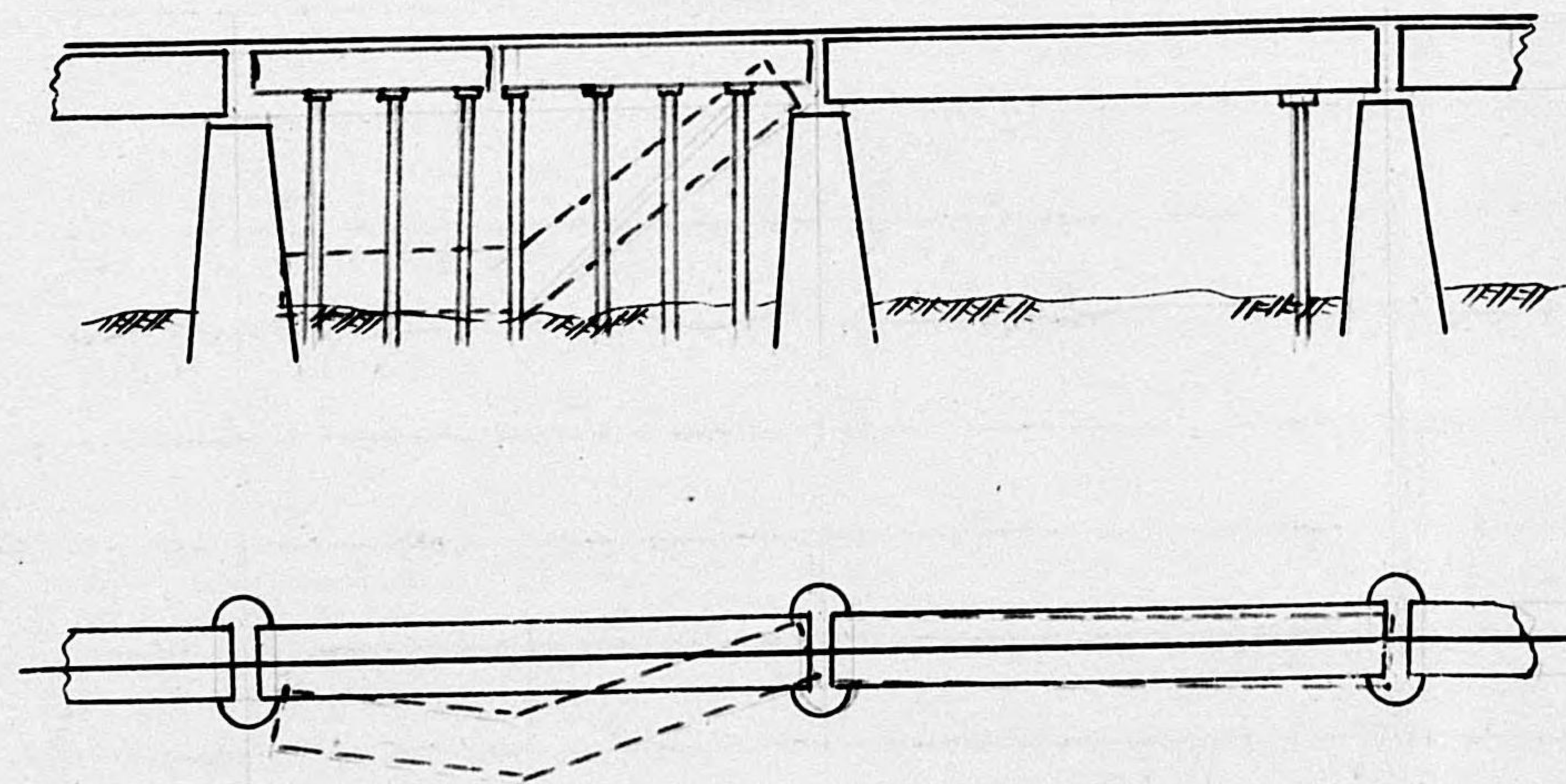


NO 12

NO 15



NO 17

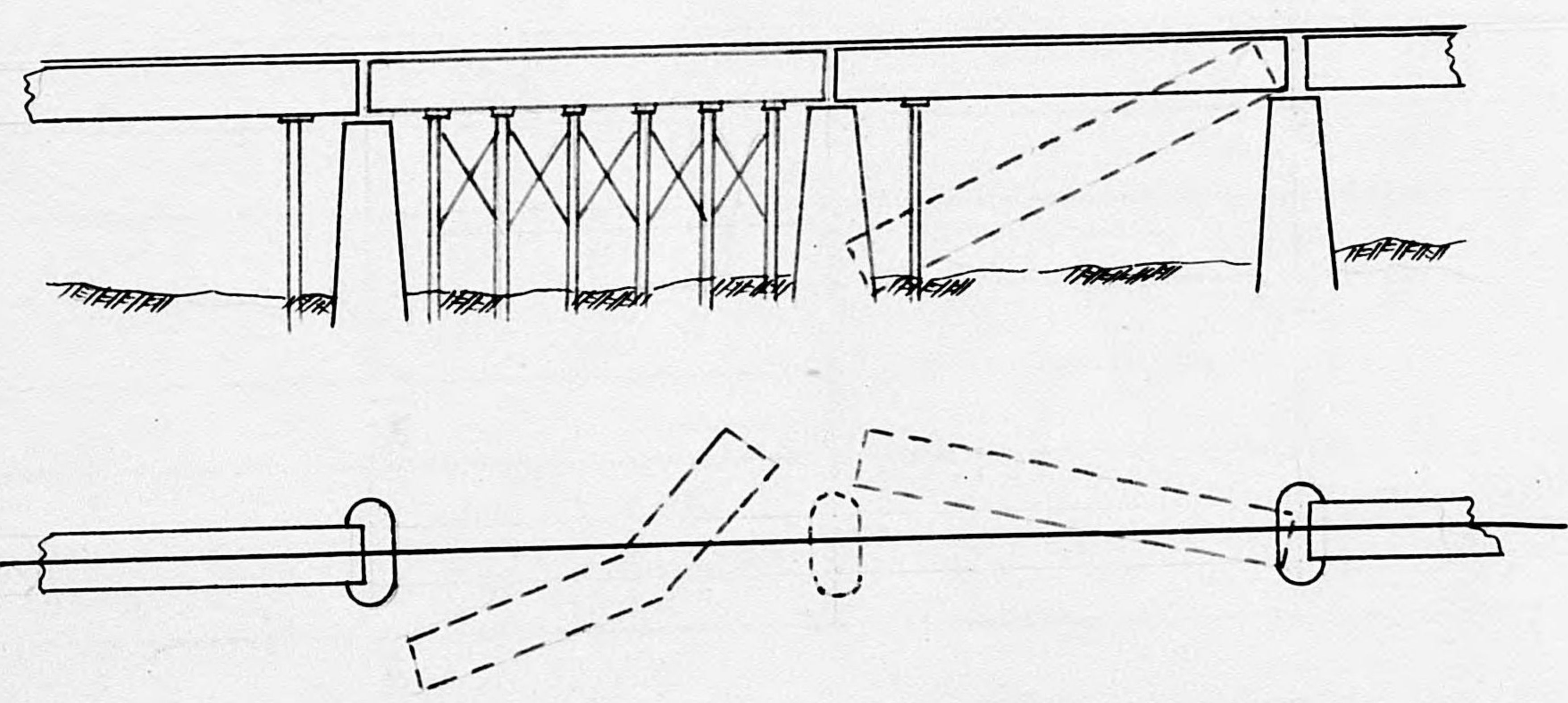


NO 18

NO 30

NO 31

NO 32

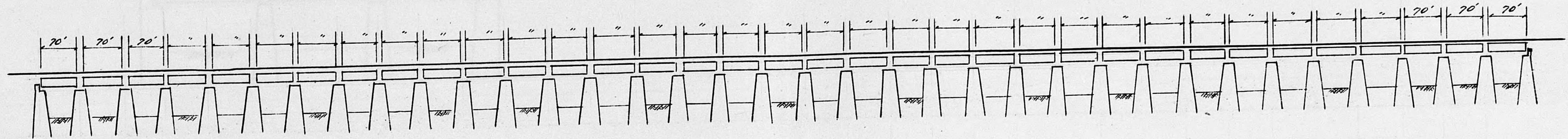


① KOMARU GAWA

SKETCH ELEVATION OF PRINCIPAL BRIDGES

FUTUMINATO GAWA

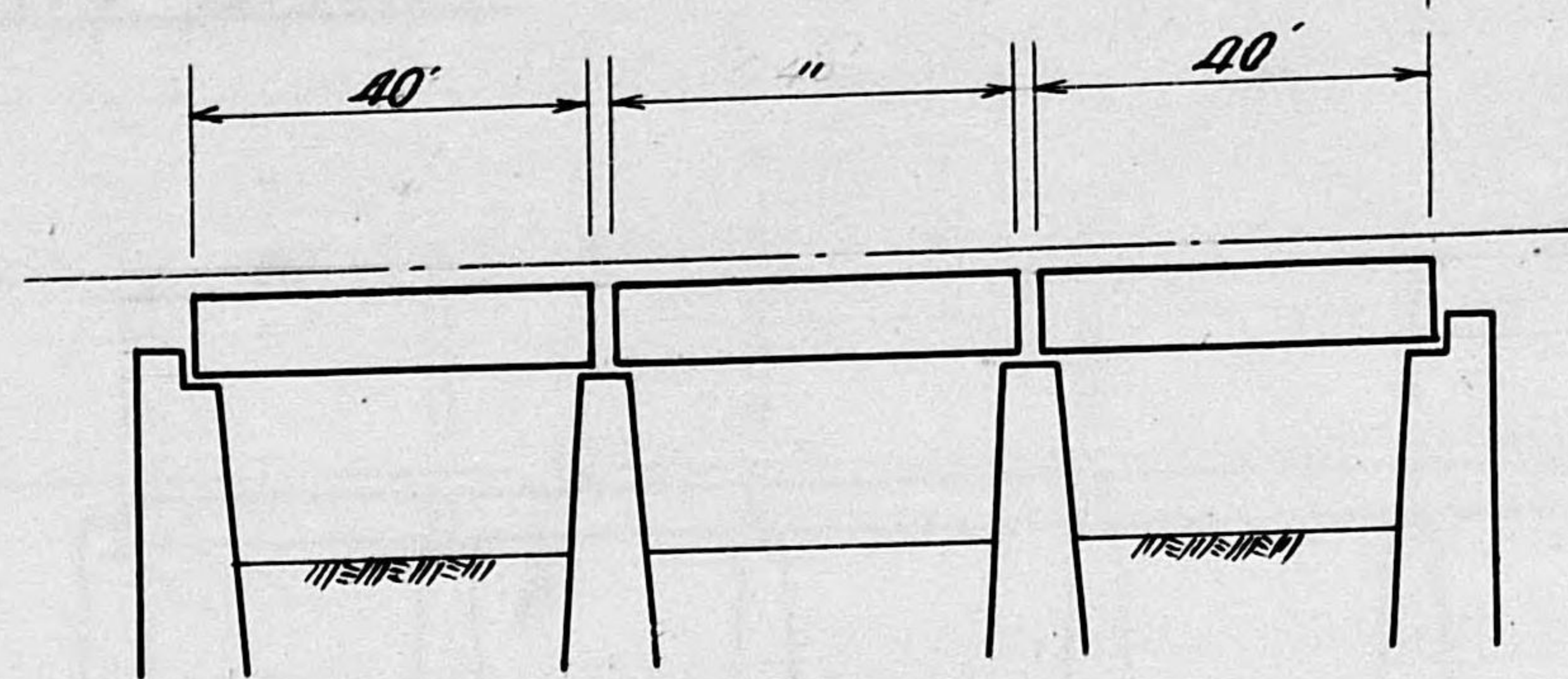
① KOMARU GAWA



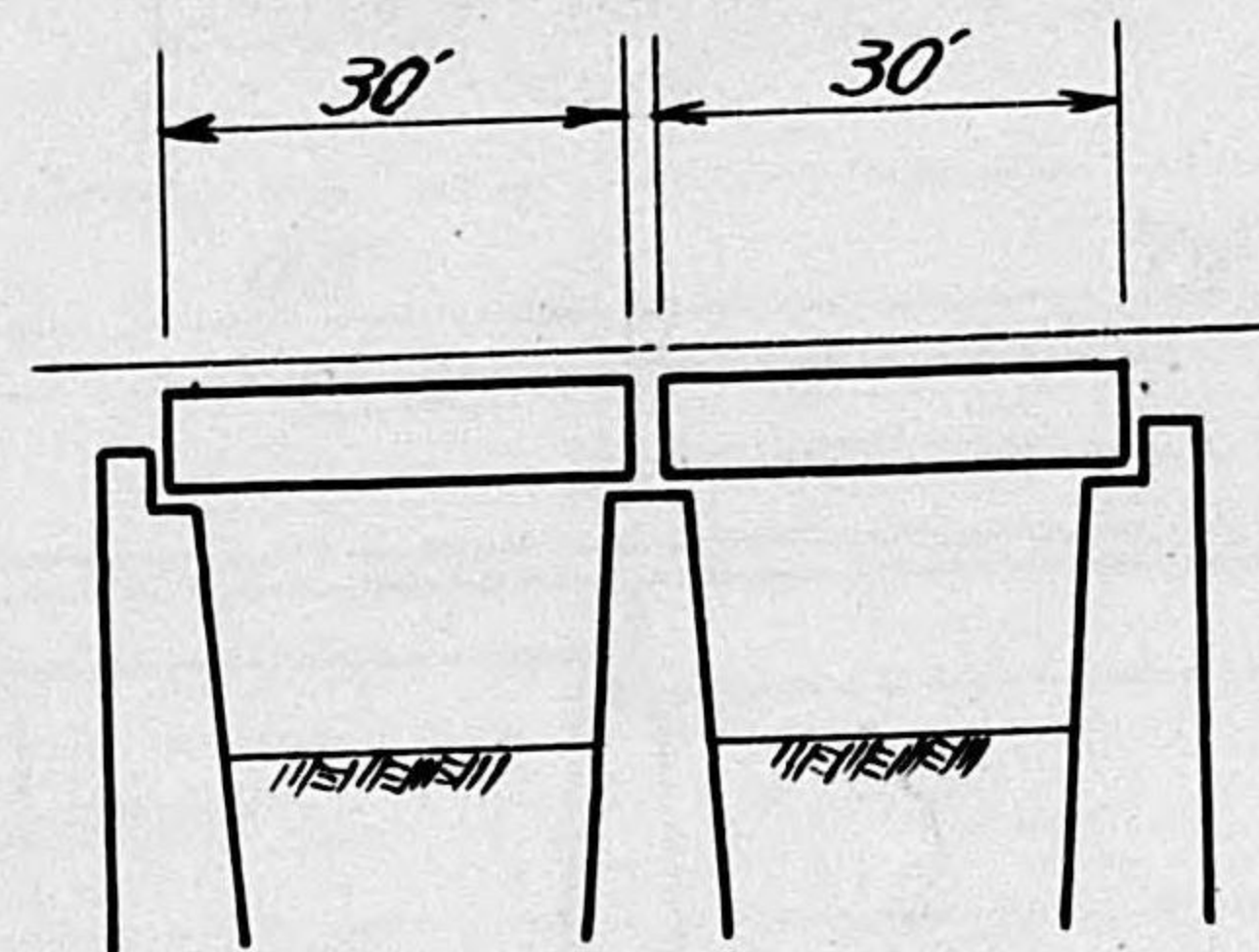
ENDOKUCHI GAWA

HITOJISE GAWA

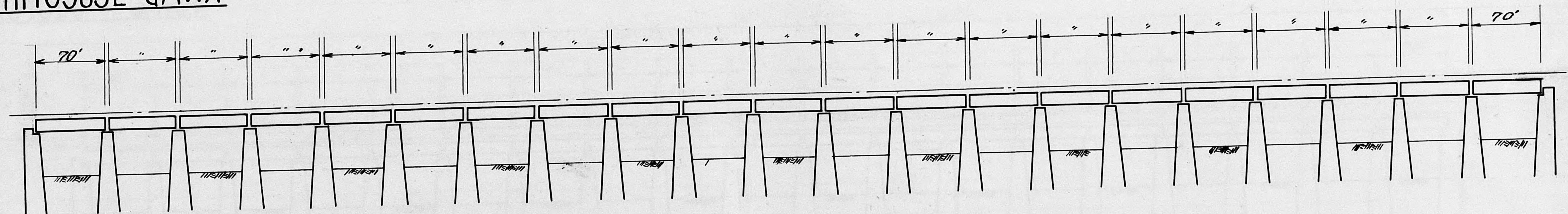
② FURUMINATO GAWA



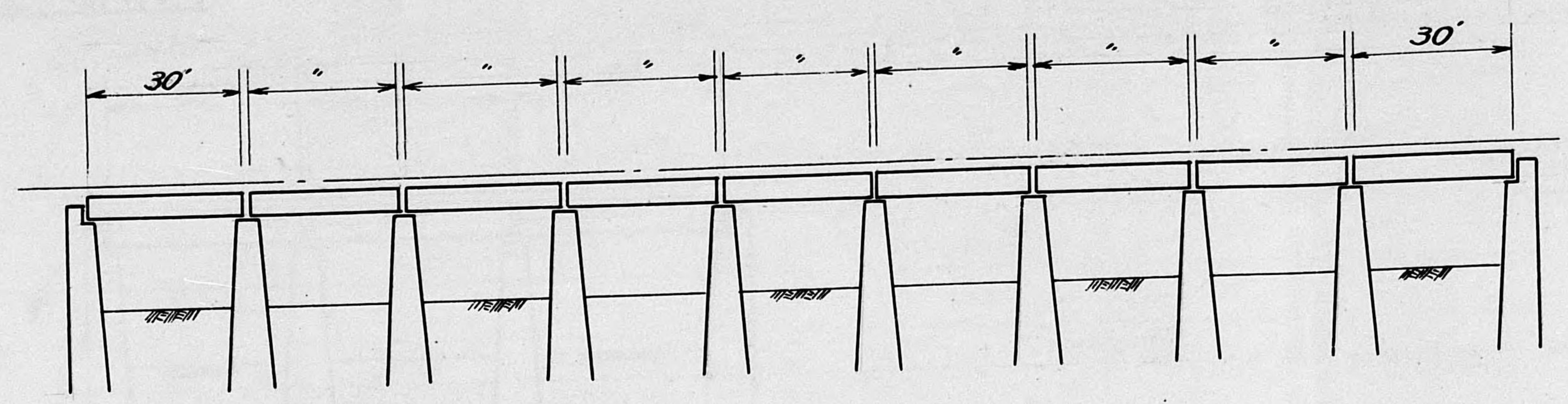
③ ENOKUCHI GAWA



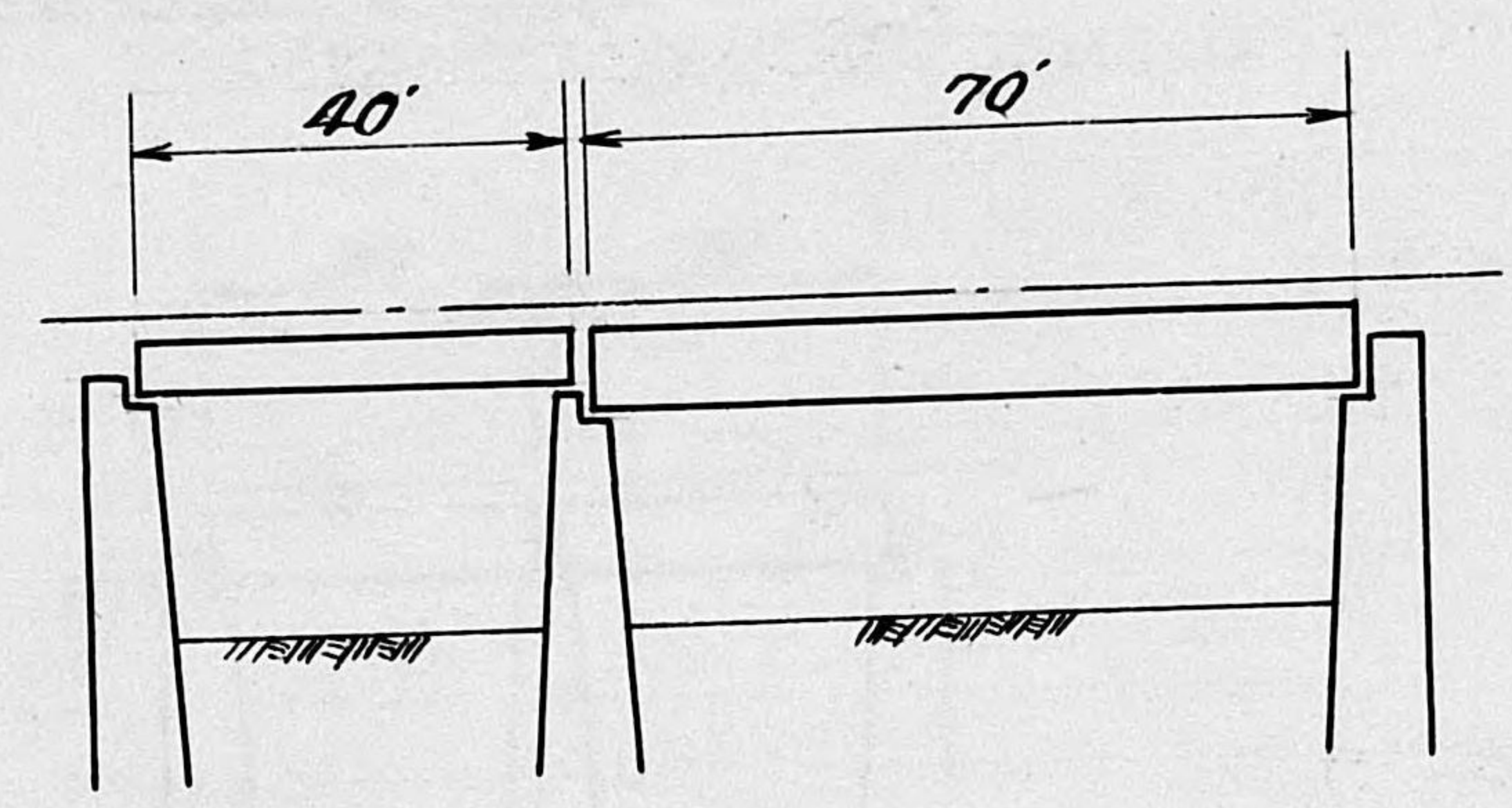
④ HITOSUSE GAWA



