

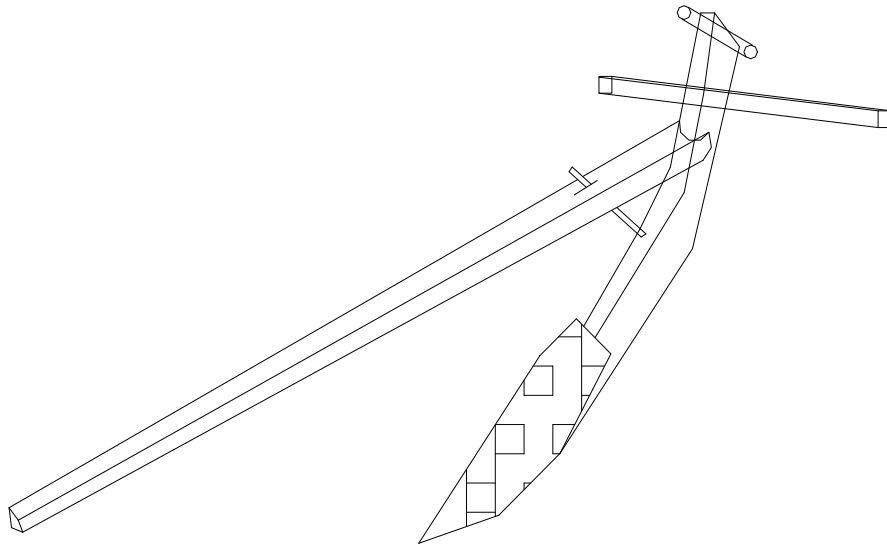
(1001)Agricultural Civil Engineering Words (Illustration) in Africa 1001～1421

Reference	Publisher・Bookstore
1 Old life and Tools	KOMINE Bookstore
2 Old life and Tools	IWASAKI Bookstore
3 Old Tools	POPURA Bookstore
4 Water	AKANE Bookstore
5 Japanese Agriculture	IWASAKI Bookstore
6 Modern Agriculture	NOUBUNKYOU
7 Agricultural Civil Engineering Words (illustration)	TOUYOU Bookstore

只野 敏夫
Tadano Toshio

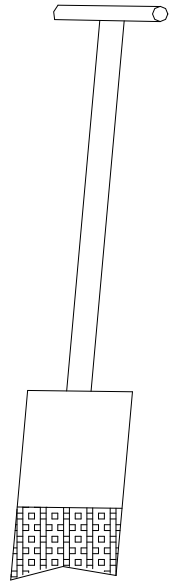
(1002) plough

(1002) plough



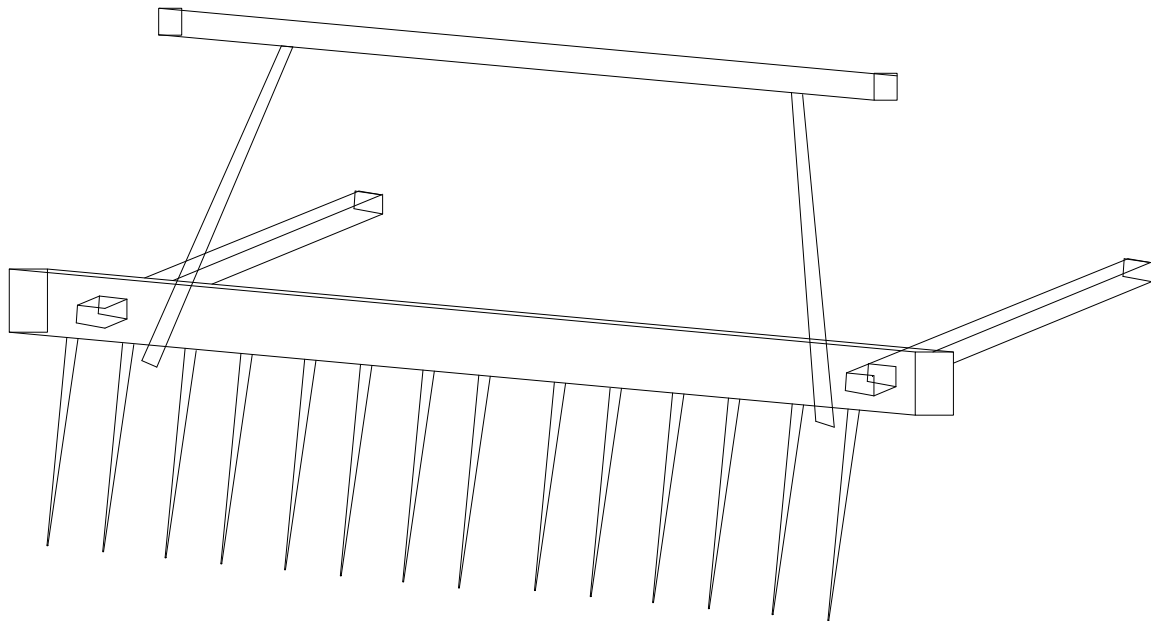
(1003) plough

(1003) plough



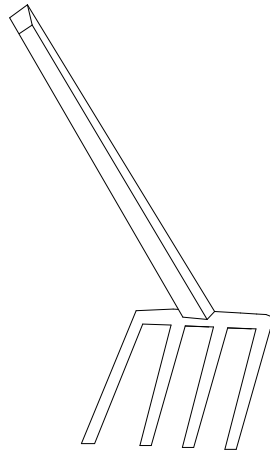
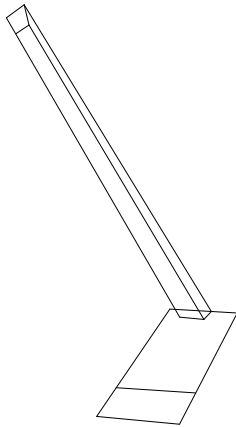
(1004) plough

(1004) plough



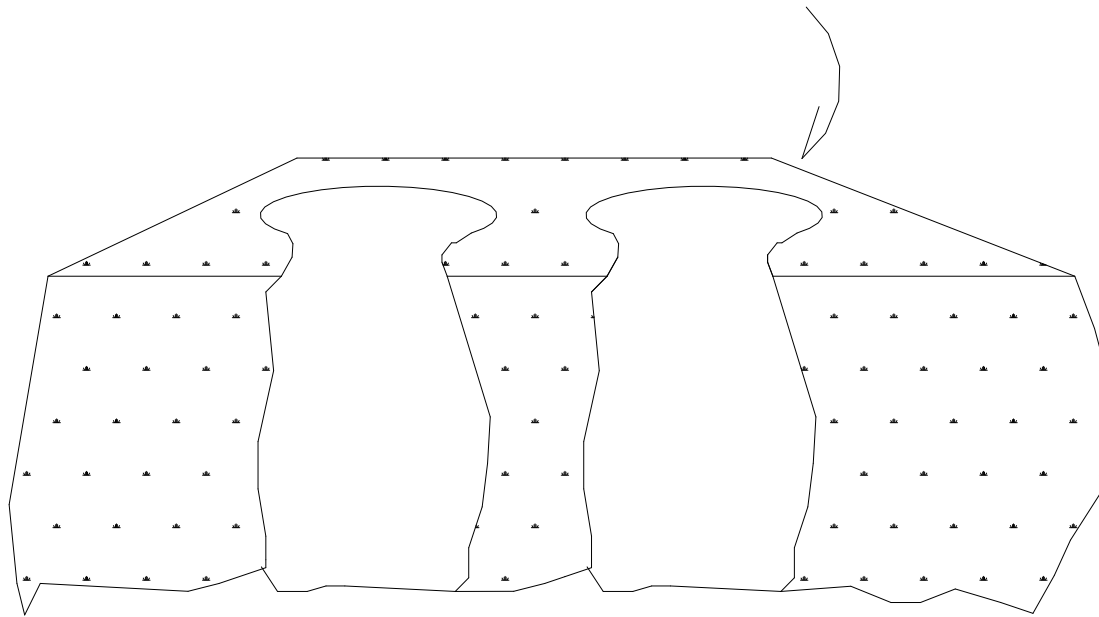
(1005) hoe

(1005) hoe



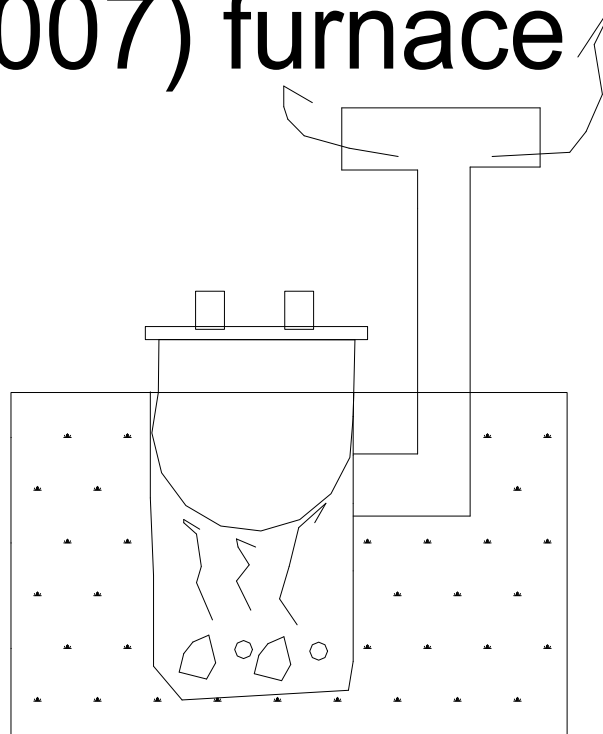
(1006) furnace

(1006) furnace



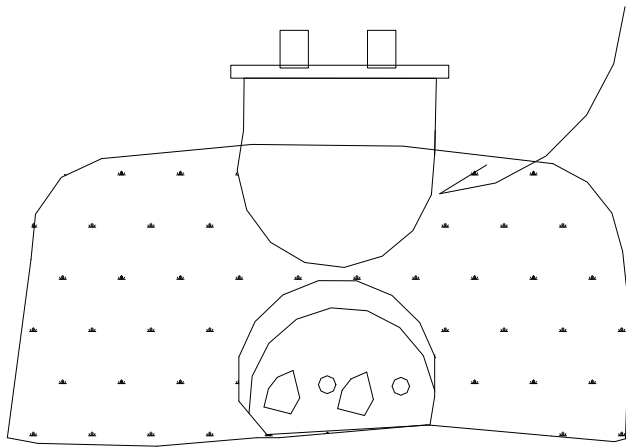
(1007) furnace

(1007) furnace



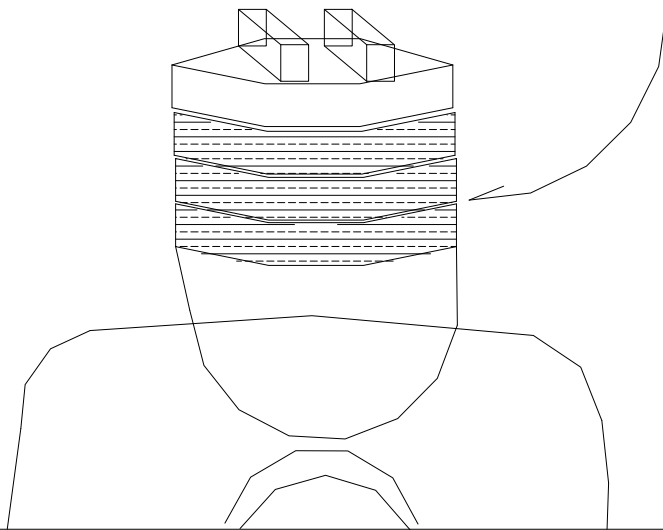
(1008) broad-brimmed cooking pot for rice

**(1008) broad-brimmed
cooking pot for rice**



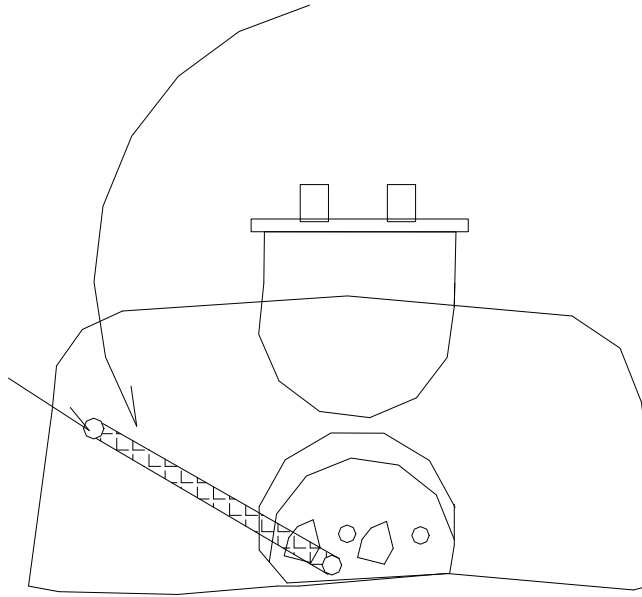
(1009) bamboo basket for steaming food

(1009)bamboo basket for steaming food



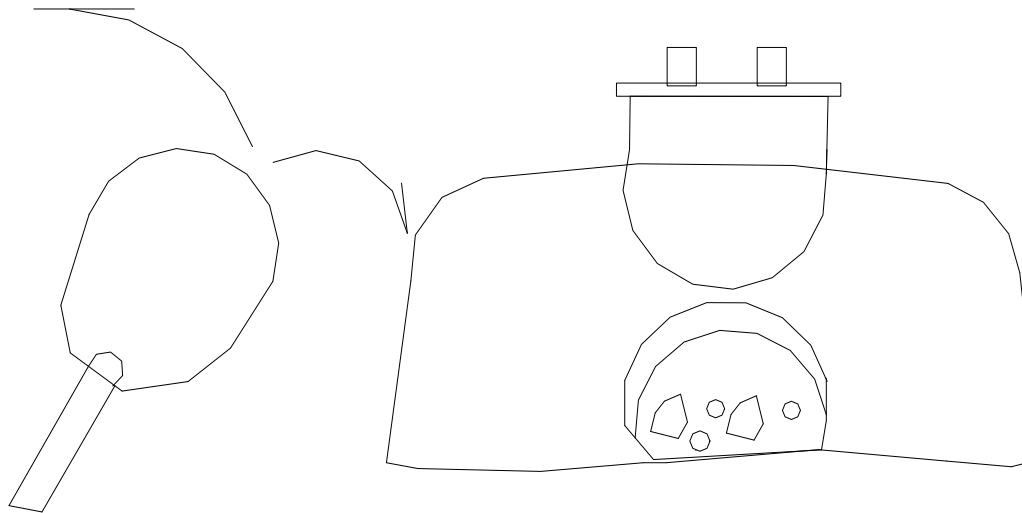
(1010) fire blow bamboo

(1010) fire blow bamboo



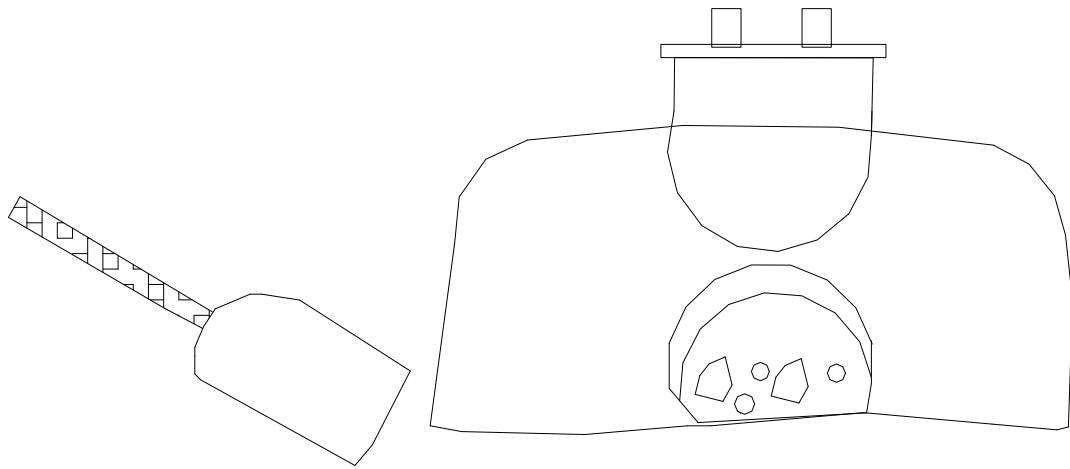
(1011) fan

(1011) fan



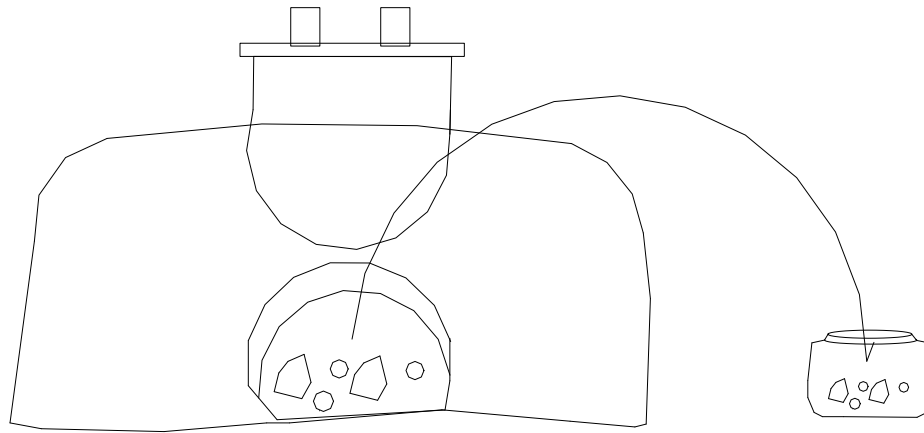
(1012) fire shovel

(1012) fire shovel



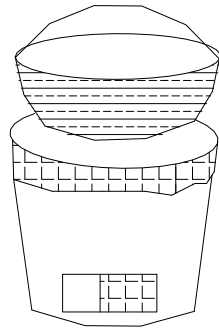
(1013)charcoal extinguisher

(1013) charcoal extinguisher



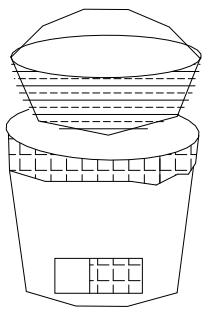
(1014) portable clay cooking stove

(1014) portable clay
cooking stove
cooking stove



(1015) charcoal

(1015) charcoal



charcoal



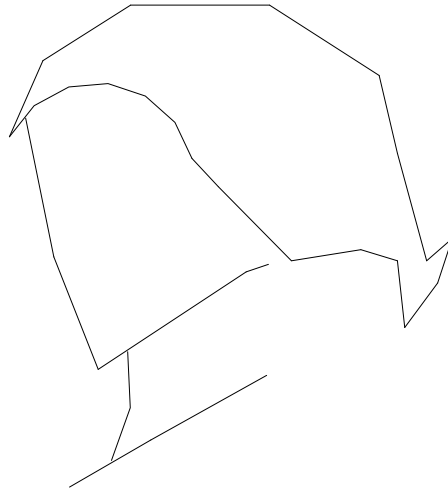
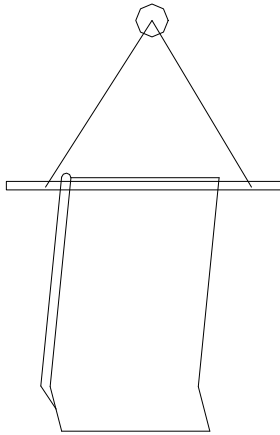
artificial coal briquette



oval briquette fire

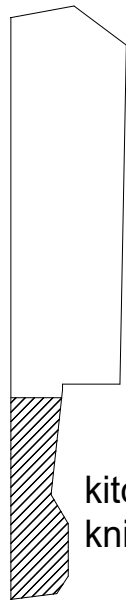
(1016) towel

(1016) towel

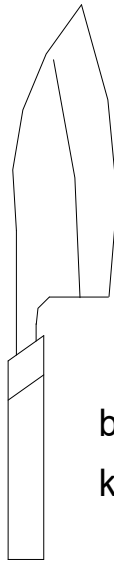


(1017) knife

(1017) knife



kitchen
knife



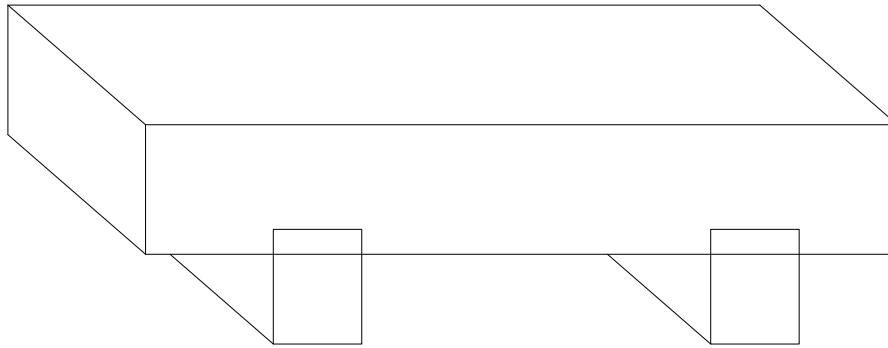
broad bladed
kitchen knife

fish-slicing knife



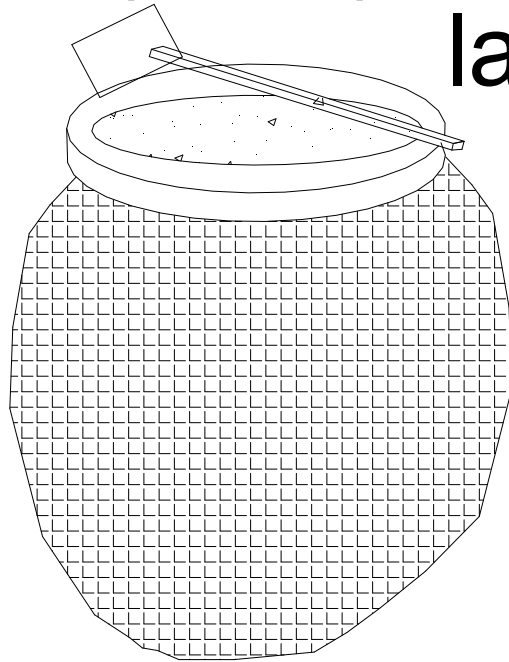
(1018) cutting board

(1018) cutting board



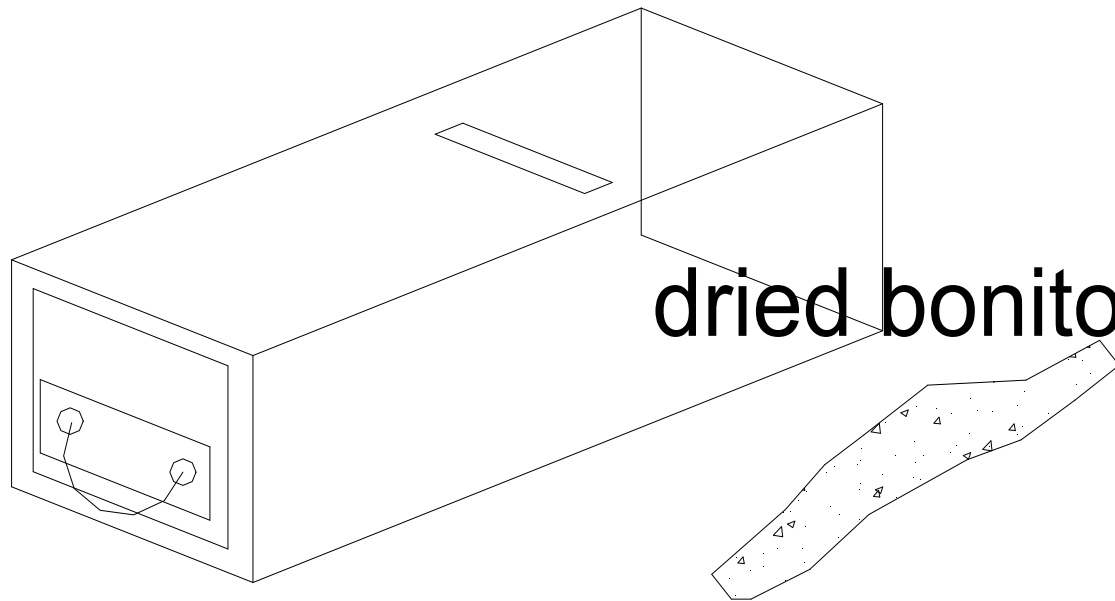
(1019) water jar

(1019) water jar
ladle



(1020) dried bonito shaver

(1020) dried bonito shaver



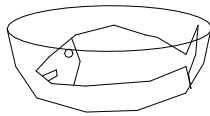
dried bonito

(1021) dried bonito

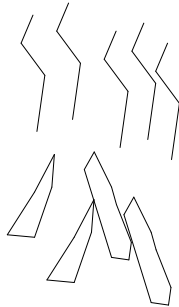
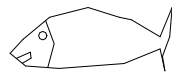
(1021) dried bonito