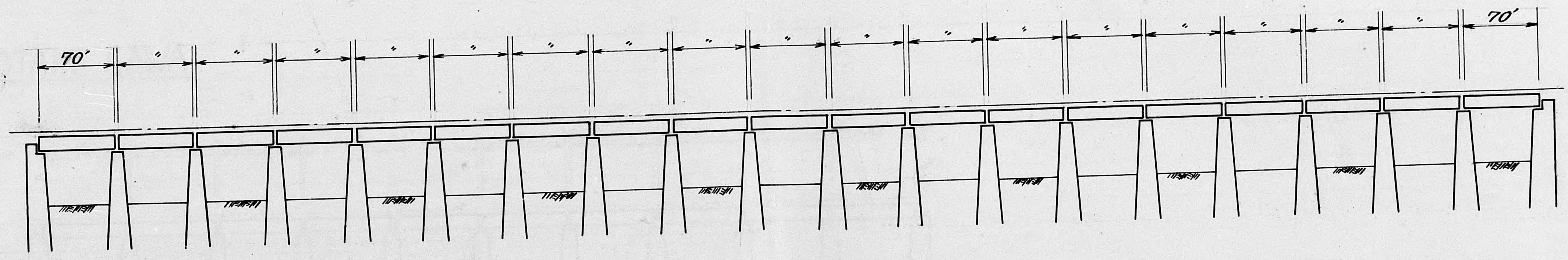
⑤ TENJIN GAWA



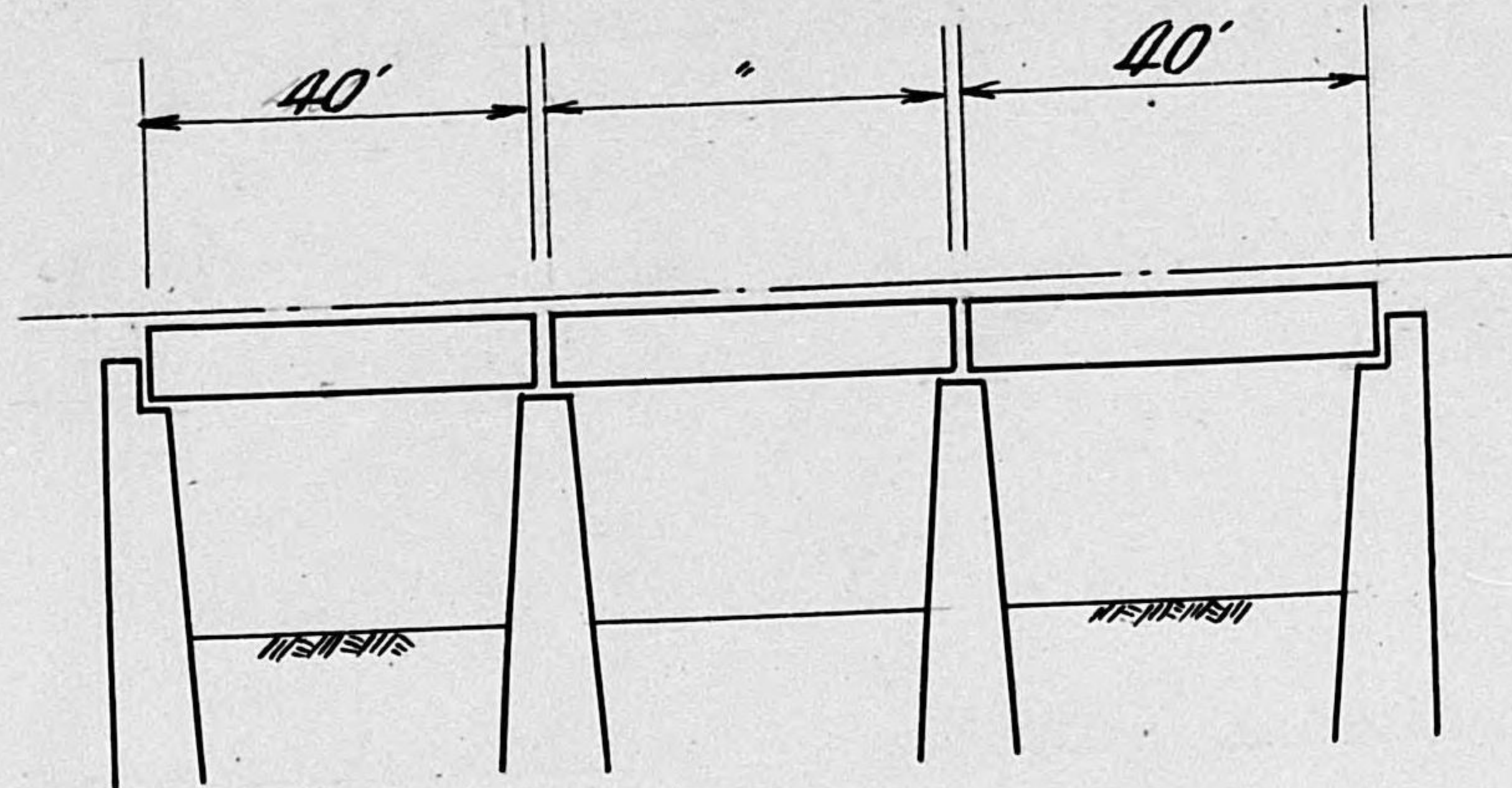
⑥ ISHIZAKI GAWA



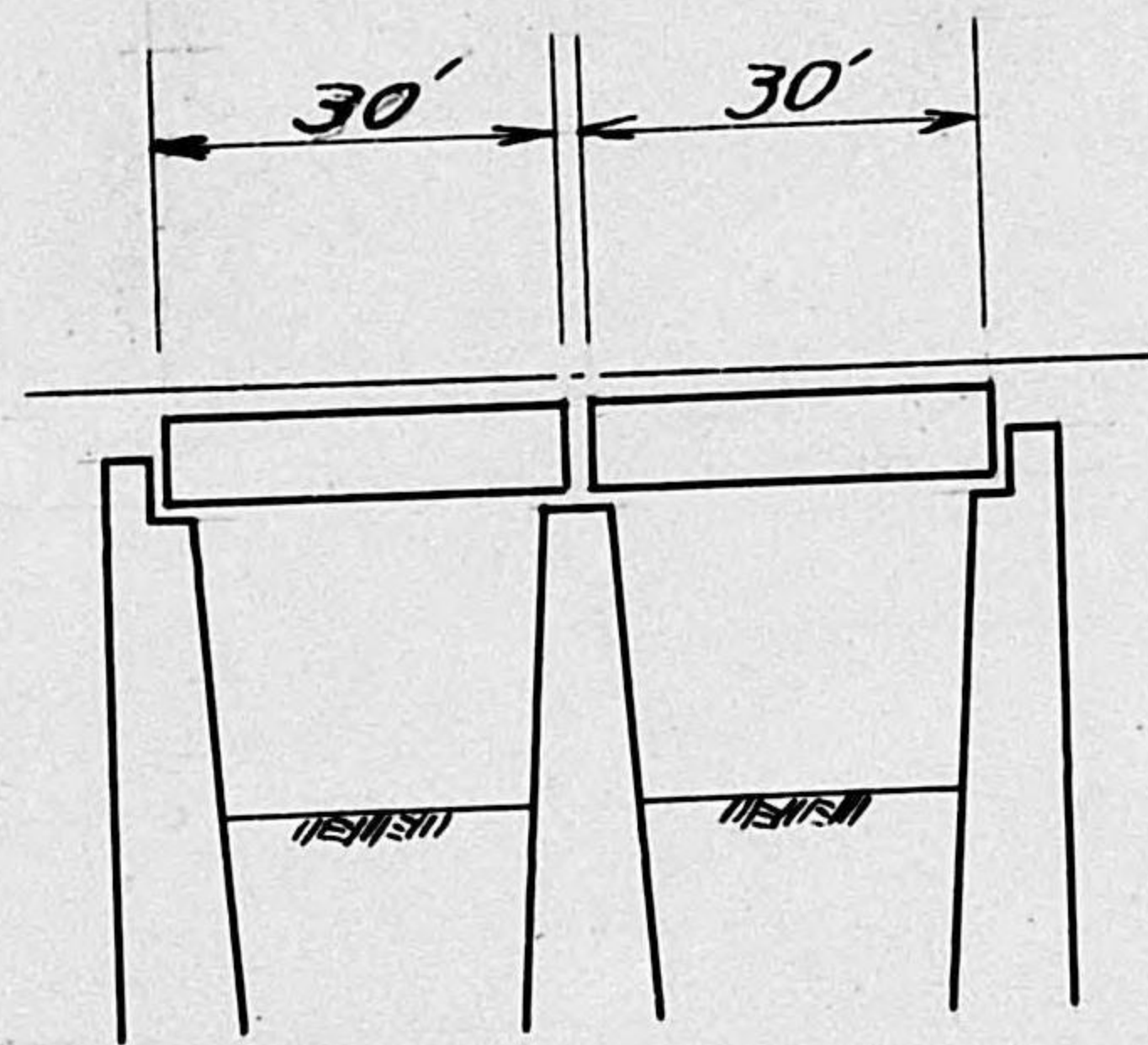
⑦ OYODO GAWA



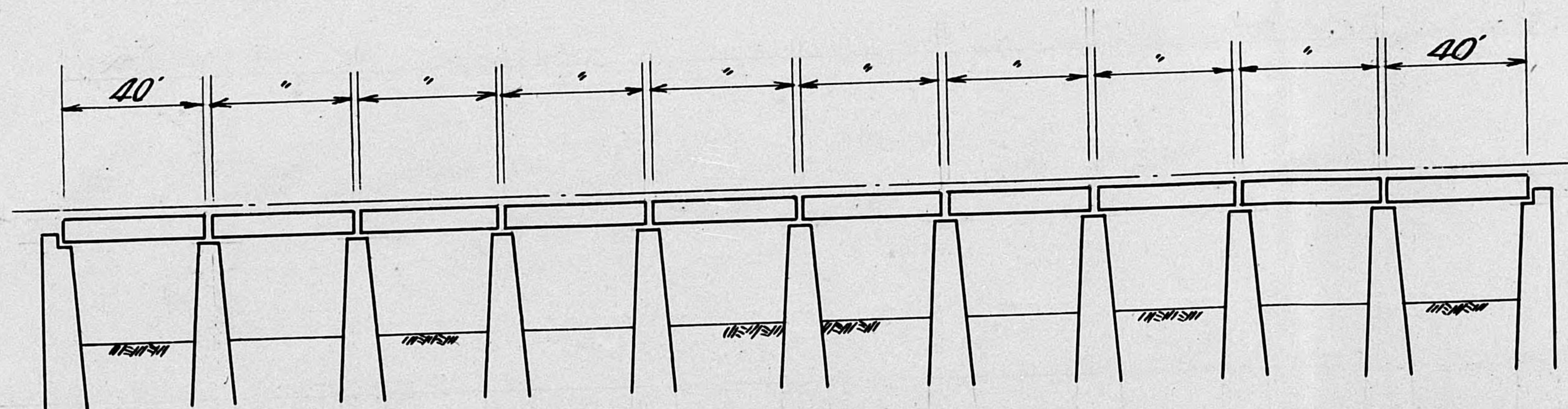
⑧ AKAE GAWA



⑨ SHINBORI GAWA



⑩ KIYOTAKE GAWA



E. W. MOSER
P. I. C.

小丸川橋梁被害調査書

Report of the investigation of the damage
to KOMARU BRIDGE

被害

No 3 桁、起桌側、桁位置の橋脚上 = 僅 = カリ 転落寸前、1 根 = シテ 桁、歪曲也。

No 6 桁、川下 = 完全転落 = 起桌側 30 約 13m 間、腹鉸、斜弦材 共 = 歪曲ス。

No 9 桁、始桌側、橋脚上 = 71 終桌方、落下 = 約 11m 間、腹鉸、歪曲也。

No 15 桁、直撃弾、貫通 = シテ 左右、主桁 = 径約 80cm (左側) 50cm (右側) 大孔ヲ生也。