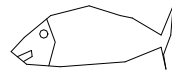
bonito



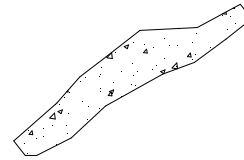
boil



smoke



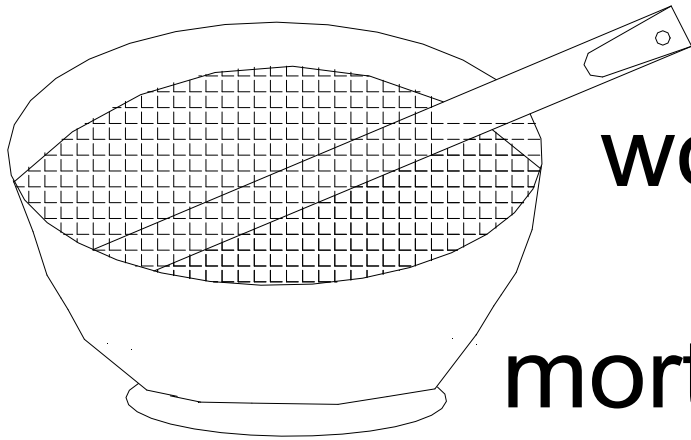
dry



mold

(1022) mortar wooden pestle

(1022) mortar wooden pestle

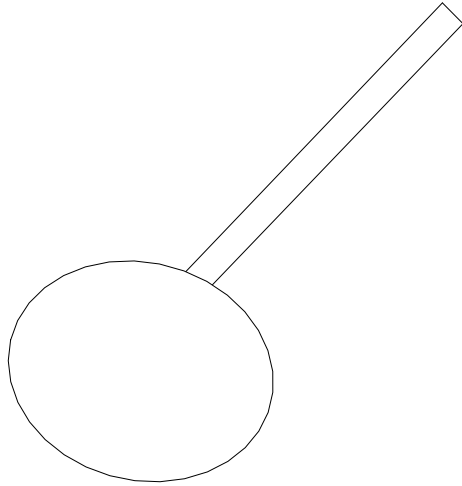


wooden pestle

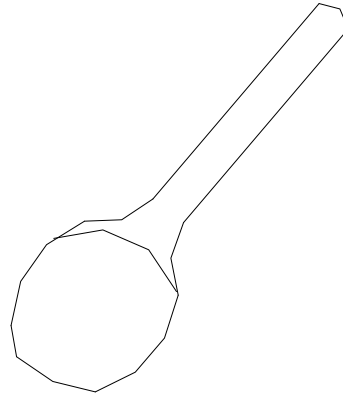
mortar

(1023) dipper wooden spoon

(1023) dipper wooden spoon

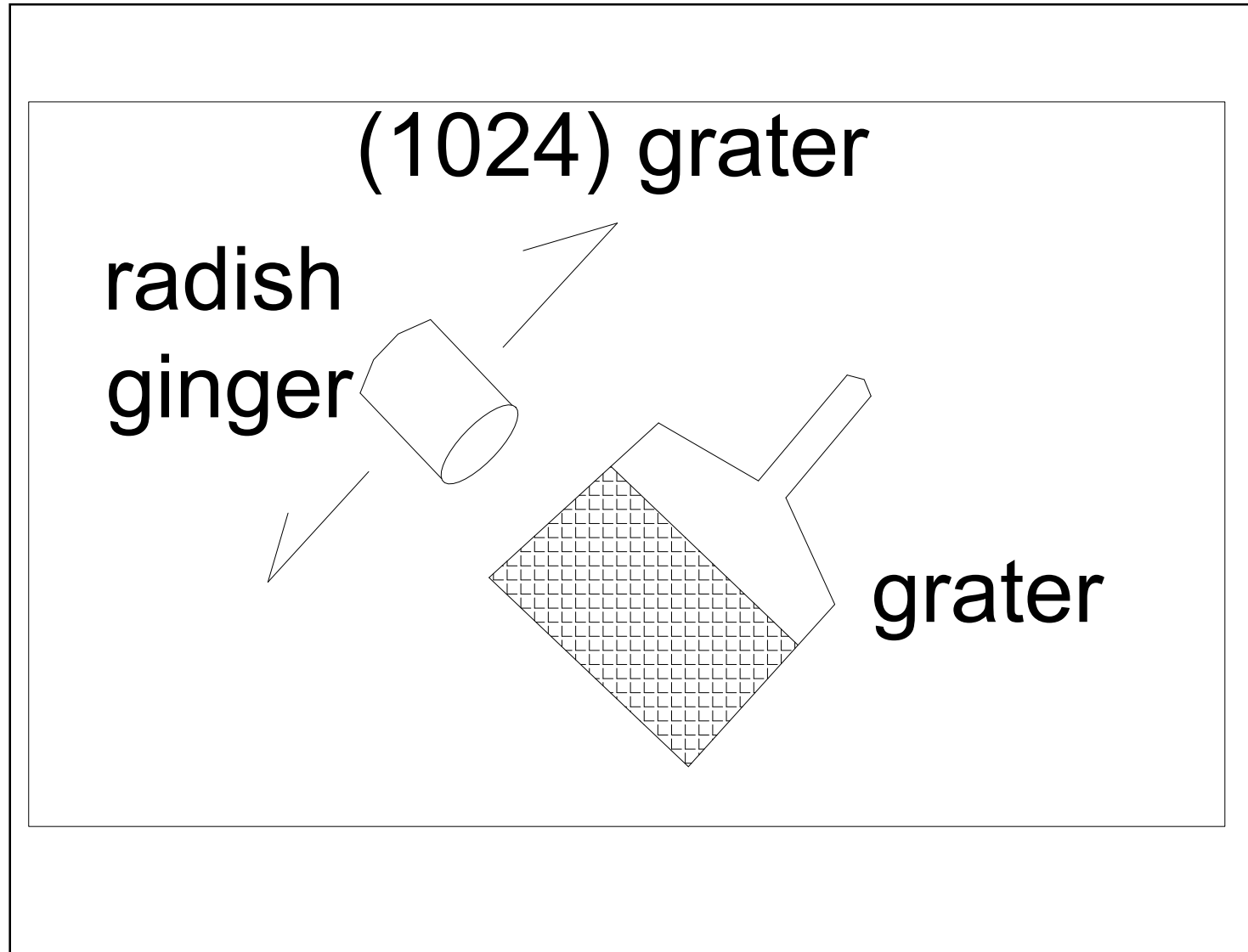


dipper



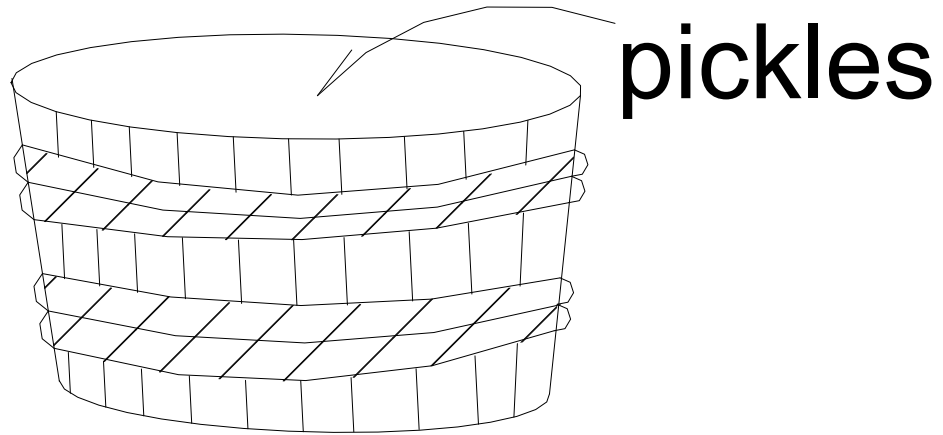
wooden spoon

(1024) grater



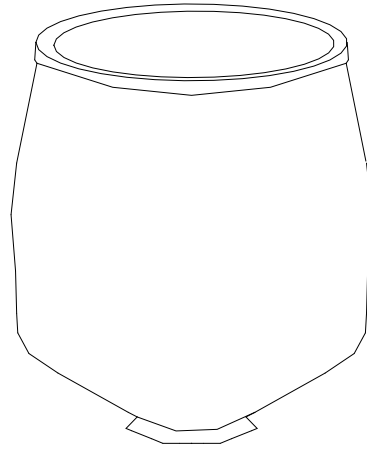
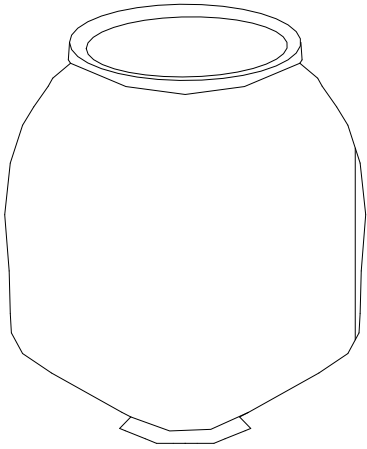
(1025) barrel

(1025) barrel
barrel



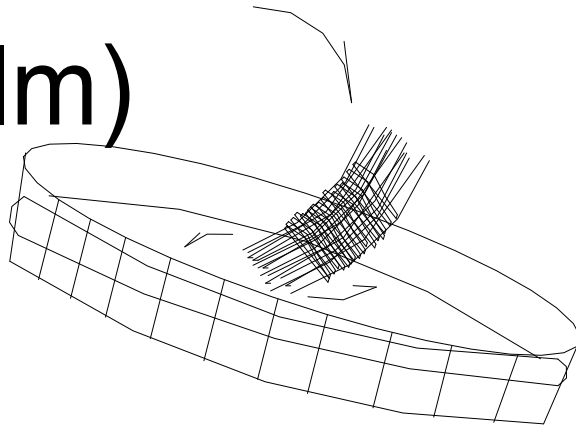
(1026) pot earthenware pot

(1026) pot earthenware pot

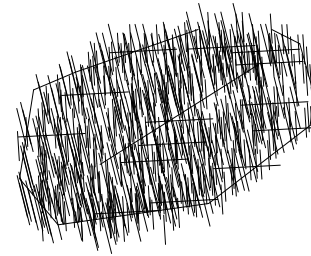


(1027) bamboo whisk

(1027) bamboo whisk
bamboo whisk
(palm)

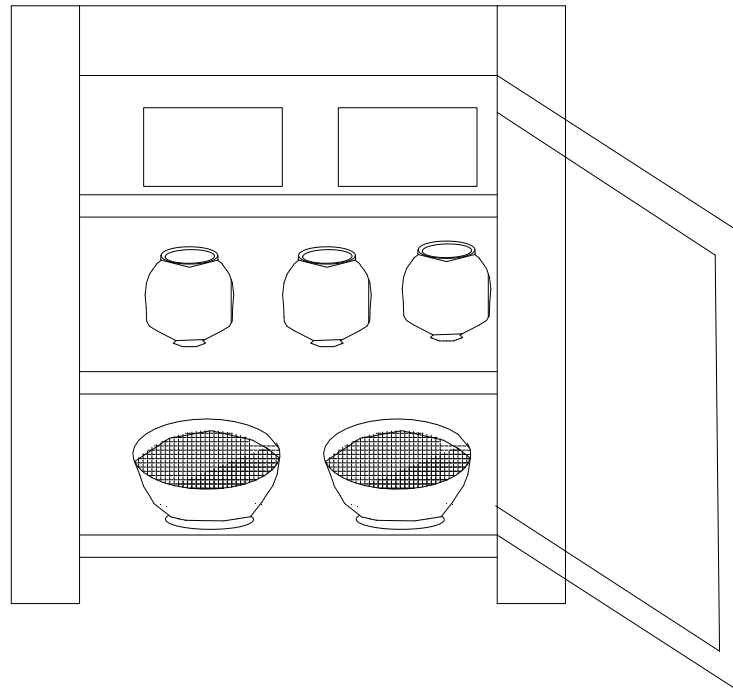


scrubbing
brushes



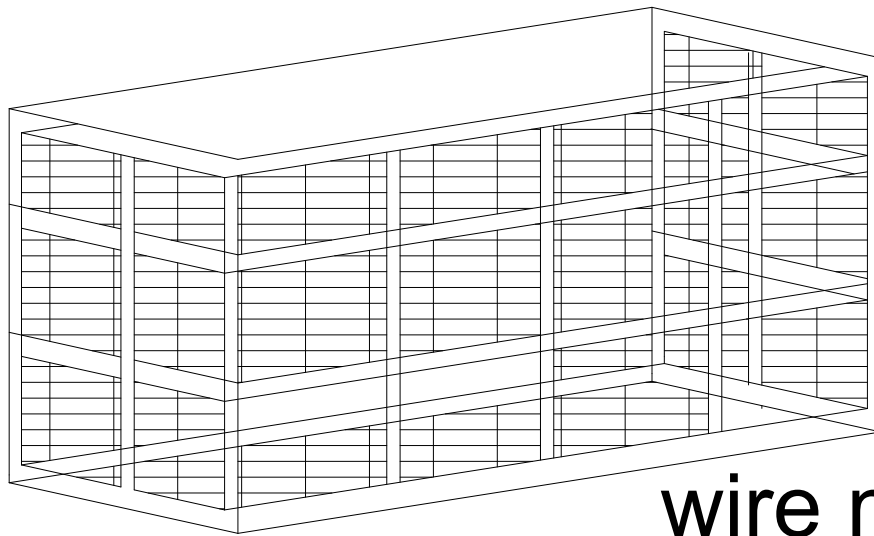
(1028) ice refrigerator

(1028) ice refrigerator



(1029) fly-net cupboard 1

(1029) fly-net cupboard 1

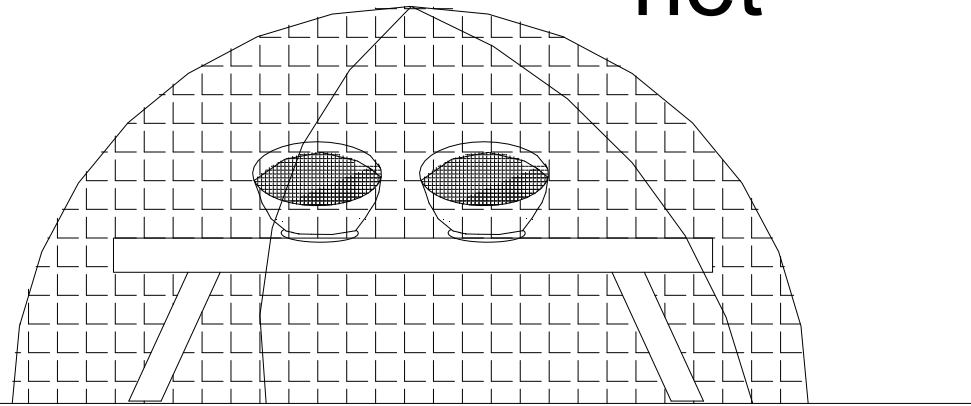


wire mesh

(1030) fly-net cupboard 2

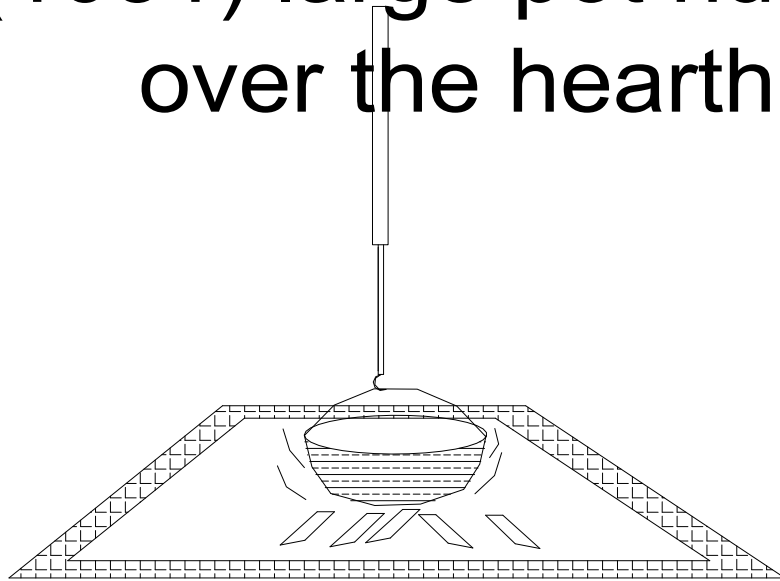
(1030) fly-net cupboard 2

net



(1031) large pot hung over the hearth

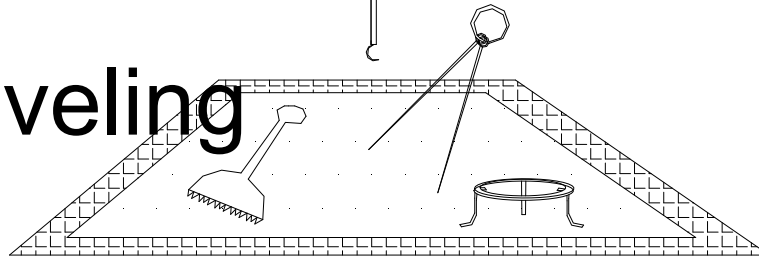
(1031) large pot hung
over the hearth



(1032) trivet (set up in a hibachi to support a kettle)