No 17 桁 径間 前回被害ヲ受テ 緊急復旧トシテ 短径間、鉸桁及軌條桁ヲ架セシカ、今回中央枕木オビル附近 = 直撃ヲ受テ、鉸桁及軌條桁後台飛散 = 鉸桁、更生使用不可能ナリ。

No 31 桁、完全 = 墜落折橋 = 再使用不可能ナリ。

No 31 橋脚、井筒天端 30 1.5m 下方附近 30 完全爆破也。

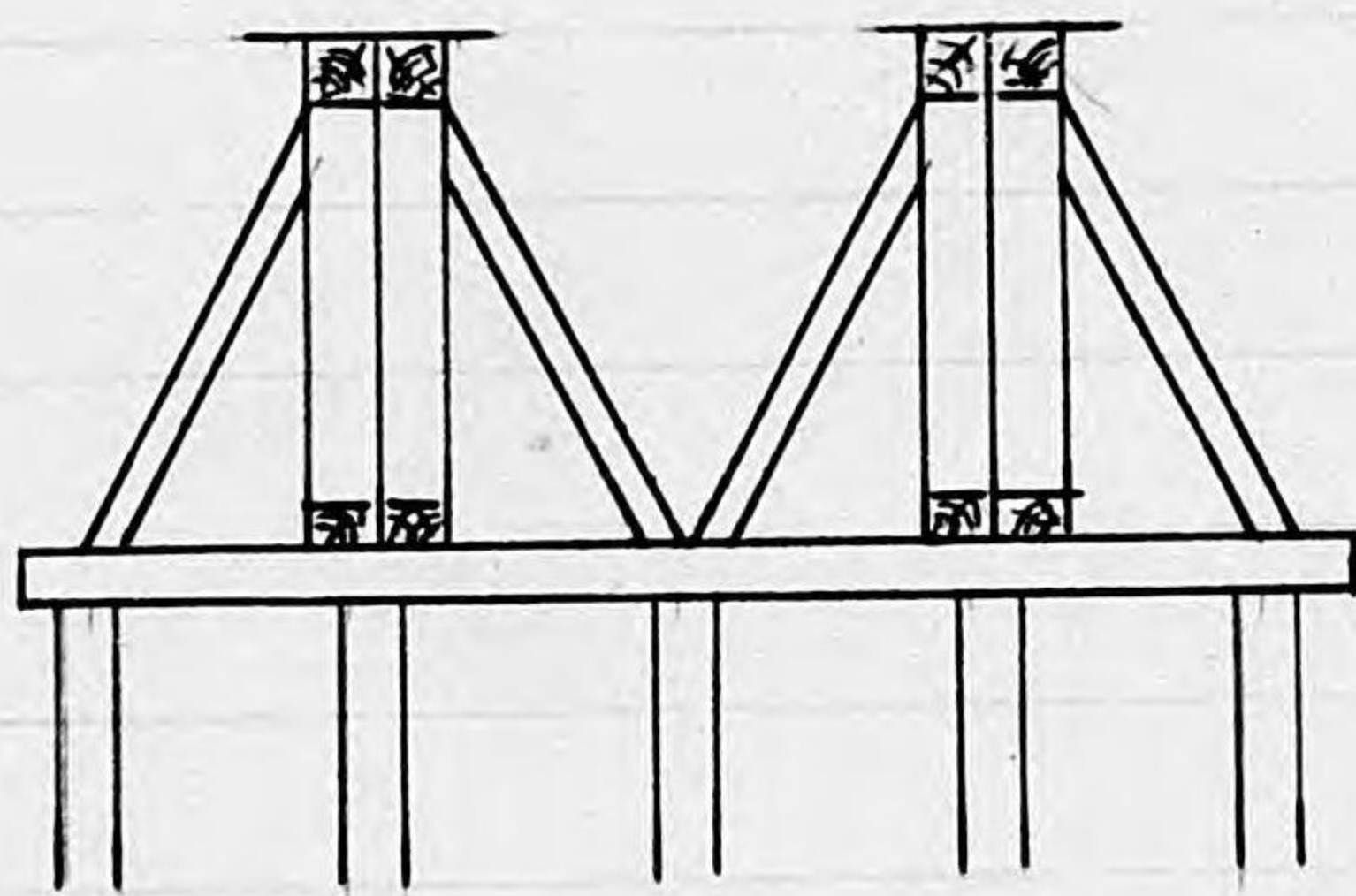
復旧

No 3 桁、正位置 = 復也シ。

No 6 桁、歪曲甚ダシク部分ヲ切断 = 短径間トシテ 架設、残部 = 木桁ヲ架設也。

No 9 桁 歪曲部分ヲ切断 = 短径間トシテ 架設他一部分 = 木桁ヲ架ス。

No 15 桁、弾孔ナル部分 = 次圖 1 如ク 補強也。



No 17 径間、木桁 (30cm x 38cm 4本集成桁) 架設也。

No 31 径間、木桁 (30cm x 30cm 4本集成桁) 架設也。

小丸川橋梁被害調査書

発生日時、
災害種別、
発生場所、
被害状況、

昭和20年7月16日 0時20分。
航空機 = 3機。
日臺本線高鍋川南間 312x109m 附近小丸川橋梁。
No 7桁 腹鉄 = 無数、弾孔 7箇所。
No 10桁 橋桁落下。
No 17桁 折損落下也。

應急處置

No 10桁 正位置 = 柱上、スチーキング = 3機 復旧。
No 17桁 切断 = 短径間トシテ 梁部残部 軌條桁
ヲ架シ、スチーキング 及 枕木 サドル = 3機 復旧。

損傷材料

橋桁 1連 切折損鉄桁、橋枕木 300丁。
軌條 30m ~ 10m 15本。

発生日時、
災害種別、
発生場所、
被害状況

昭和20年8月7日 12時55分、8月8日 16時
航空機 = 2機。
日臺本線高鍋川南間 小丸川橋梁。
茅3連東寄 = 傾斜 6連墜落 (8月7日)
其他 (8月8日)
別紙 1通。

應急處置

應急 別紙 圖面 参照

Report of the Investigation of Damage to KōMARU
River BRIDGE

Time of occurrence: 16 July 1945 0020.

Type of disaster: according to the airplane

Place of occurrence: KōMARU RIVER BRIDGE in the vicinity
of 312 K. 109 m. and between KAWAMINAMI
and TAKANABE on the HIKOKI Line.

State of Damage: Because of cannon hits there were
holes in the abdominal girders of
the #7 beam.

#10 beam fell down

#17 beam broke and fell off

Emergency measures: #10 beam was raised to a
straight position and restored to
use by staging

#17 beam was cut off and being
too short the deficient part
was built of rail beams and
it was restored to use by
staging and ^{cross-}tie sandals (Tr. caps)

Damaged materials: One bridge cross-beam with
beam plates cut & damaged. 300
bridge cross-ties. 15, 30 K_n 10 m
rails.

Time of occurrence: 7 August 1945 1255 to 1600

Type of disaster: according to the airplane

Place of occurrence: ~~A~~ KOMARU RIVER BRIDGE
between TAKANABE and
KAWAMINAMI on the HINOKI LINE

State of damage: #3 rail was inclined to the
east side. #6 rail was
ruined. (7 August)

Other . . . (8 August)

As explained on the enclosures

Emergency measures: See the diagrams on the enclosures
for emergency.

Damage: #3 beam was displaced on the side of
the starting point and hung over the
bridge-legs a little and seemed to
have rolled forward a bit. The
beam was bent.

#6 beam fell down stream completely
and for about 13 m. from the ^{side of} starting
point the abdominal girder and the
slanting-string-material (TH. SHACHŌZAI)
were bent.

#9 beam was over the bridge legs ^{on} the side of the starting point. It had fallen on the ending point side and the abdominal girder was bent for about 11 m.

#15 beam, because of the passage of a direct hit, had large holes in the principle beams both right and left (80 cm on the left and 50 cm on the right)

#17 beam had received damage in the former raid and was restored to use by emergency measures using the rail beam and the short plate beam, but this time there was a direct hit near the center of the cross-tie sandal. The foundation of the plate beam and the rail beam flew around and cannot be used again.

#31 beam fell and was completely ruined. It cannot be used again.

#31 bridge-leg, from the upper edge of the well-
curb downward 1.5 m. was completely
destroyed.

Restoration: #3 beam was restored to its proper position

#6 beam was badly bent and part was severed and, being too short, was rebuilt. The remaining section was built with a wooden beam.

#9 beam. The bent section was severed. Being too short it was rebuilt. The other part was built with a wooden beam.

The section of #15 beam which had shell holes in it was reinforced as in the accompanying diagram.

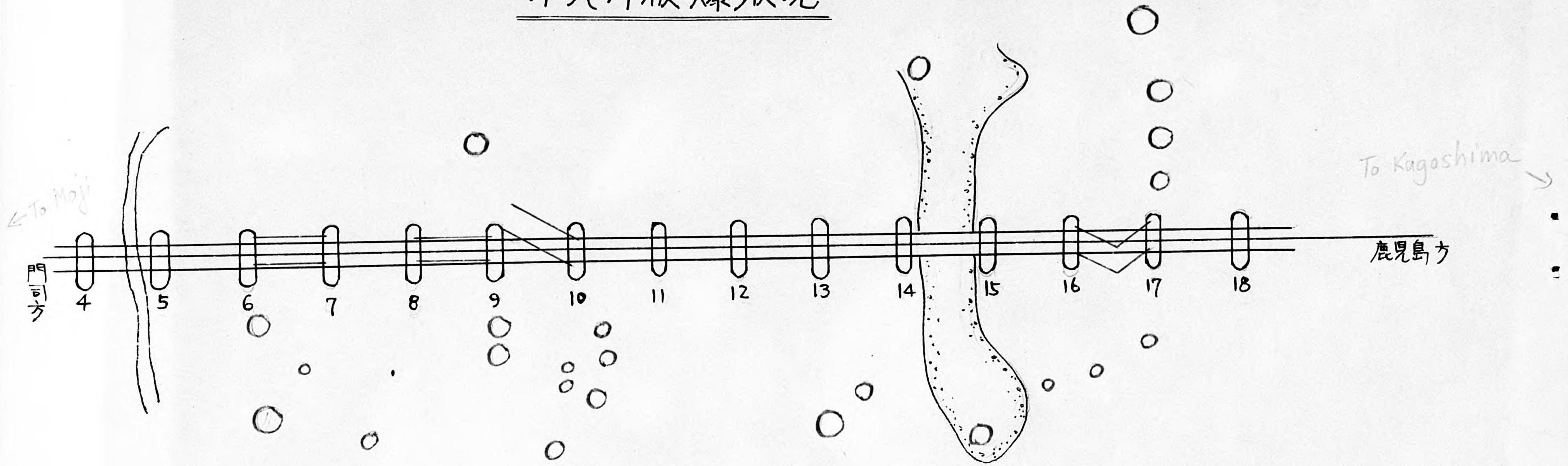
#17 The space was filled ~~was attained~~ with wooden beams (4 beams $30\text{ cm} \times 30\text{ cm}$)

#31 The space was filled ~~was attained~~ with wooden beams (4 beams $30\text{ cm} \times 30\text{ cm}$)