(1032) trivet (set up in
a hibachi to support a kettle)
(a pair of)
tongs

ash leveling



(1033) earthenware baking

(1033) earthenware baking

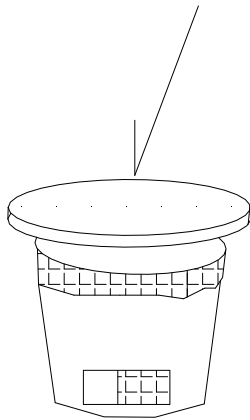
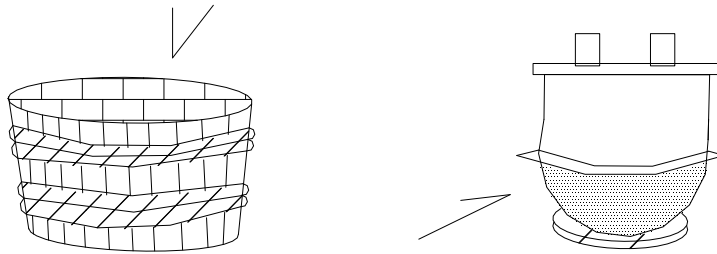


plate terra-cotta
(bean sesame)

(1034) wooden container for cooked rice

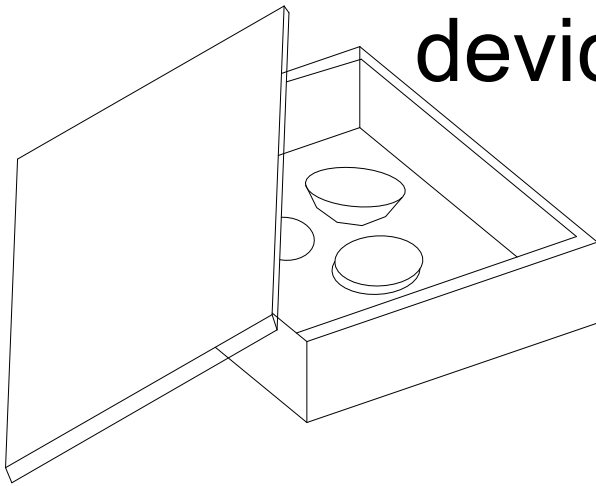
**(1034) wooden container
for cooked rice**



**broad-brimmed
cooking pot for rice**

(1035) box set

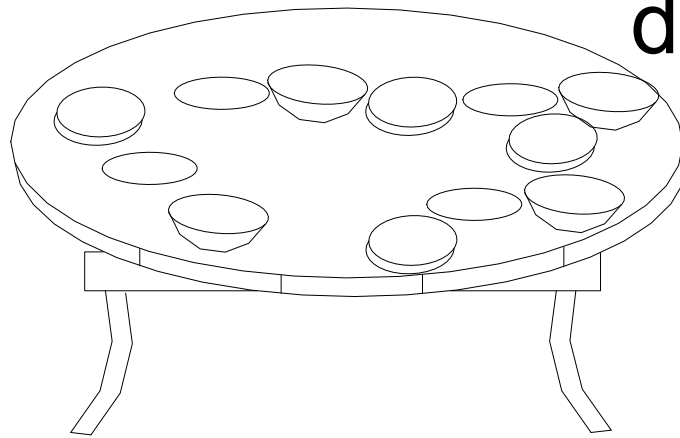
(1035) box set
wooden box
devices for eating