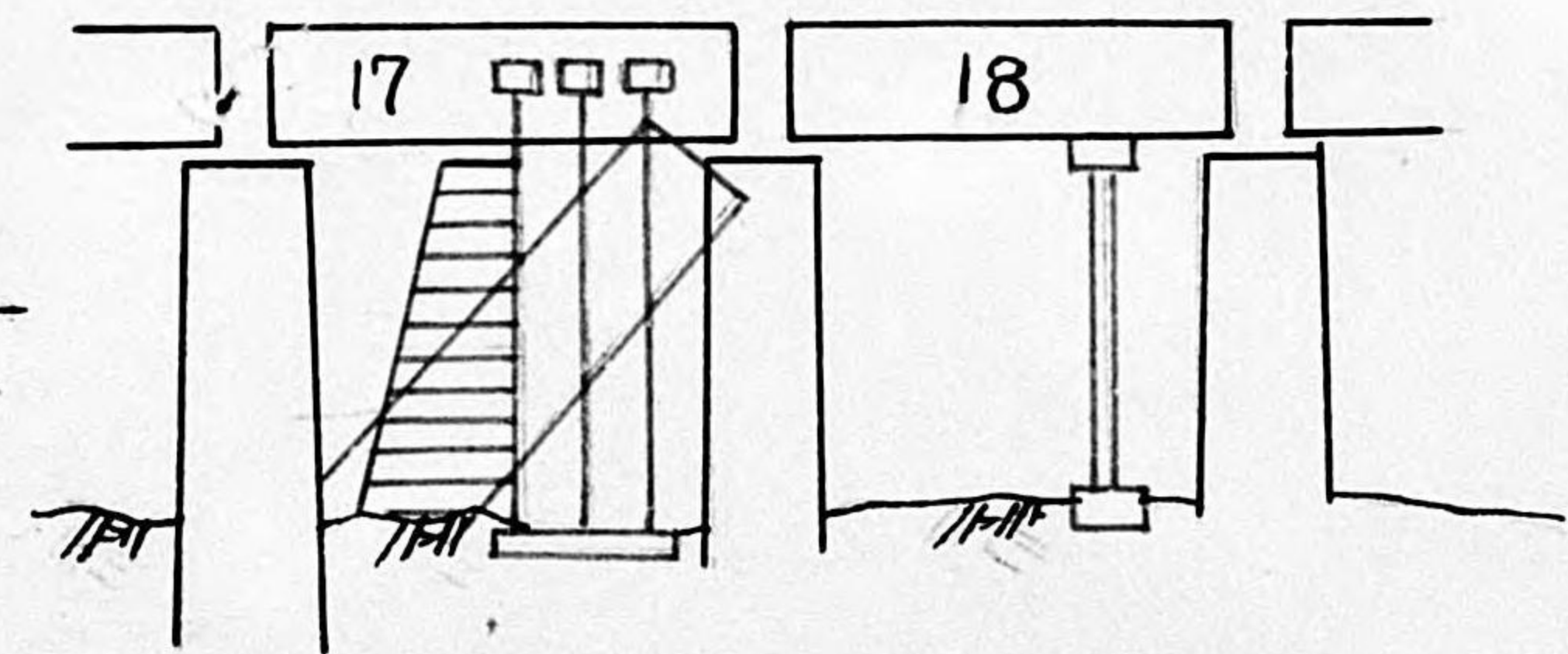
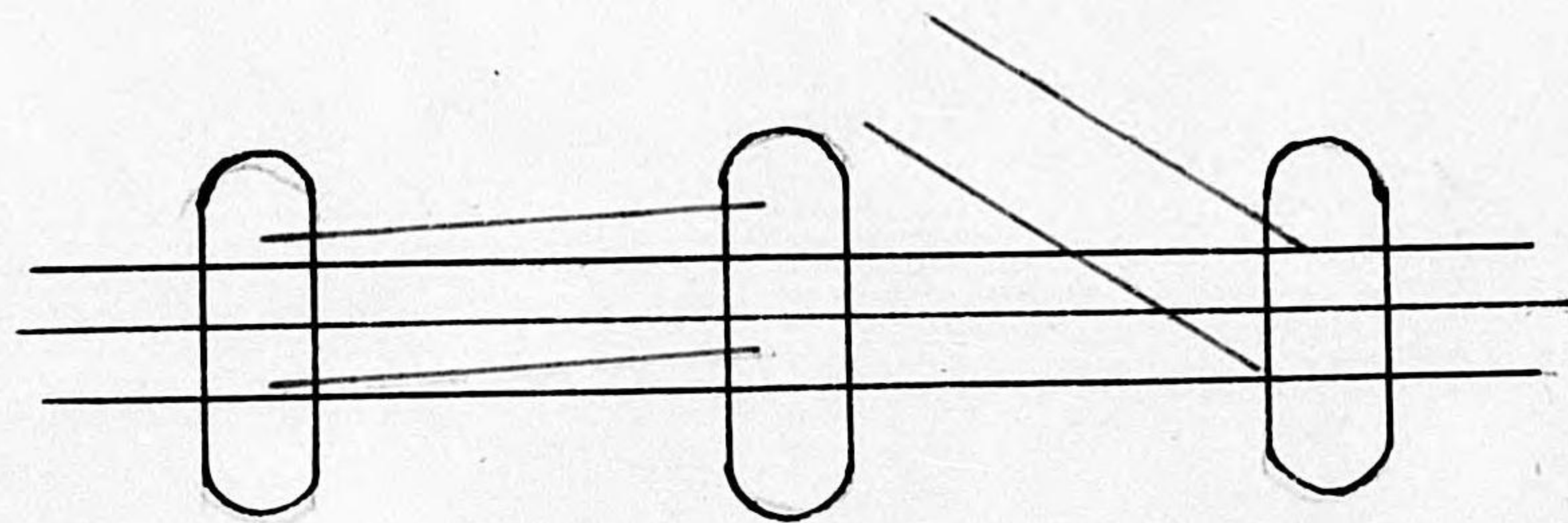
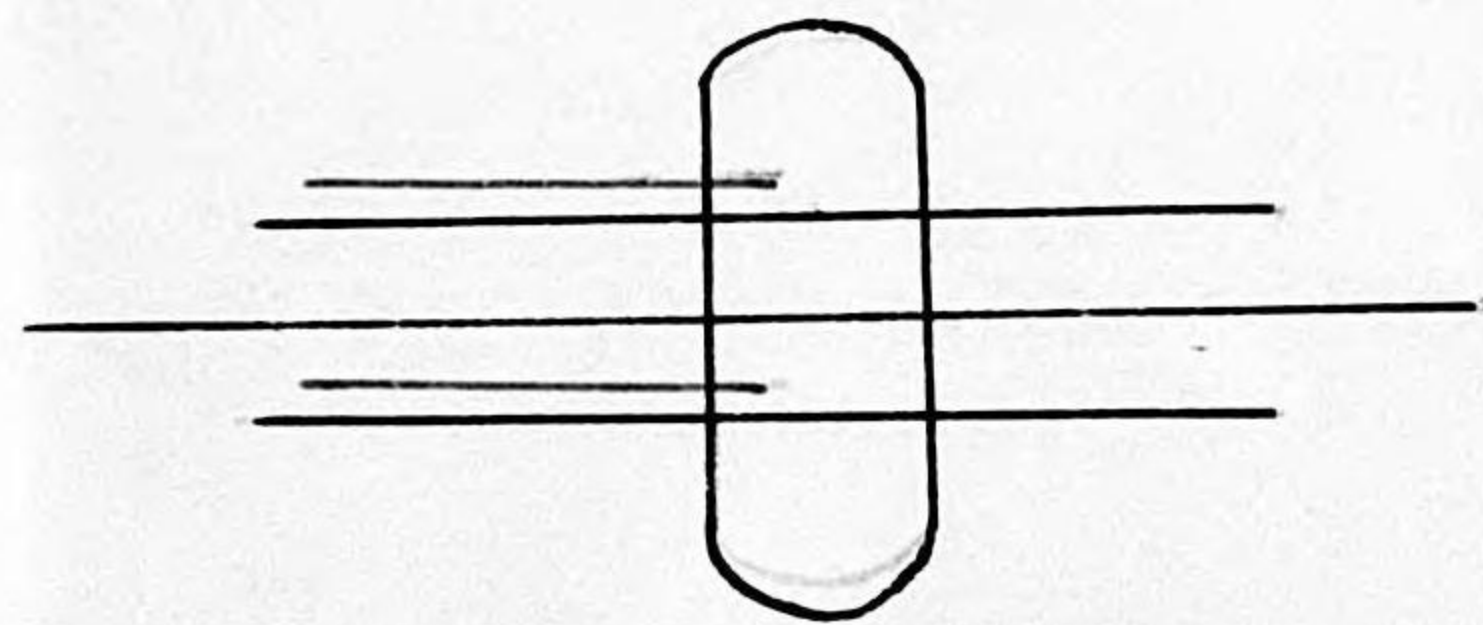
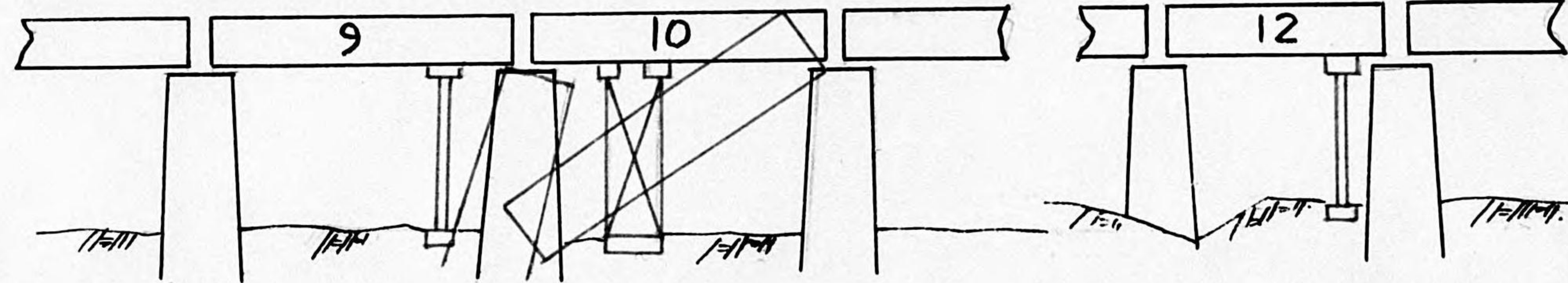
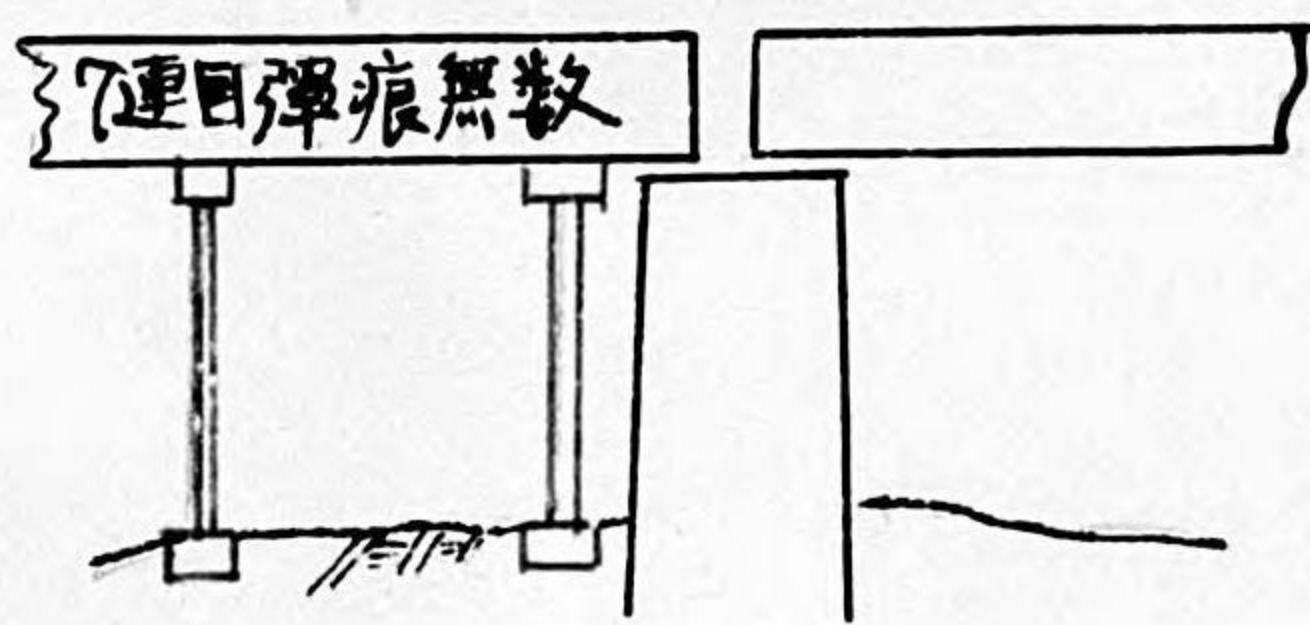
KOMARU GAWA

Komarugawa Bomb Damage Conditions

小丸川被爆状況

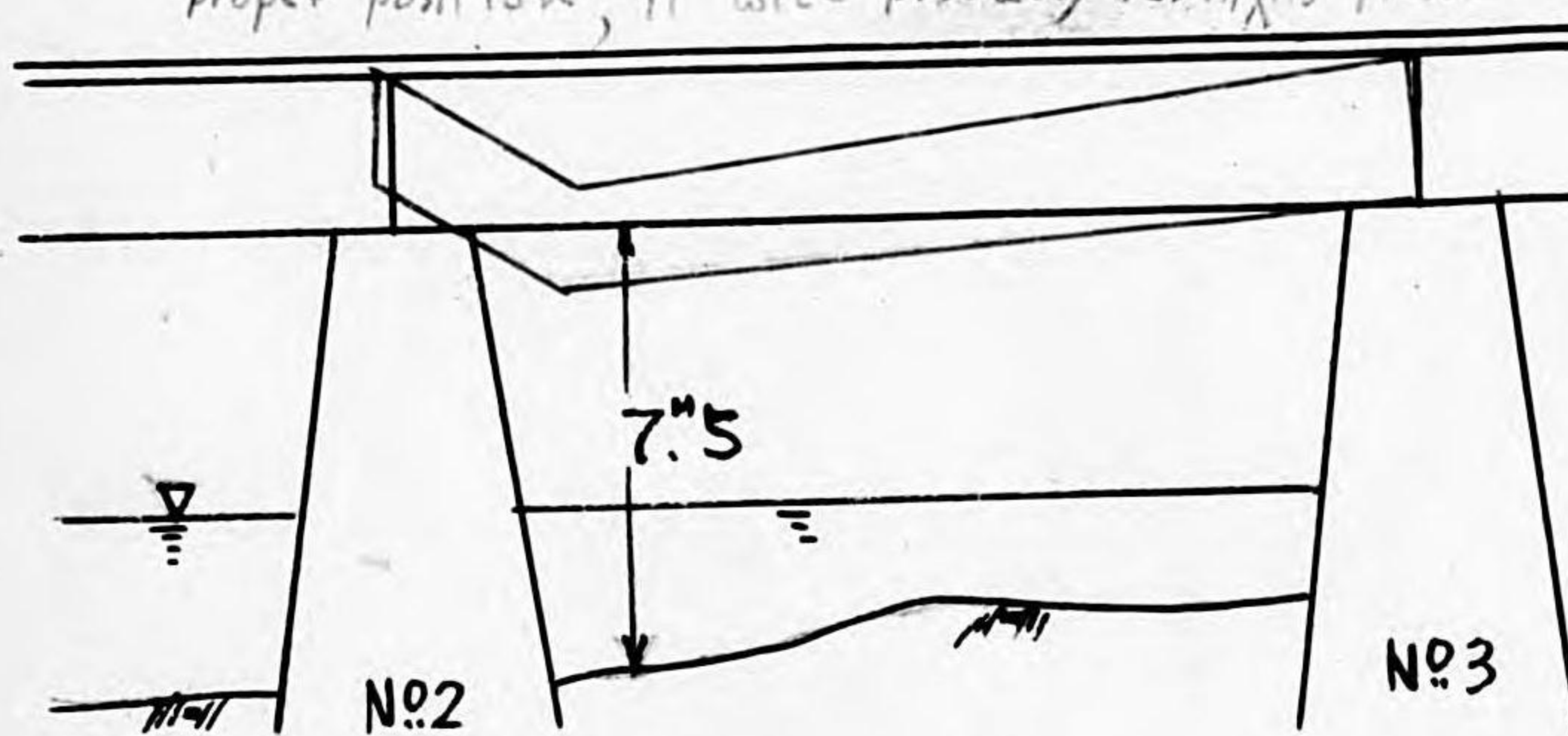


Countless shell traces
at 9th pier



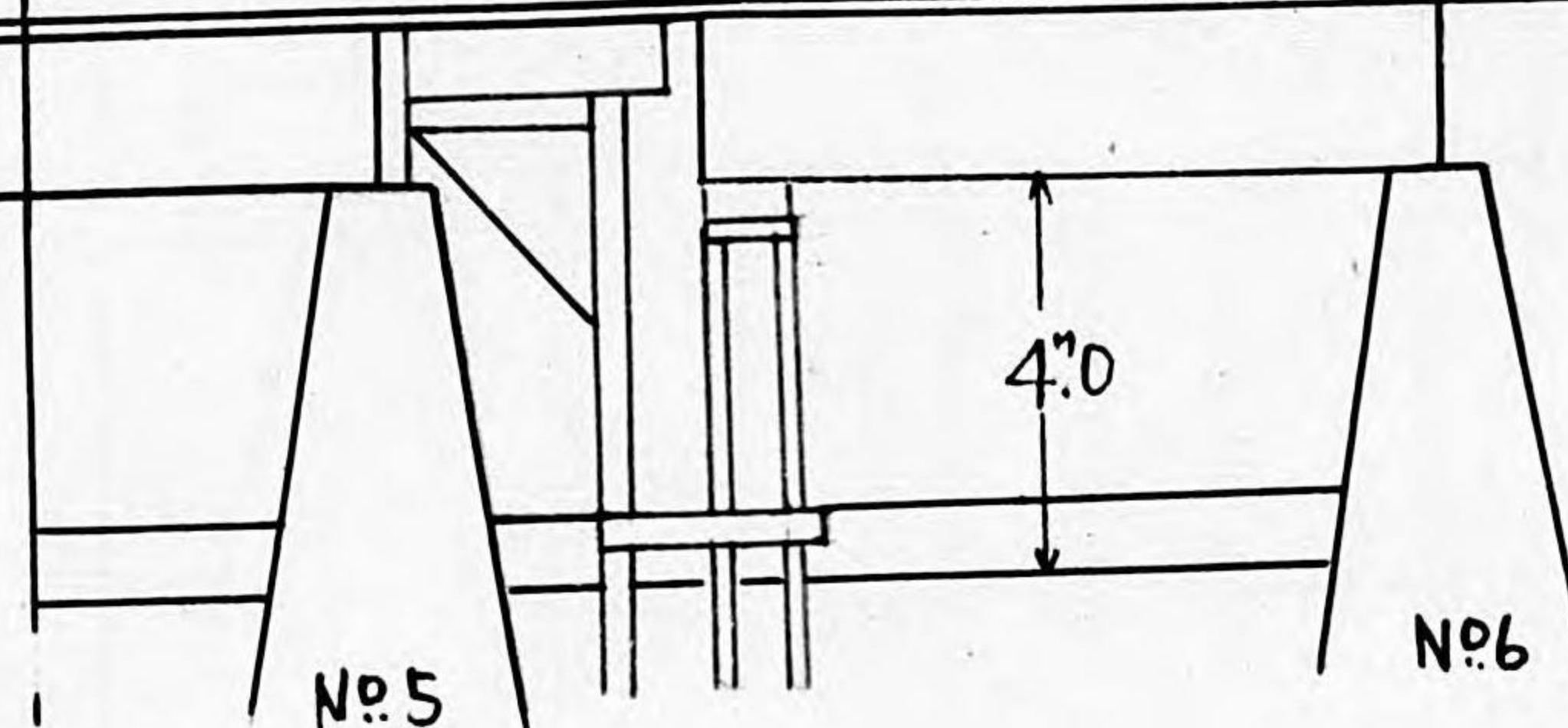
NO3
 NO3 桁起点側ハ橋脚上ニ僅カカリ轉落寸前、形ニ歪曲シアルモ正位置ニ復歸セバ現状ニ復ス

The starting point of No3 beam fell down temporarily a little on top of the bridge leg and appeared to be a little in front of it. Although it is bent, if restored to its proper position, it will probably return to its present condition.

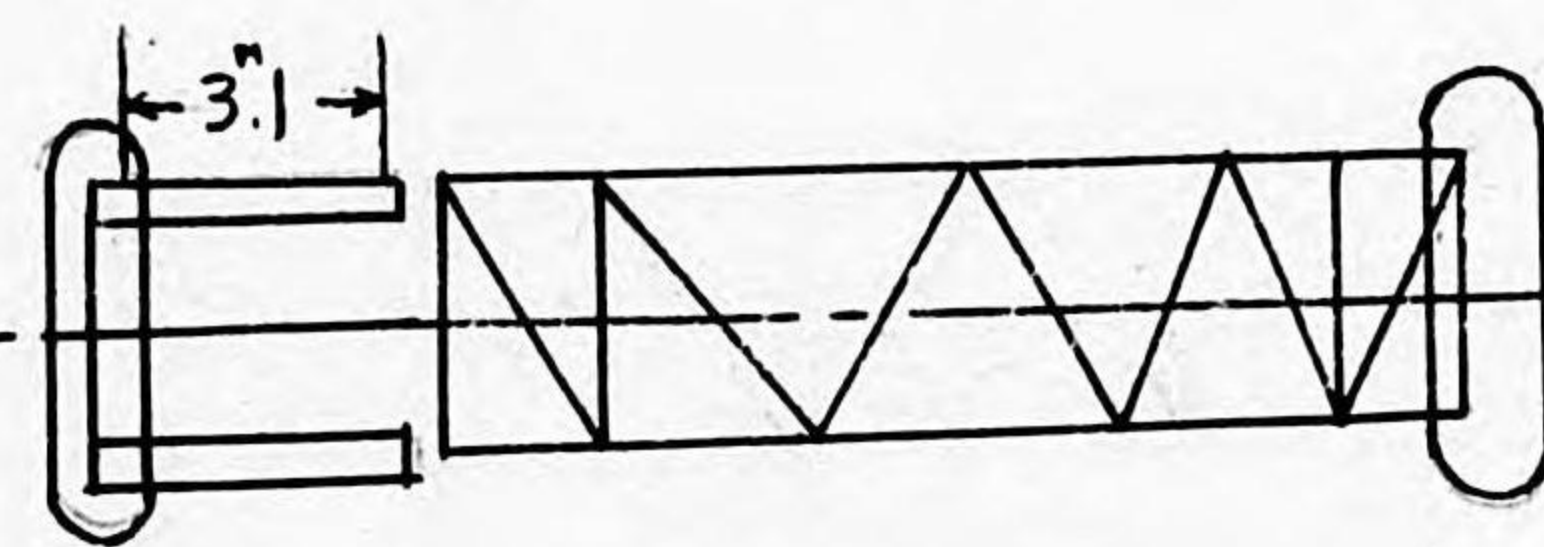
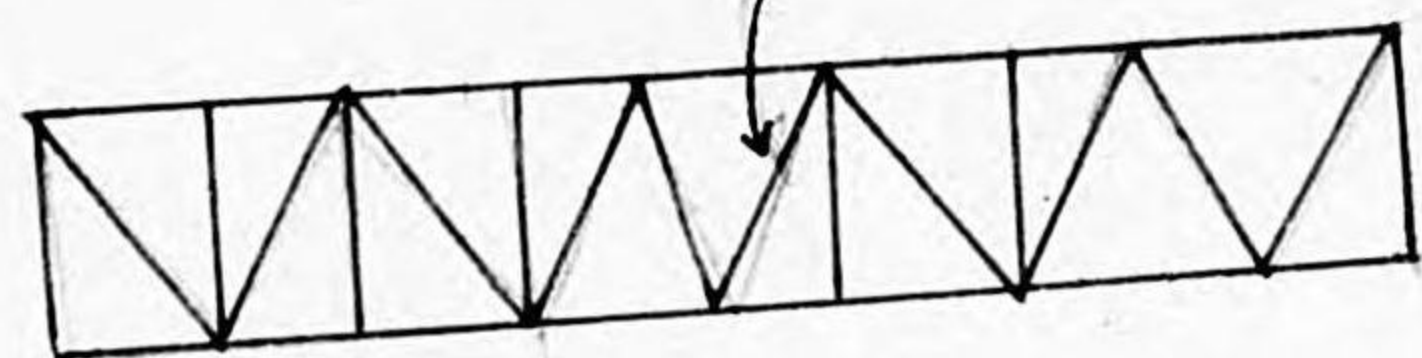


NO6
 NO6 桁ハ川下約40'位置ニ完全轉落シ起点ヨリ約3'間ハ腹板、斜弦材共ニ歪曲ス

No 6 BEAM fell down completely into a position about 40' down-stream. THE abdominal steel plate(s) and the "SLANTING STRING" material for a distance of about 3' from the STARTING POINT were BENT.



上部ハ屈曲 Bent upward

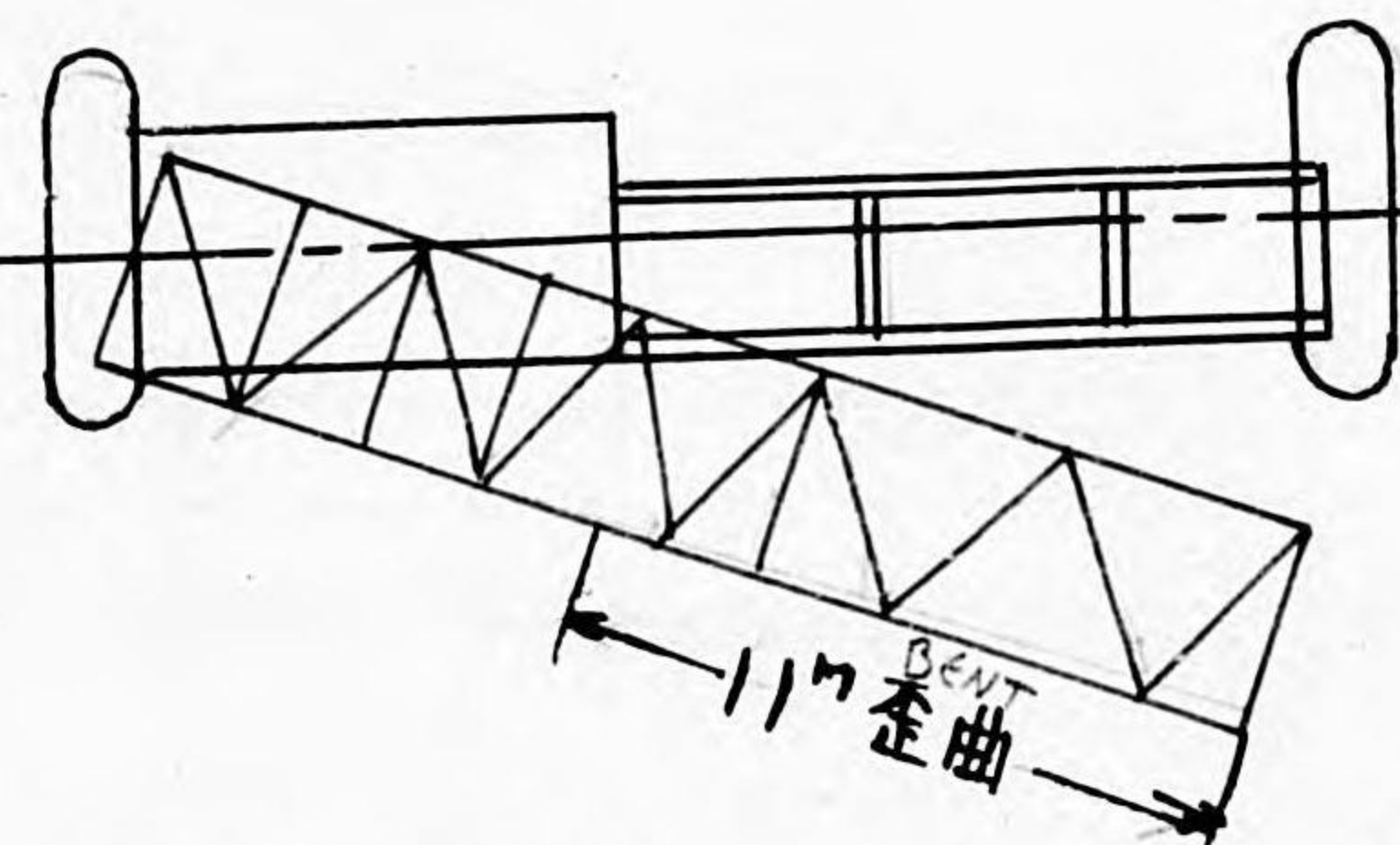
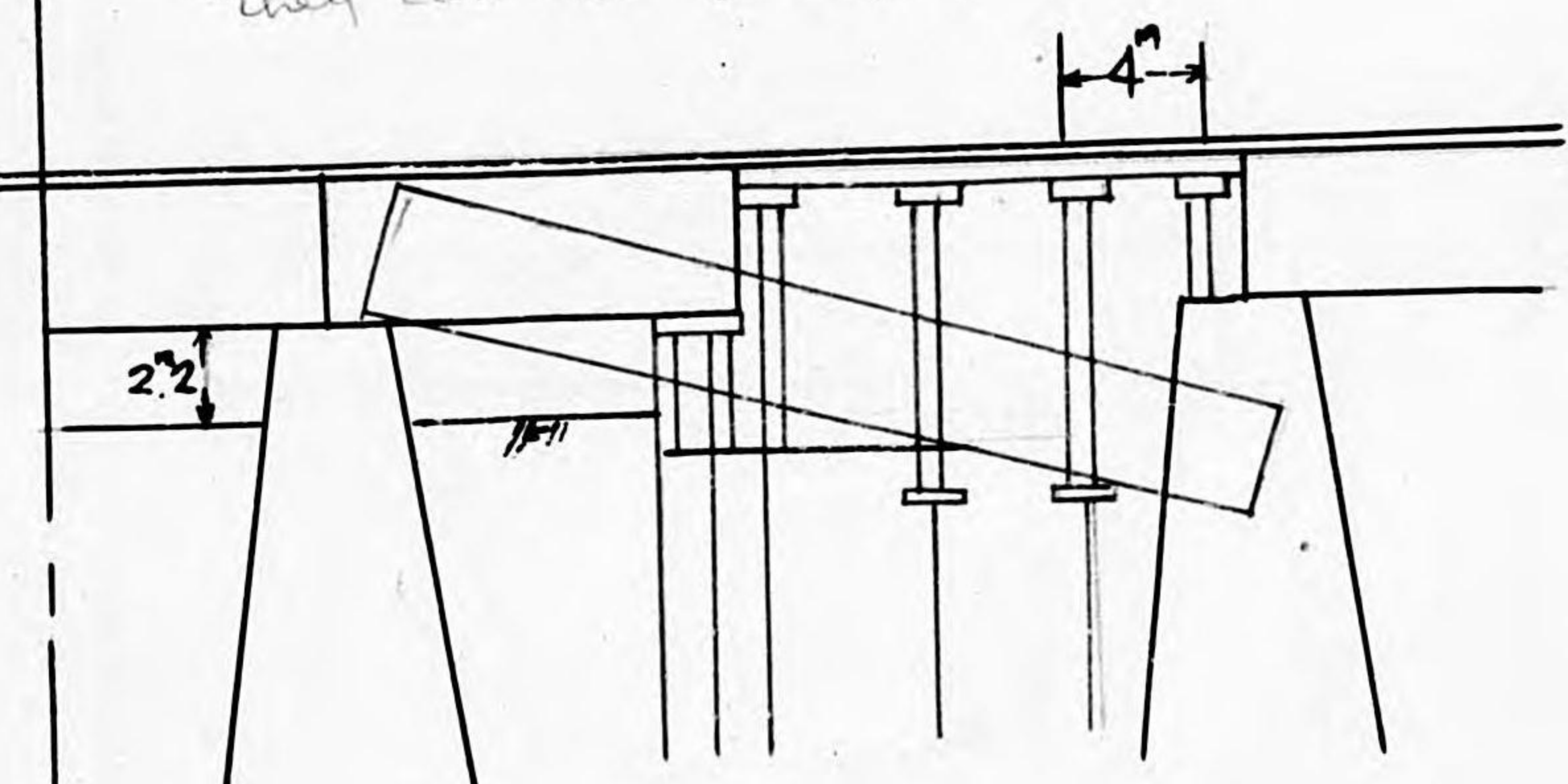