(1036) low dining table

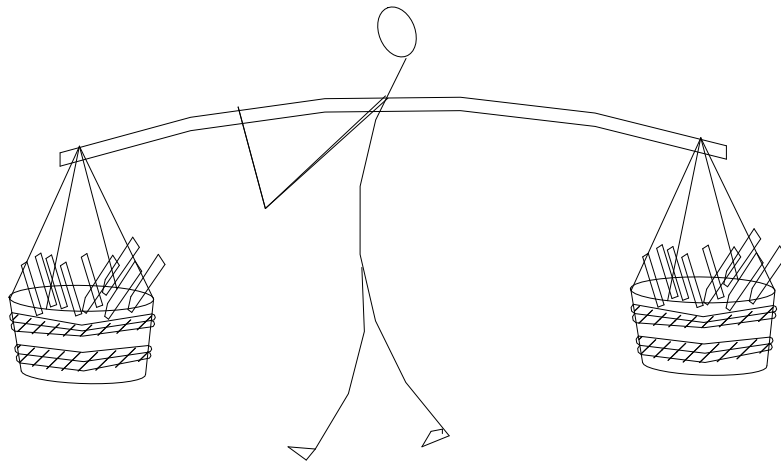
(1036) low dining table

dietary



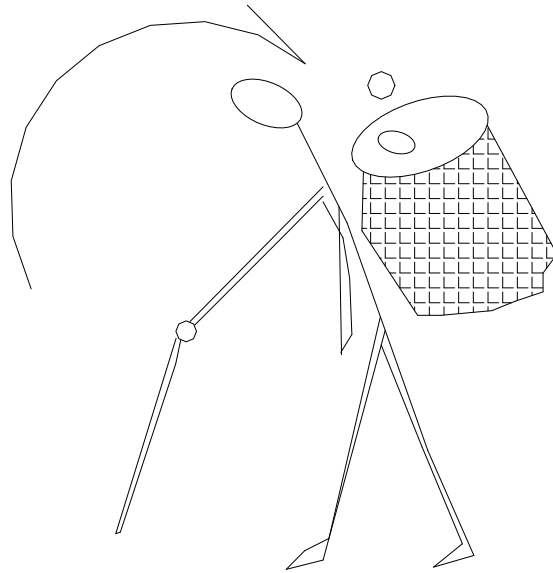
(1037) firewood gathering

(1037) firewood gathering



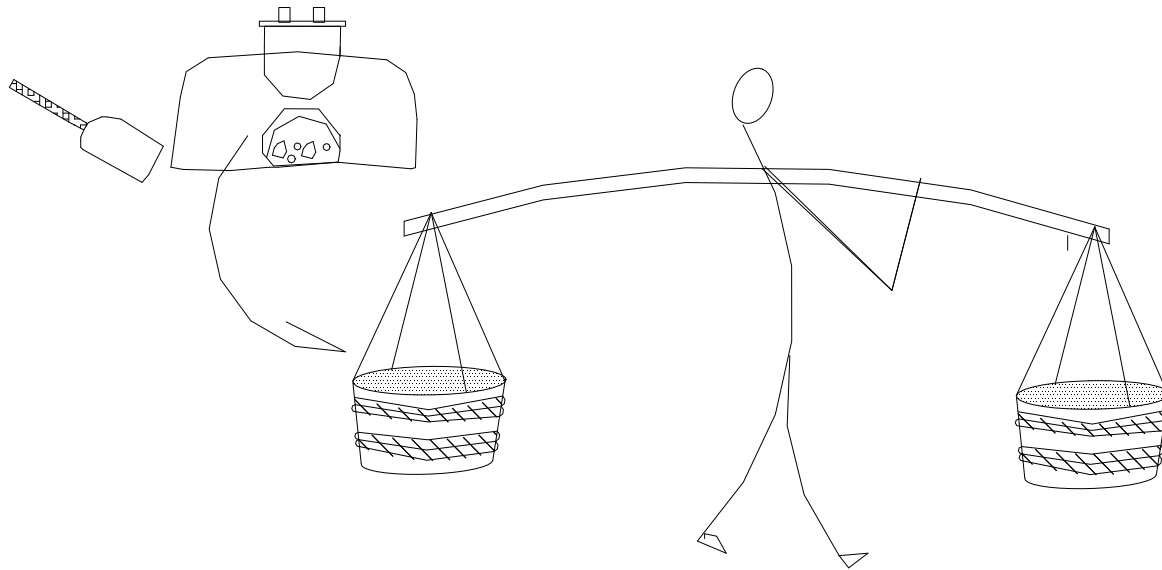
(1038) buying paper scraps

(1038) buying paper scraps



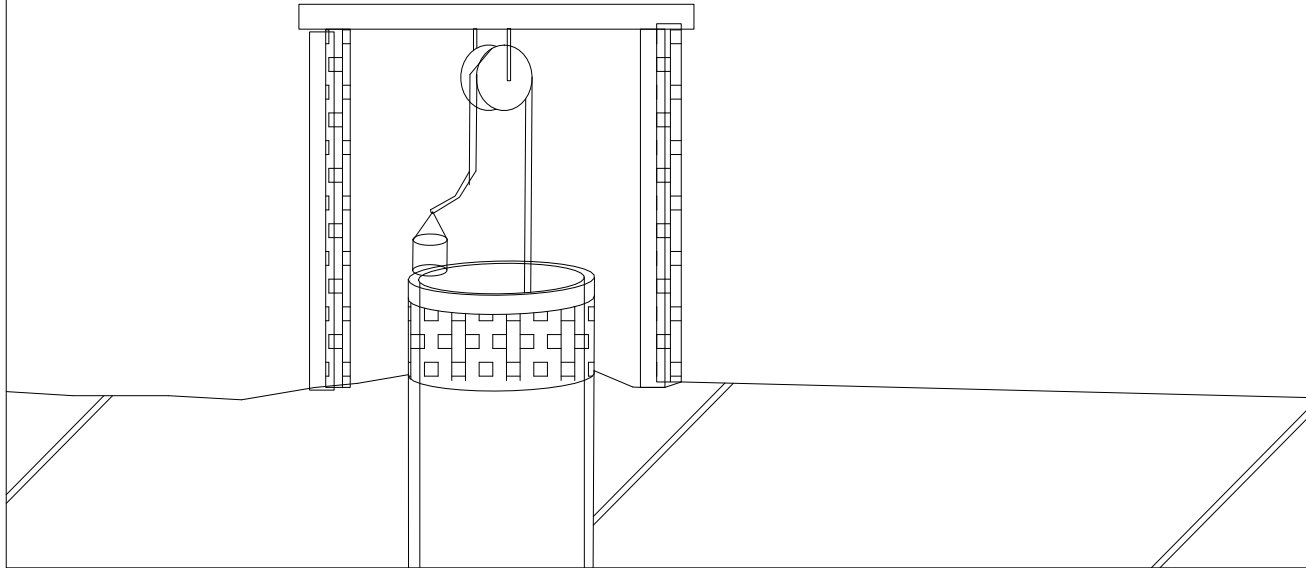
(1039) ash removal

(1039) ash removal

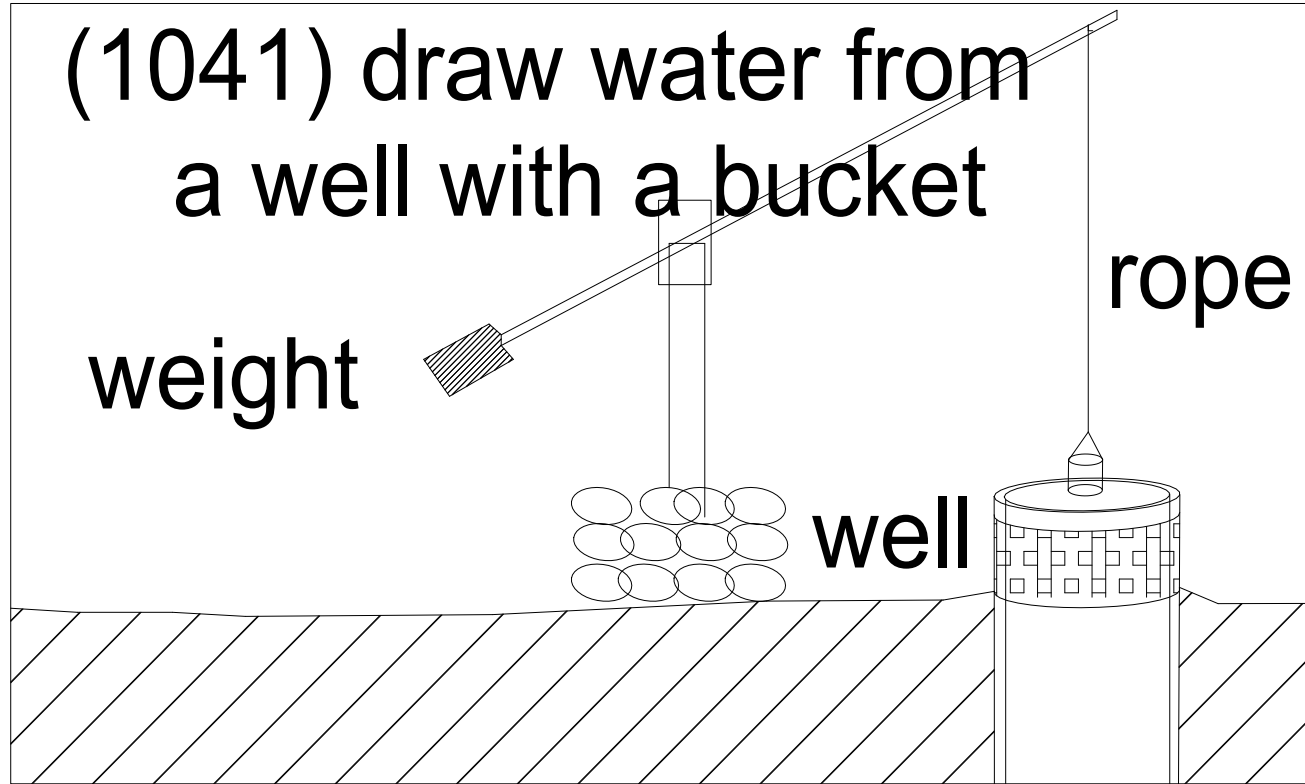


(1040) well pulley

(1040) well pulley

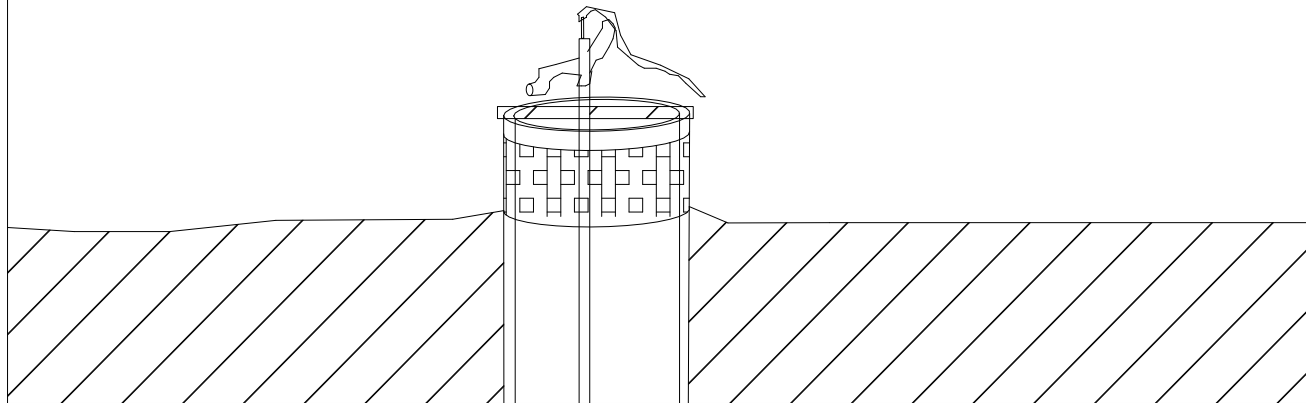


(1041) draw water from a well with a bucket



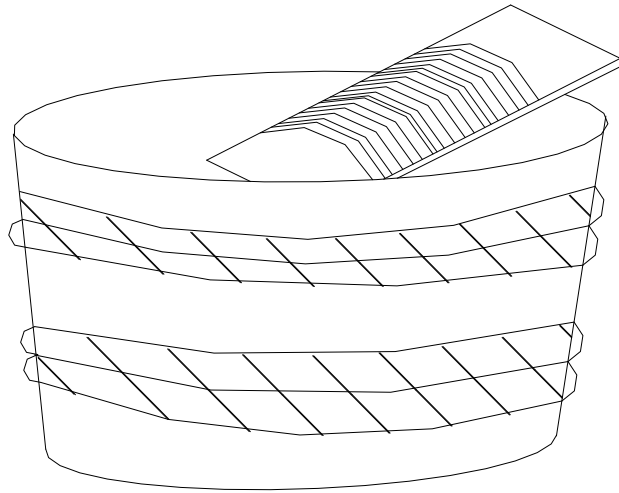
(1042) hand pump

(1042) hand pump



(1043) washboard basin

(1043) washboard basin

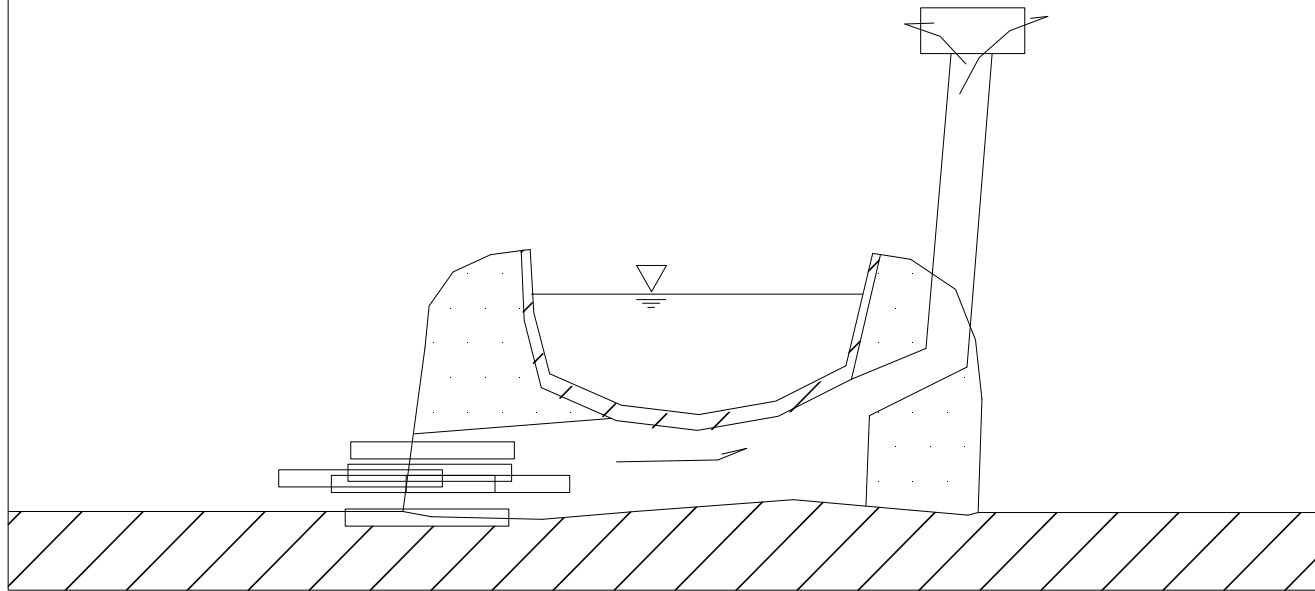


washboard

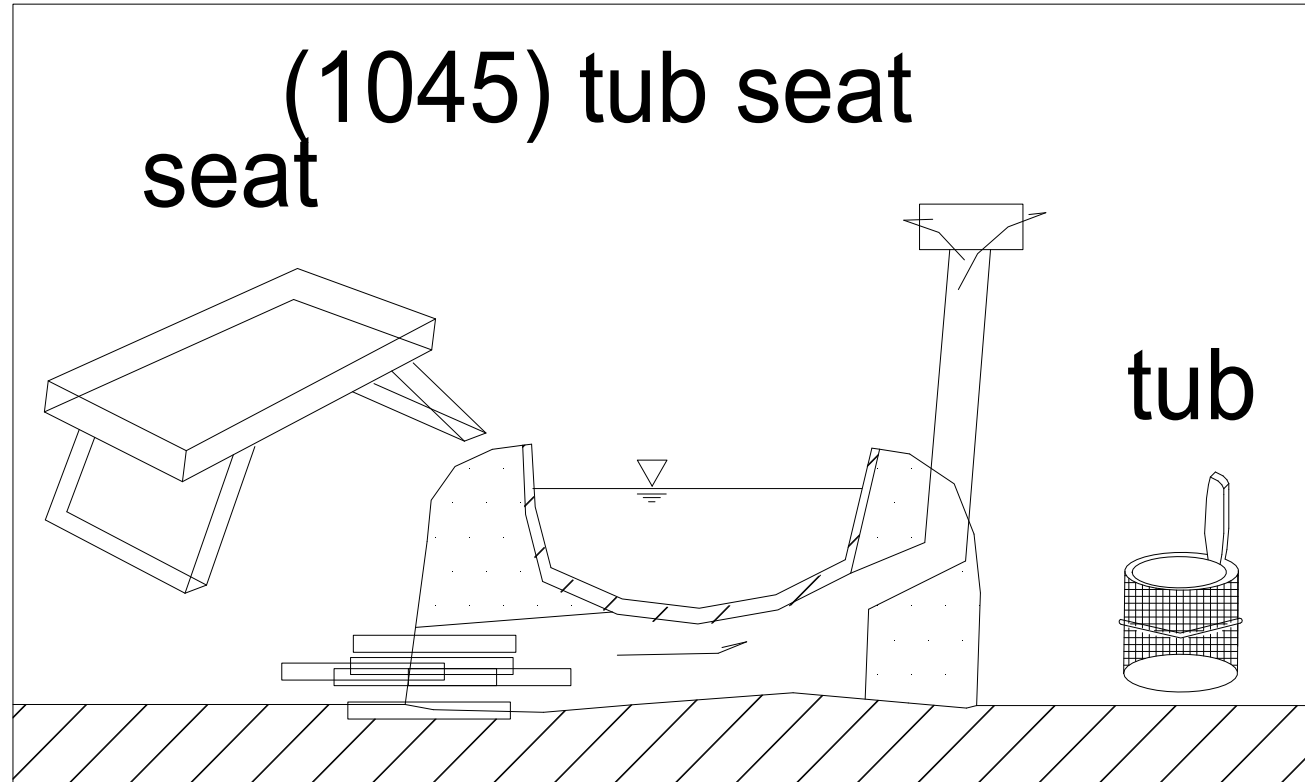
basin

(1044) bath

(1044) bath



(1045) tub seat



(1046) sponge cucumber

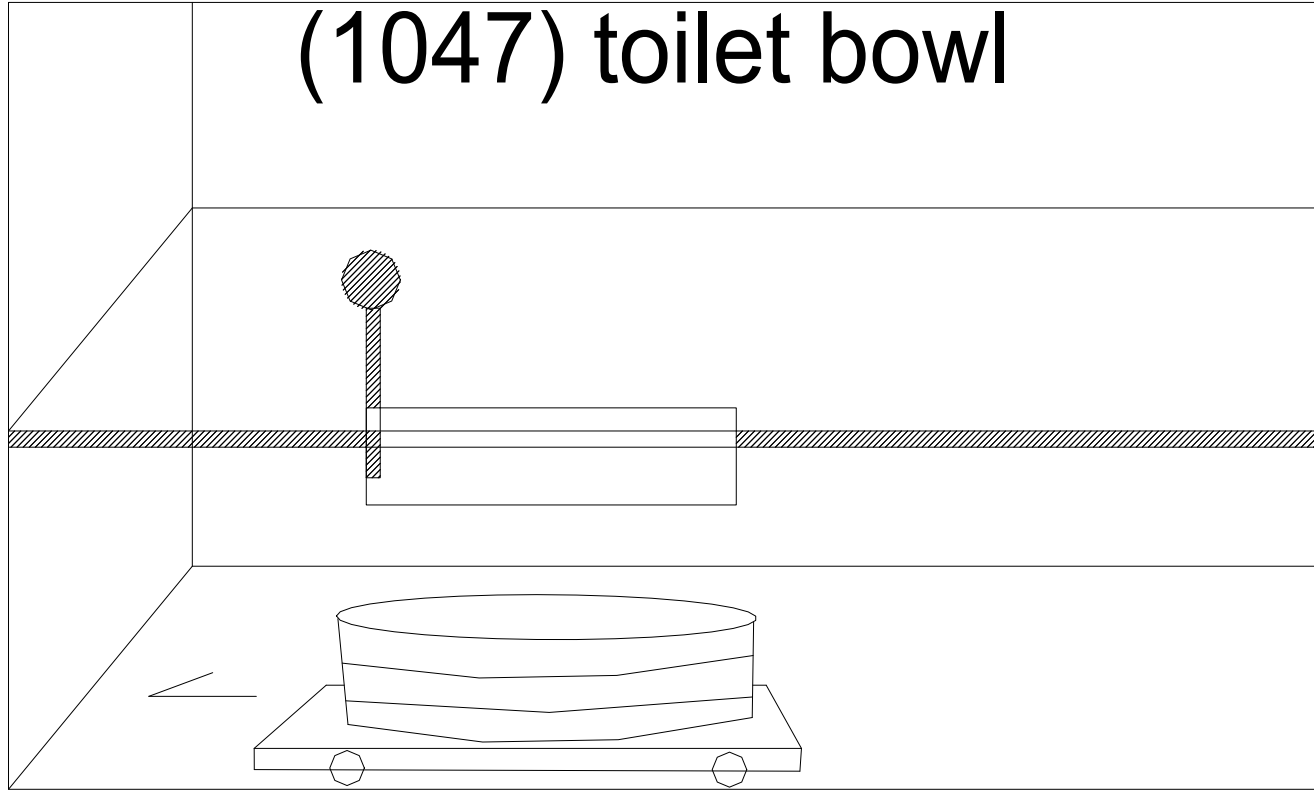
(1046) sponge cucumber

body wash



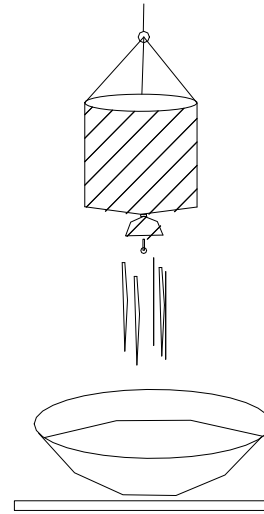
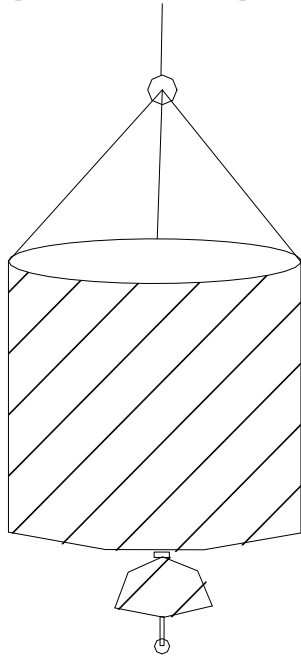
(1047) toilet bowl