木材ヲ以テ桁、歪曲部分ヲ補強シ正位置ニ扛上スル受台ハ三本並列ス

THE BENT PARTS of the beam WERE RE-ENFORCED WITH wooden materials and raised to proper POSITION. Three BEAM foundations STAND IN A ROW.

NO9
 終点方川上ニ轉落 終点方ヨリ約11米、間ハ腹板歪曲ニ補強セザレバ使用ニ得ズ

THE END fell down in the upstream direction, and the abdominal steel plate(s) for a distance of about 11 meters from the end were BENT. UNLESS re-enforced they can not be used.



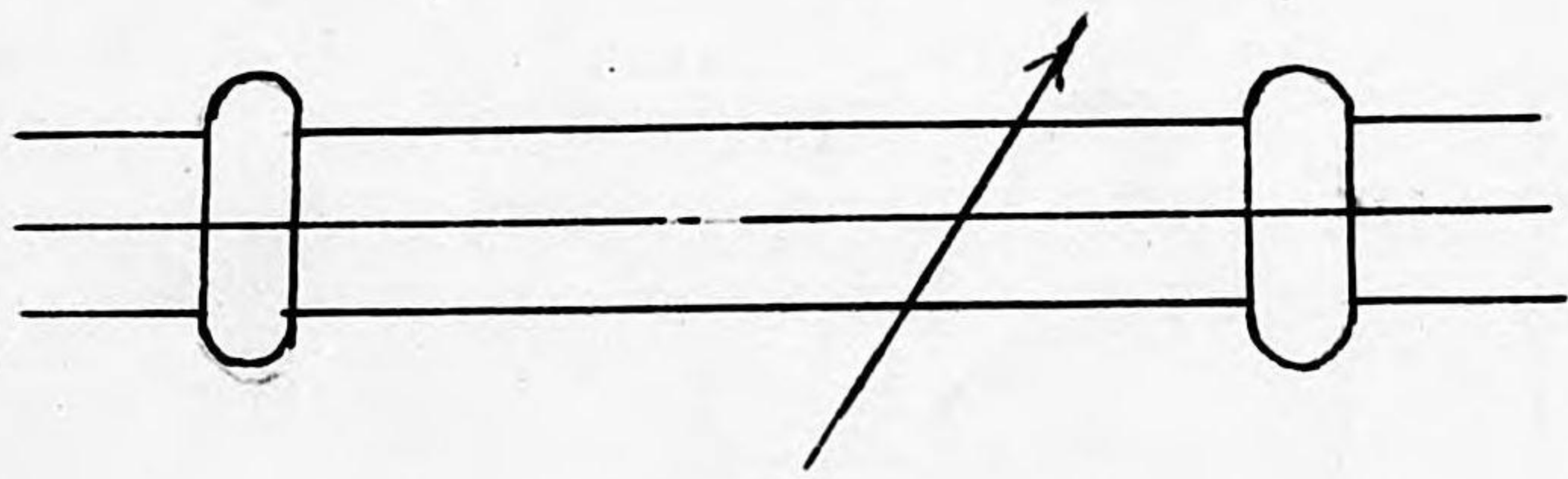
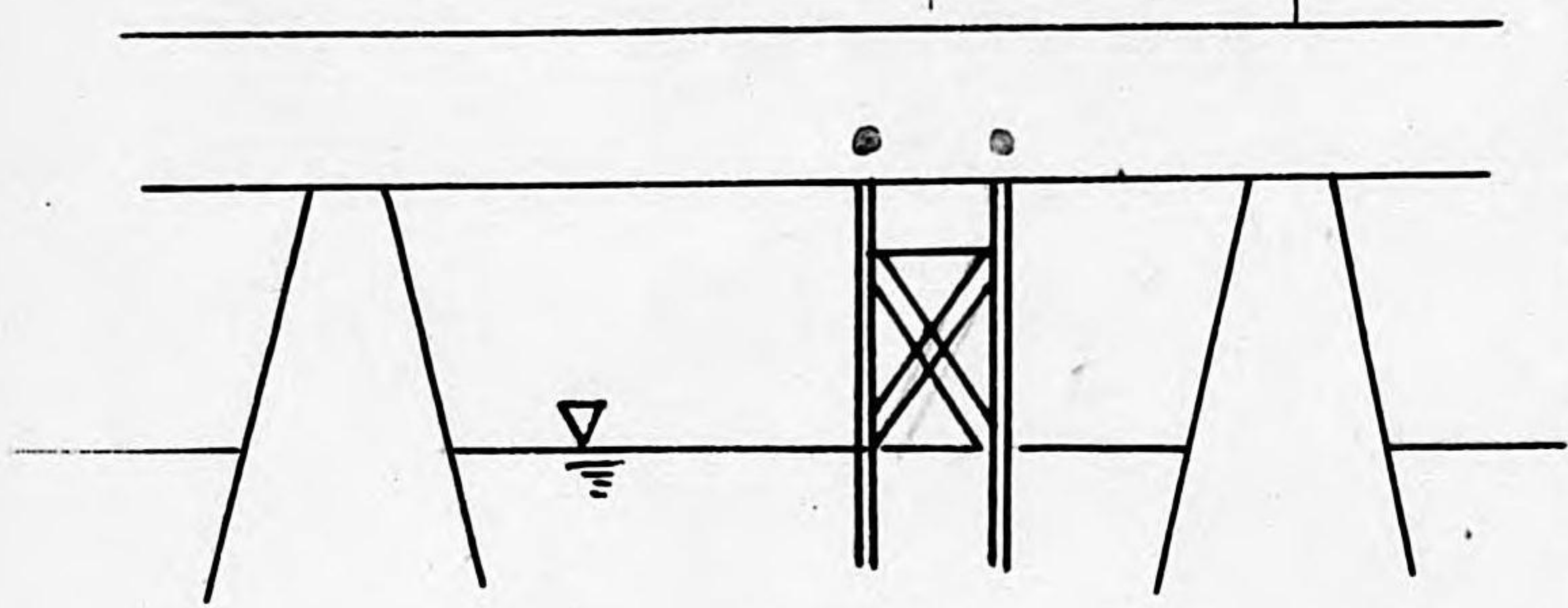
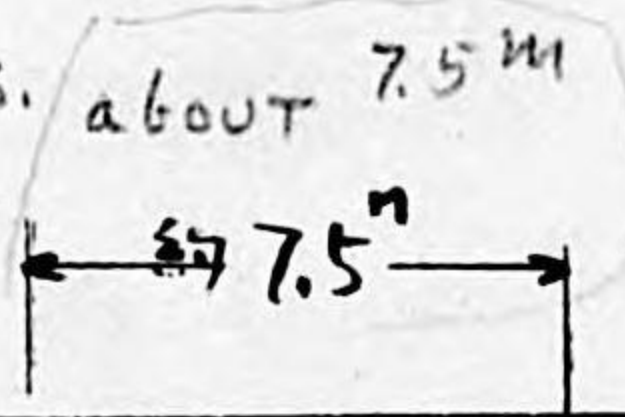
鋼桁ハ使用ニ得ル長サヲ9.3ニトリ切断扛上、他部分木桁ヲ架設ス基礎ハ並枕木土台トス

The part of the steel plate beams which could be used was cut to a length of 9.3 and raised; for the remaining part wooden BEAMS were installed. For a BASE RR TIES were lined up and made into a WOODEN FOUNDATION

NO 15

直撃弾⇒腹板=大孔ヲ生々至約0.8^m

Large Holes, for a length of about 0.8^m, were made in the abdominal steel plates. about 7.5^m

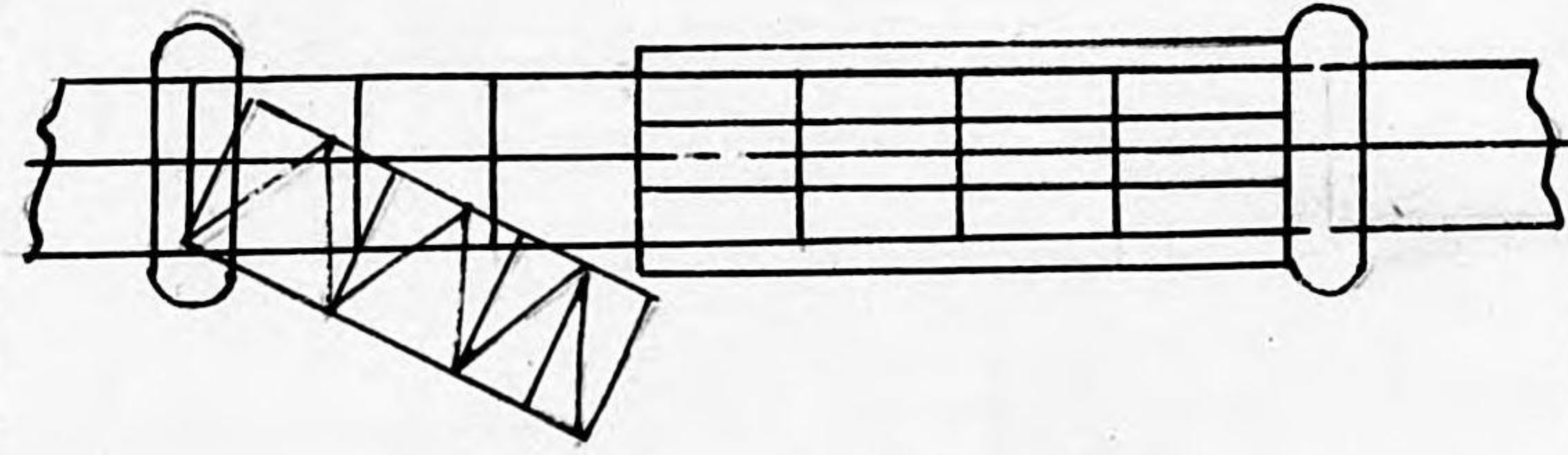
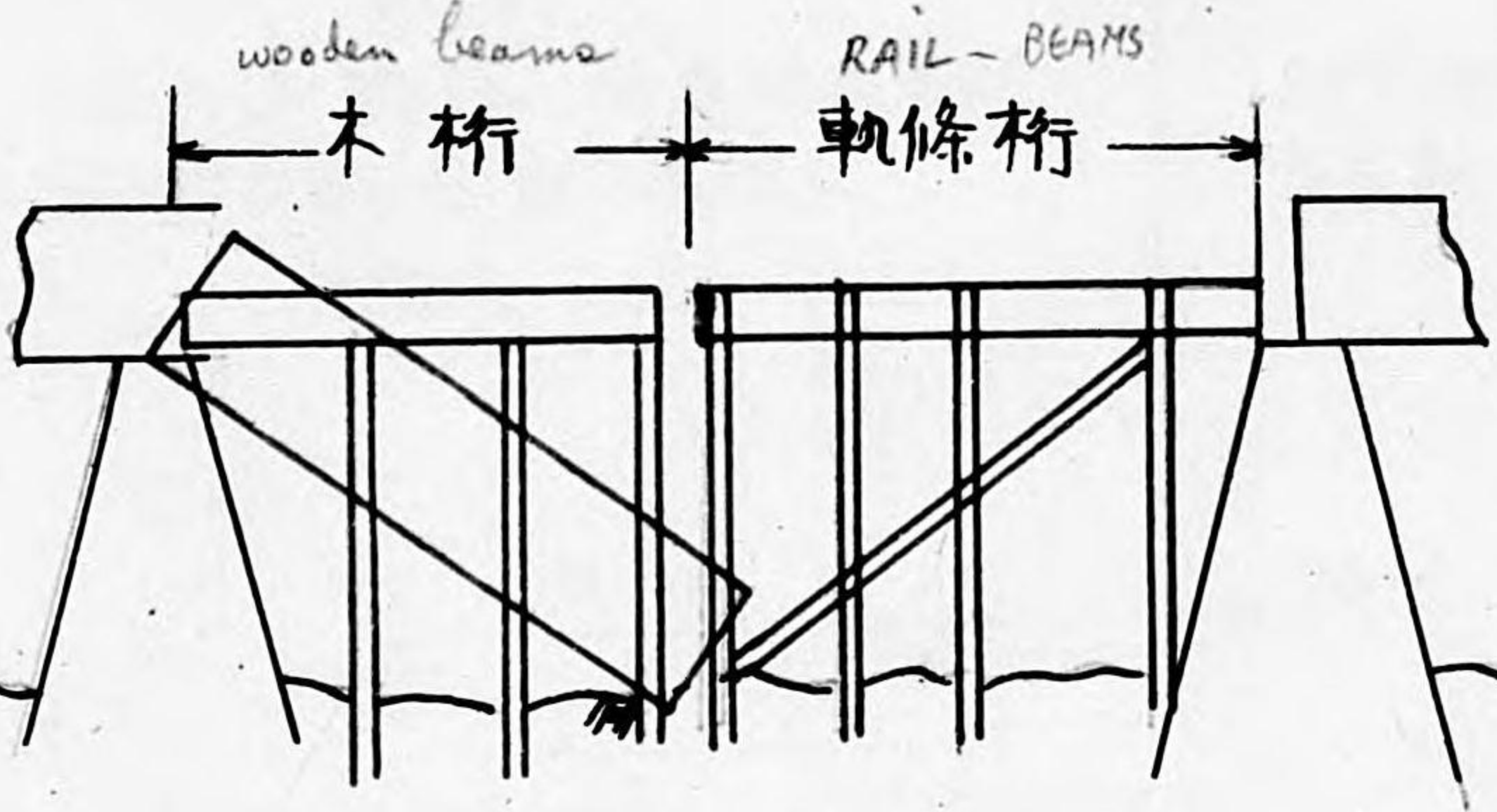