(1047) toilet bowl



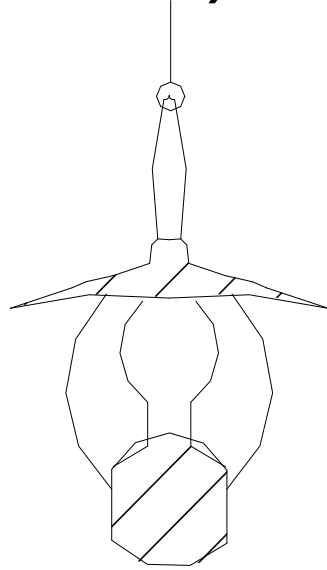
(1048) hand wash basin

(1048) hand wash basin



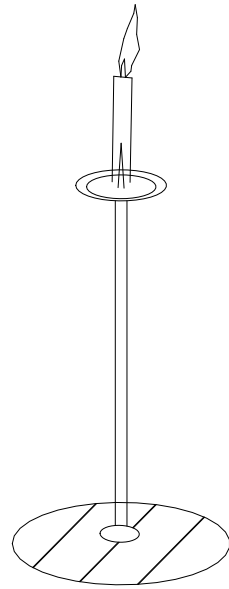
(1049) oil lamp

(1049) oil lamp



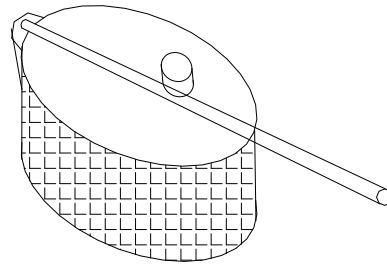
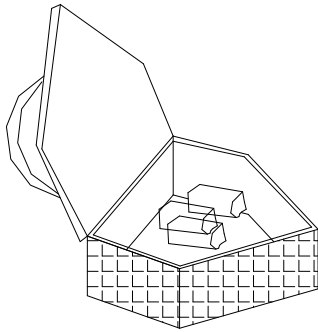
(1050) candlestick

(1050) candlestick



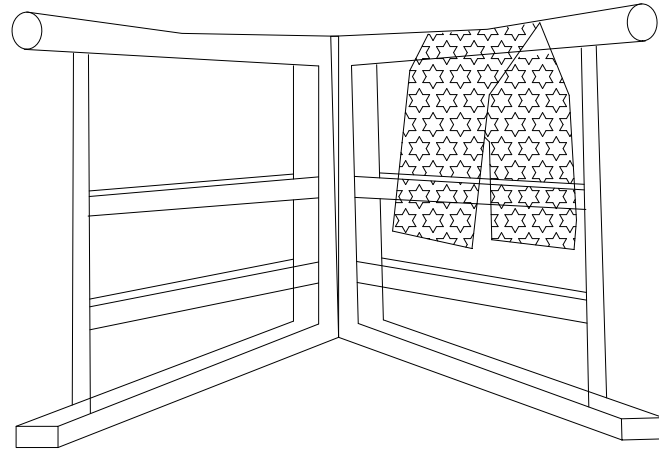
(1051) charcoal iron

(1051) charcoal iron
spray bottle



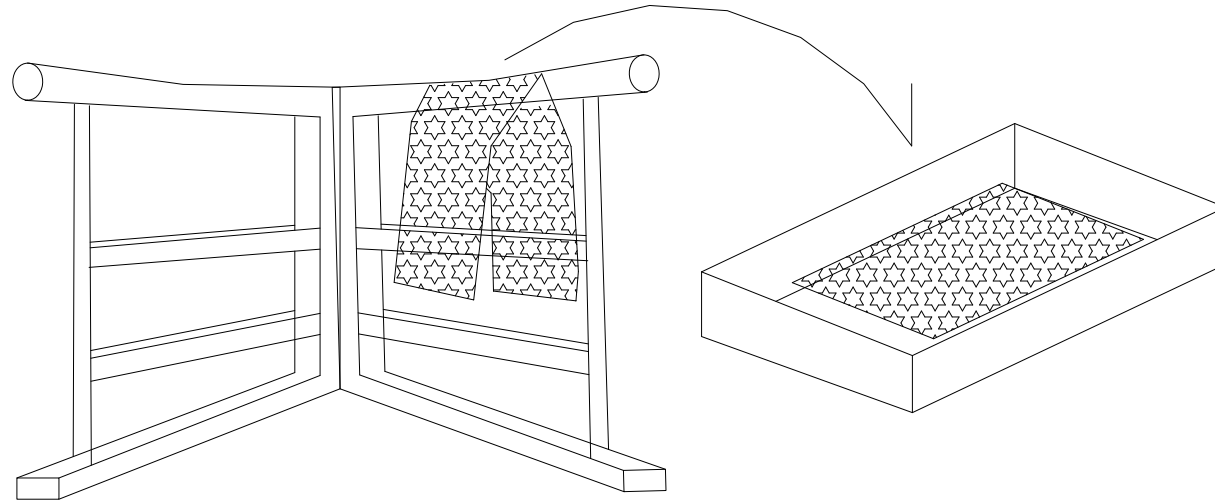
(1052) clothes hanger

(1052) clothes hanger

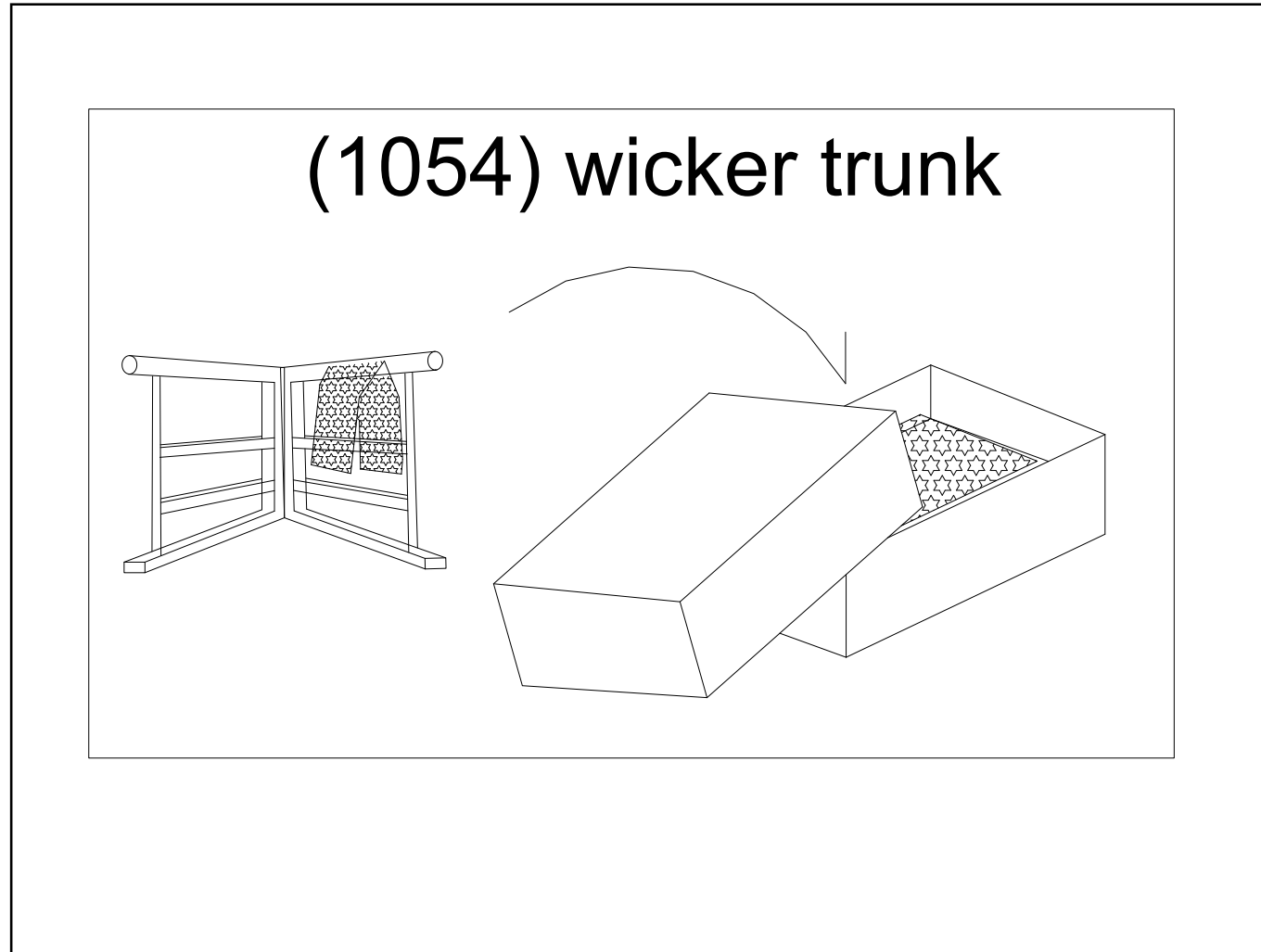


(1053) clothing storage box

(1053) clothing storage box

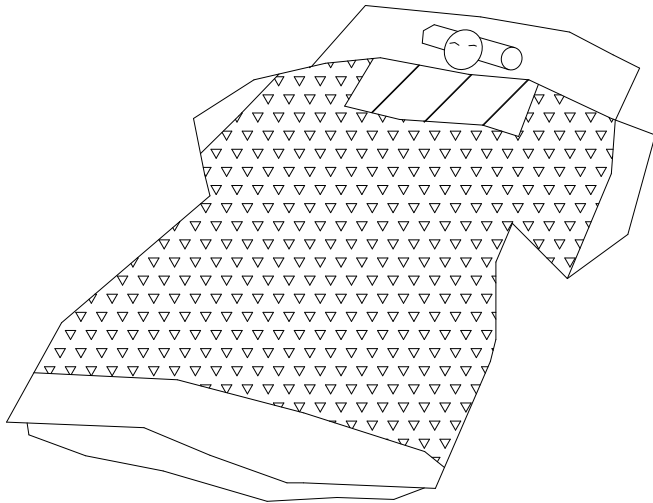


(1054) wicker trunk



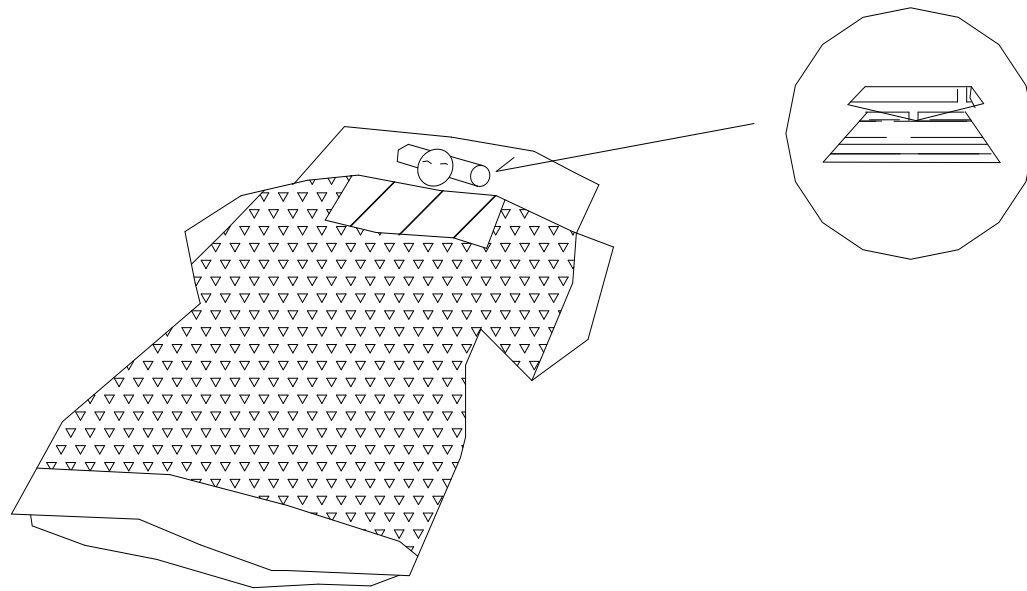
(1055) nightclothes

(1055) nightclothes



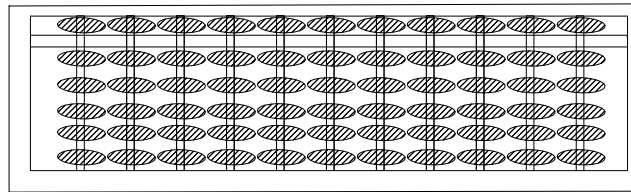
(1056) box pillow

(1056) box pillow



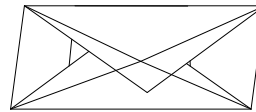
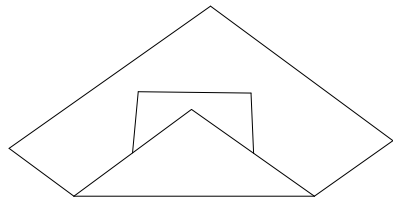
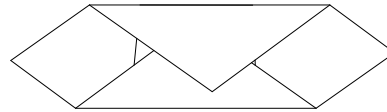
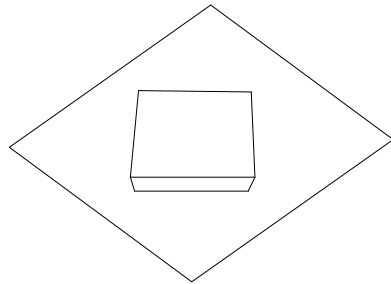
(1057) abacus

(1057) abacus



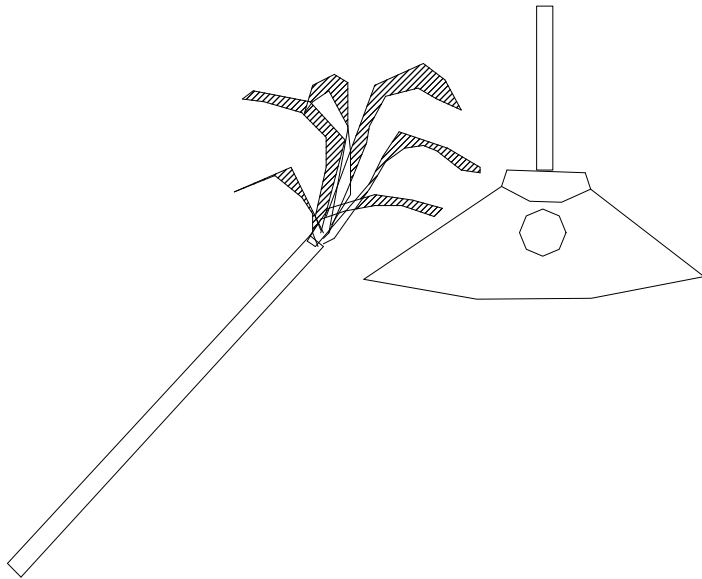
(1058) wrapping cloth

(1058) wrapping cloth



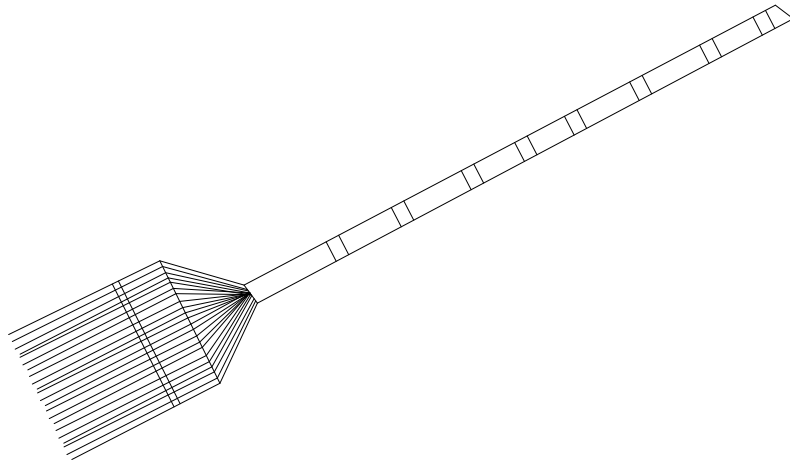
(1059) wrapping cloth

(1059) wrapping cloth



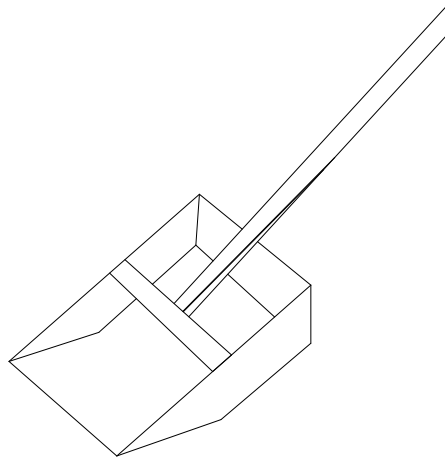
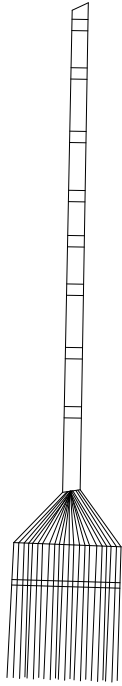
(1060) broom

(1060) broom



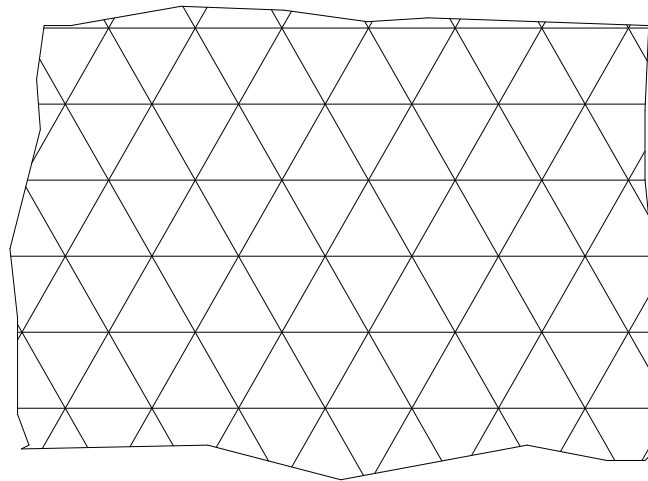
(1061) broom

(1061) broom



(1062) cleaning cloth

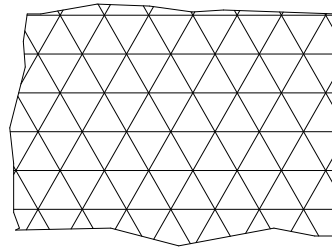
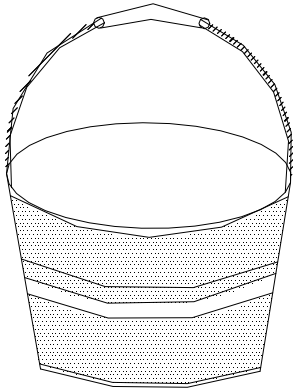
(1062) cleaning cloth