桁受台=柱ト杭打5本ト

5 piles as supports (pillars) for the BEAM foundations

Together with the BEAMS and RAIL-BEAMS which received DIRECT HITS NEAR THE CENTER of the tie-SANDALS (CAPS) the RAIL-BEAM FOUNDATIONS FLEW APART (12 Aug). The steel-PLATE BEAMS and the "SLANTING STRAIN-MATERIAL" were damaged and cut; the BRIDGE LEGS were BENT and could not be used. NO 17. (TN* Japanese says "NOT BENT" BUT character for "NOT" would appear to be MISTAKE for the compound NO 18 USED Elsewhere for "BENT" 否 歪 曲 曲)

中央枕木サドル附近=直撃ヲ受テ
桁及軌條桁共(8月12日)軌條桁受台飛散シ
釘桁、斜弦材折損切斷橋脚歪曲、使用不能

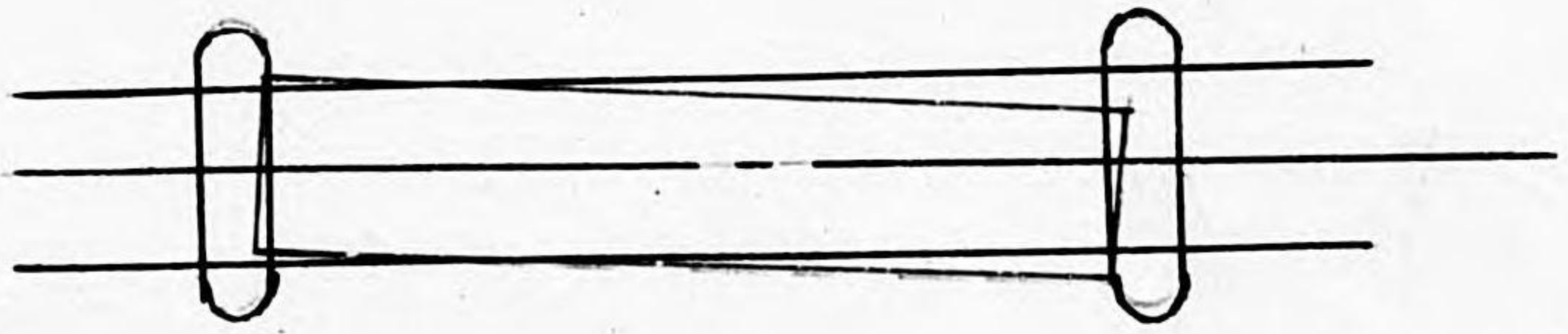
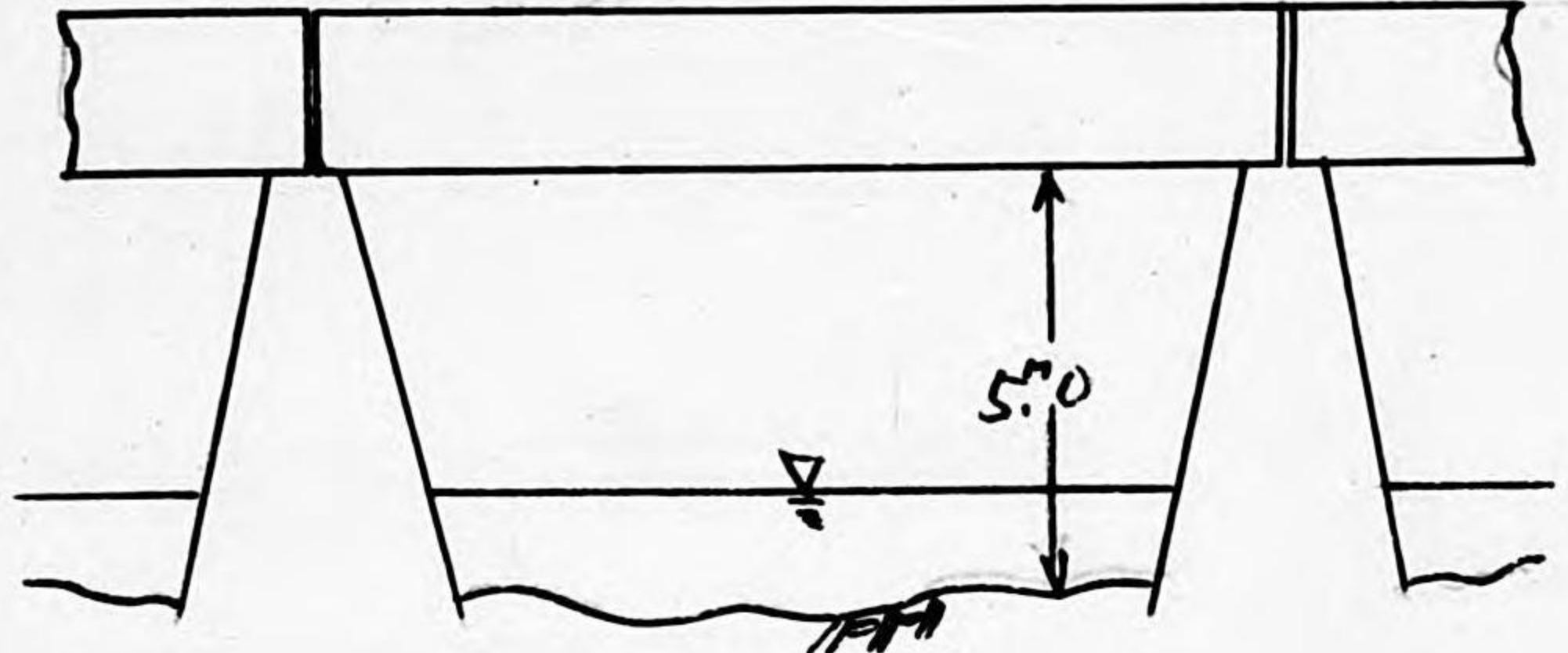


釘桁ハ撤去スル代リ=木桁ヲ架設ス軌條桁ハ8月12日復旧ス

Instead of removing the steel BEAMS, WOODEN beams were INSTALLED. RAIL BEAMS RESTORED 12 Aug.

終端側ヨリ川上=約70^m移動

MOVED about 70 m upstream from the end side.



正位置=移動ス

MOVED TO correct position

NO 30

直撃弾=依、腹部=
約 50mm, 大孔ヲ生ス

Large holes of about 50mm
were made in the abdominal
section by direct ^{bomb} hits

NO 31

桁切斷轉落、再度使用不能ナリ
橋脚完全=飛散撤壊ス。

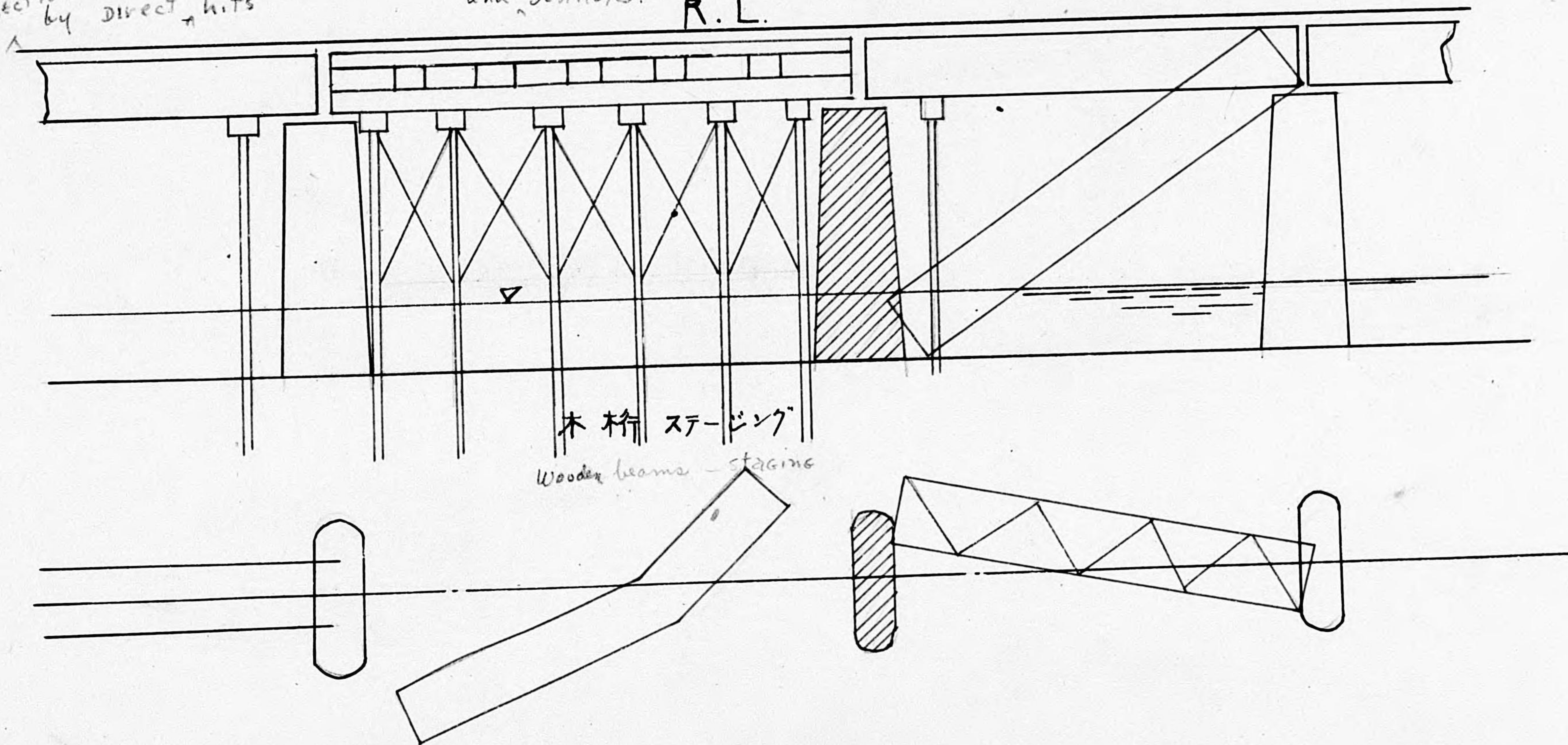
Beams were SEVERED and
fell. Can not be used again.
LEGS of BRIDGE FLEW apart completely
and ^{were} DESTROYED.

NO 32

起点側ヨリ川下=轉落再使
用可能ナリ

FELL in downstream direction from starting point.
Can be USED AGAIN.

R. L.



木桁 ステージング

Wooden beams - staging