old cloth

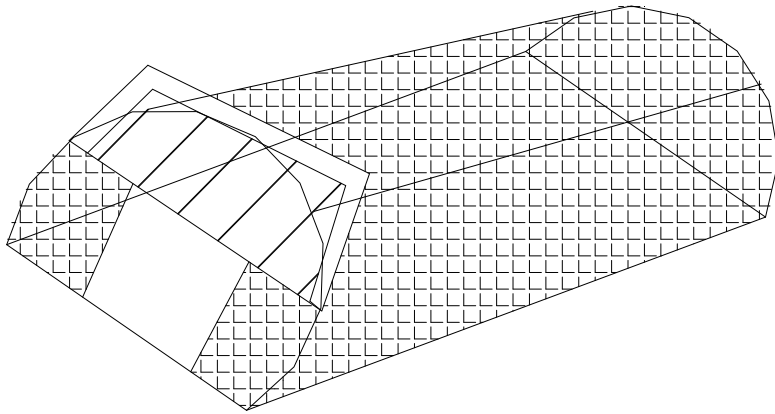
(1063) bucket

(1063) bucket



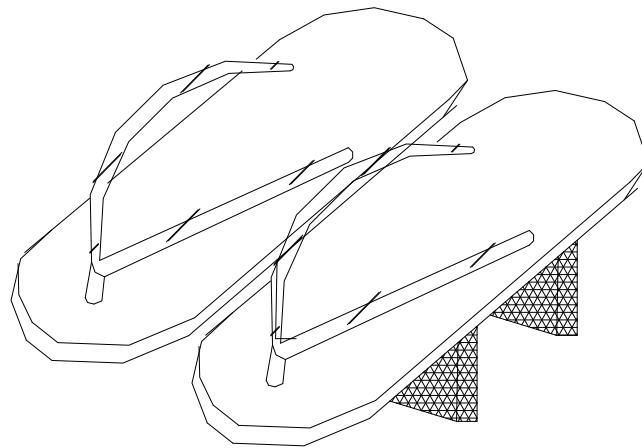
(1064) mousetrap

(1064) mousetrap



(1065) wooden sandals

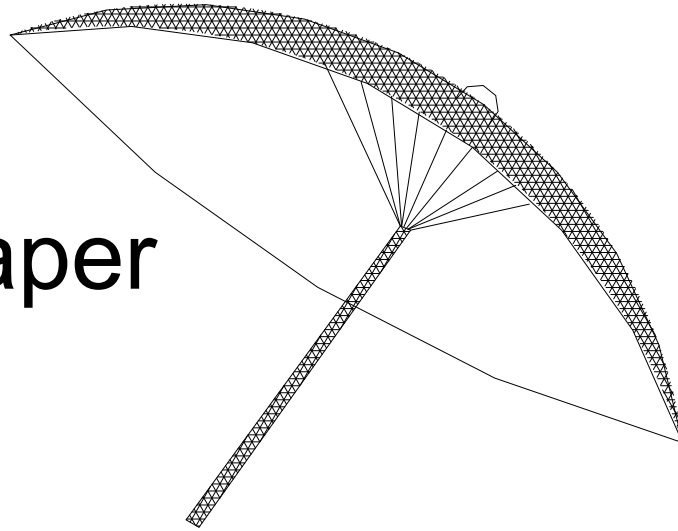
(1065) wooden sandals



(1066) Japanese umbrella

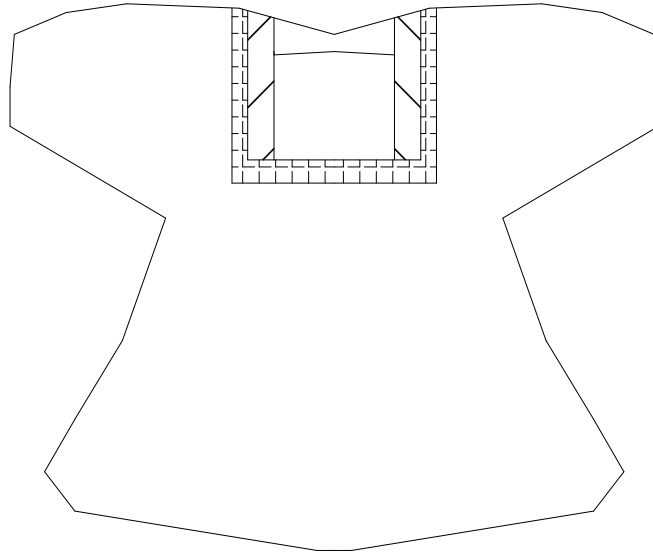
(1066) Japanese umbrella

oil paper



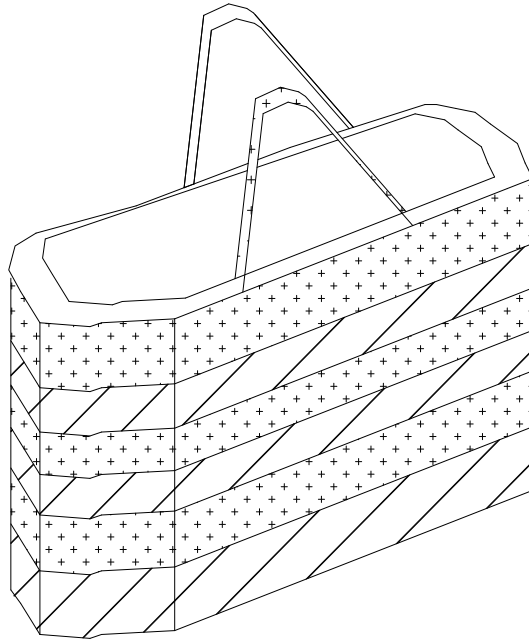
(1067) cook's apron

(1067) cook's apron



(1068) shopping basket

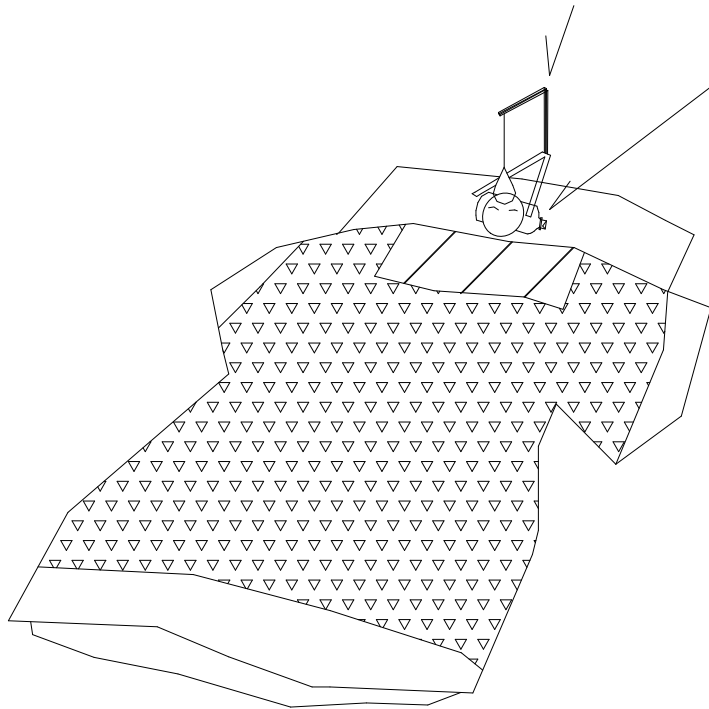
(1068) shopping basket



(1069) ice water pillow

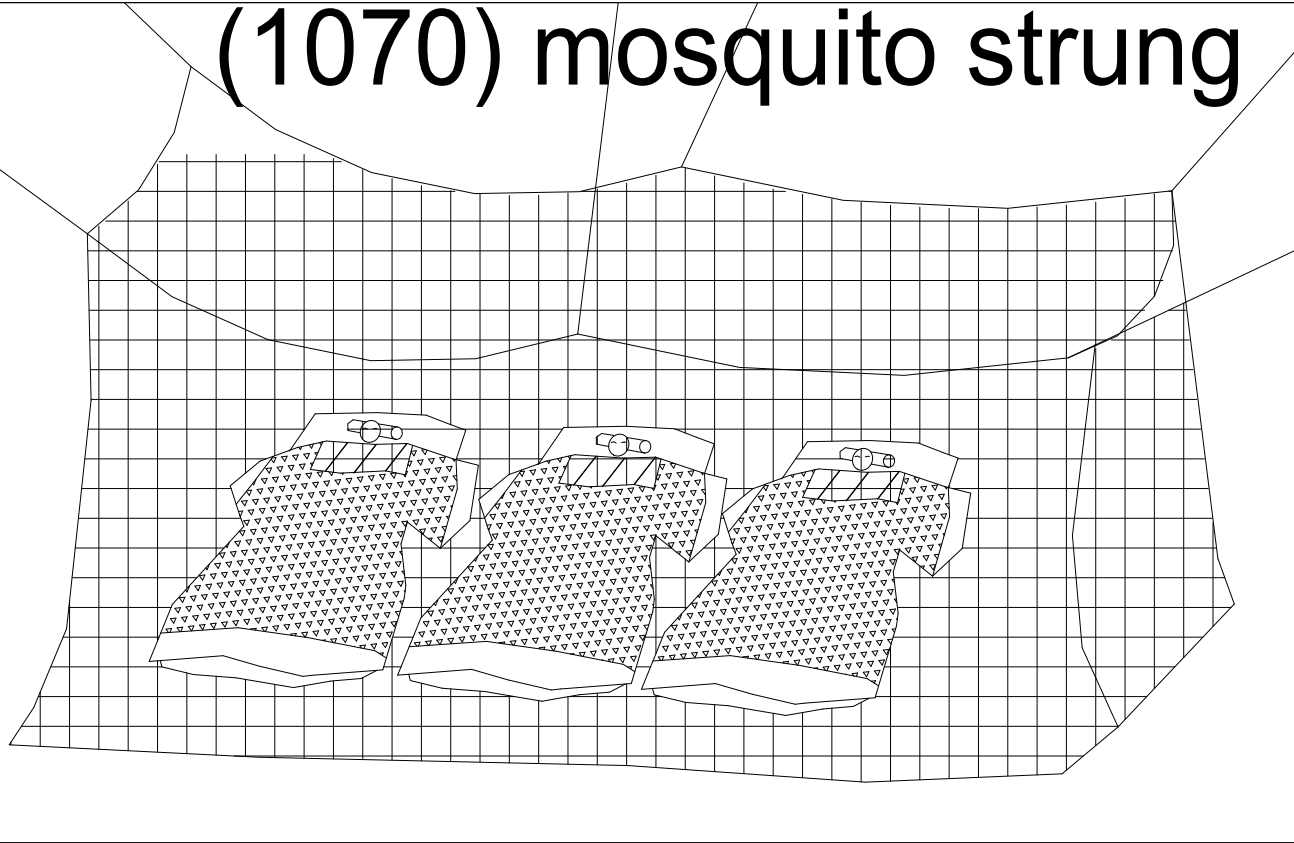
(1069) ice water pillow

ice bag



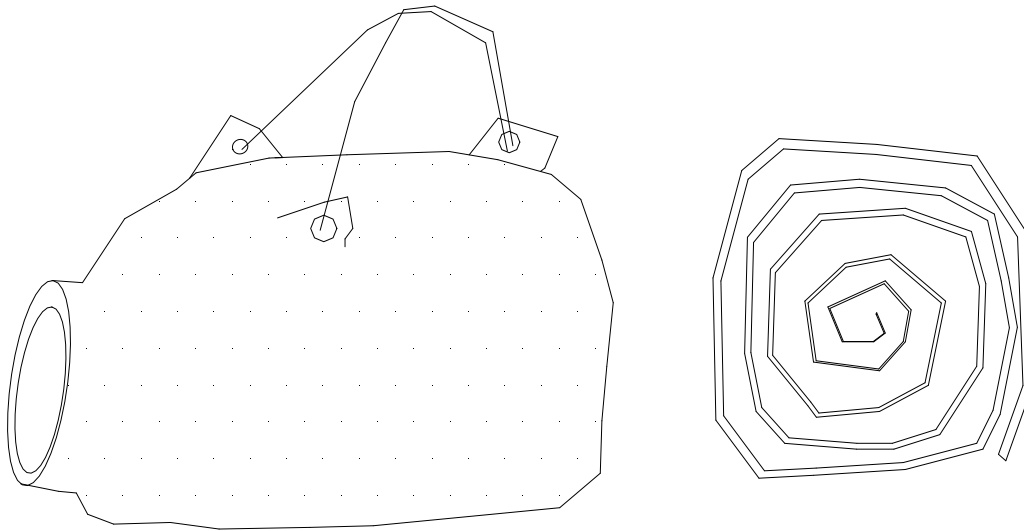
(1070) mosquito strung

(1070) mosquito strung



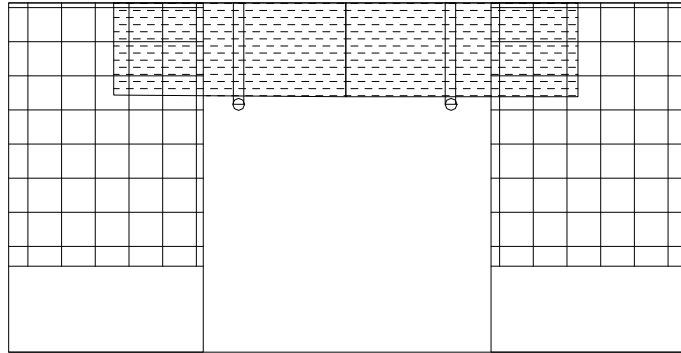
(1071) mosquito repellent

(1071) mosquito repellent
mosquito coil



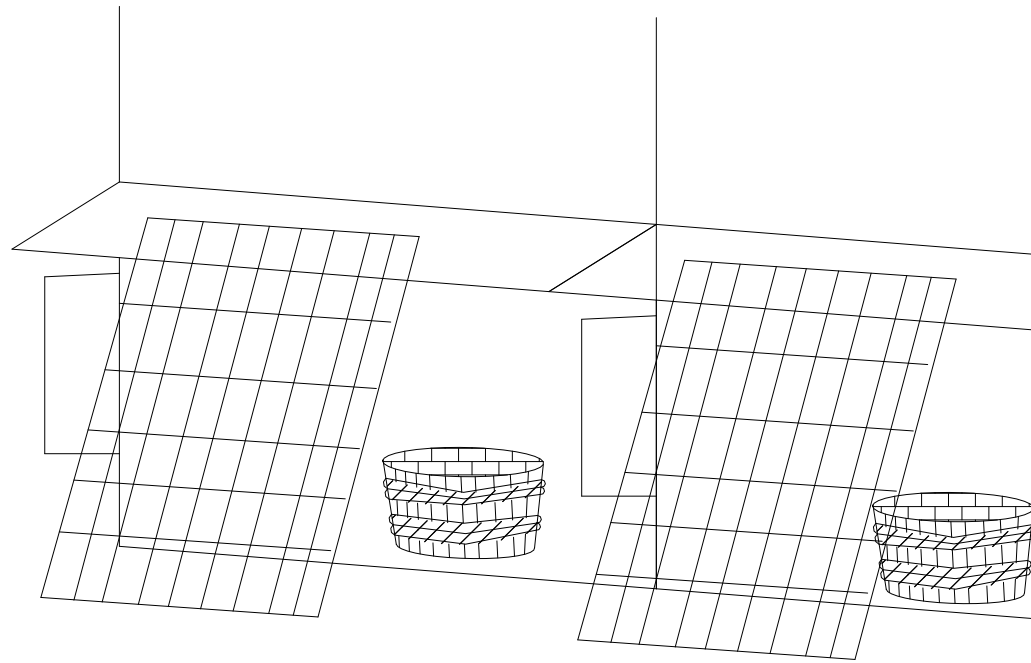
(1072) reed screen

(1072) reed screen



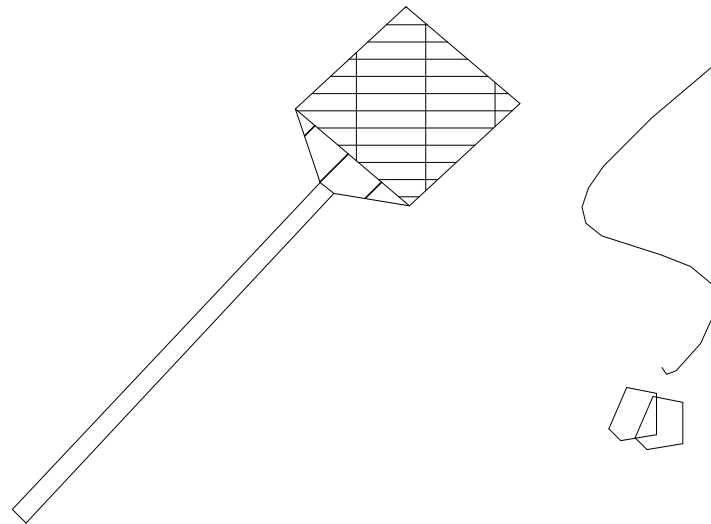
(1073) reed blind

(1073) reed blind



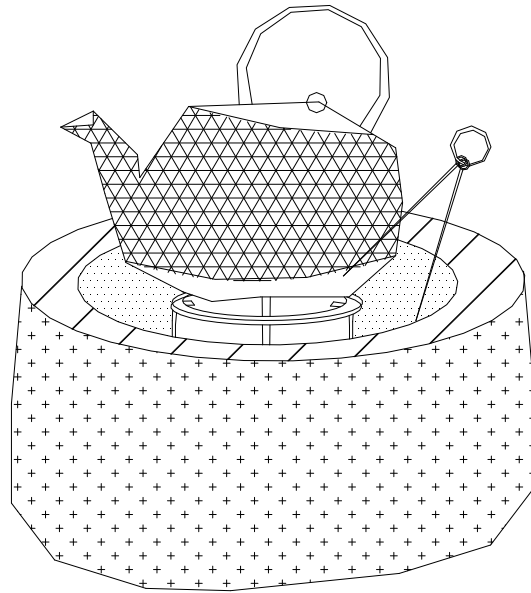
(1074) fly flapper

(1074) fly flapper



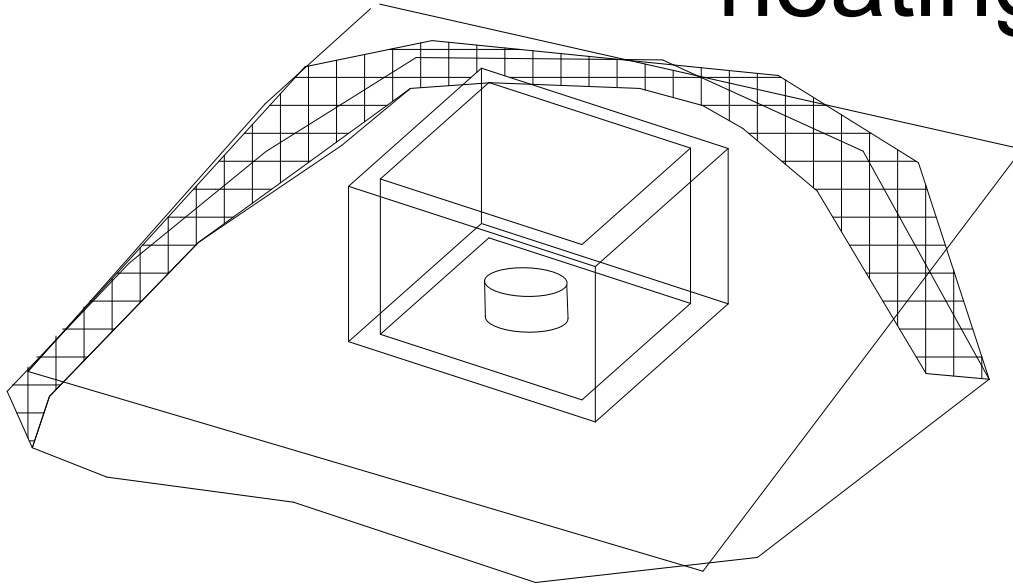
(1075) charcoal brazier

(1075) charcoal brazier



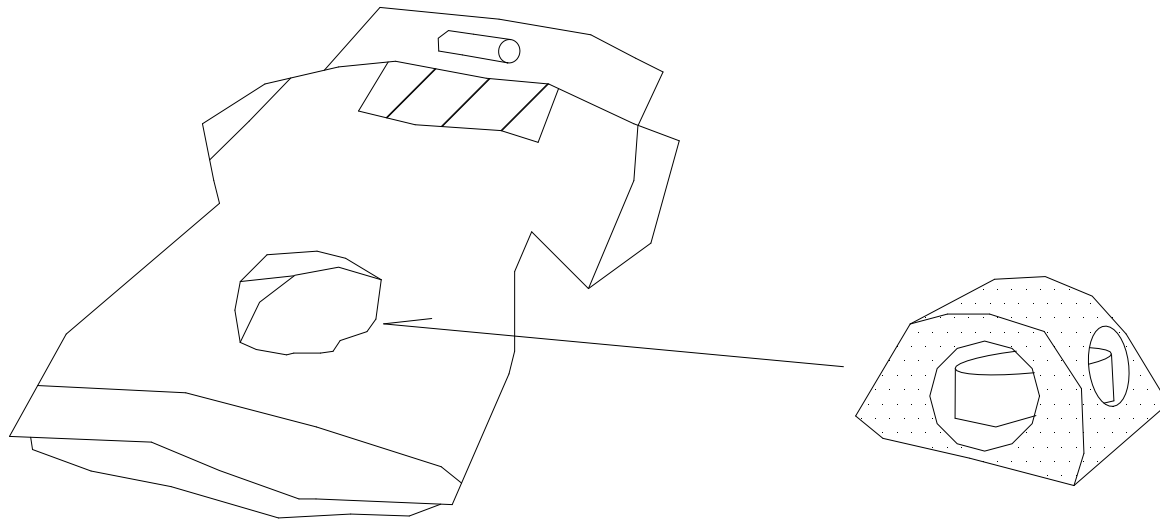
(1076) foot-warmer frame

**(1076) foot-warmer frame
heating pan**



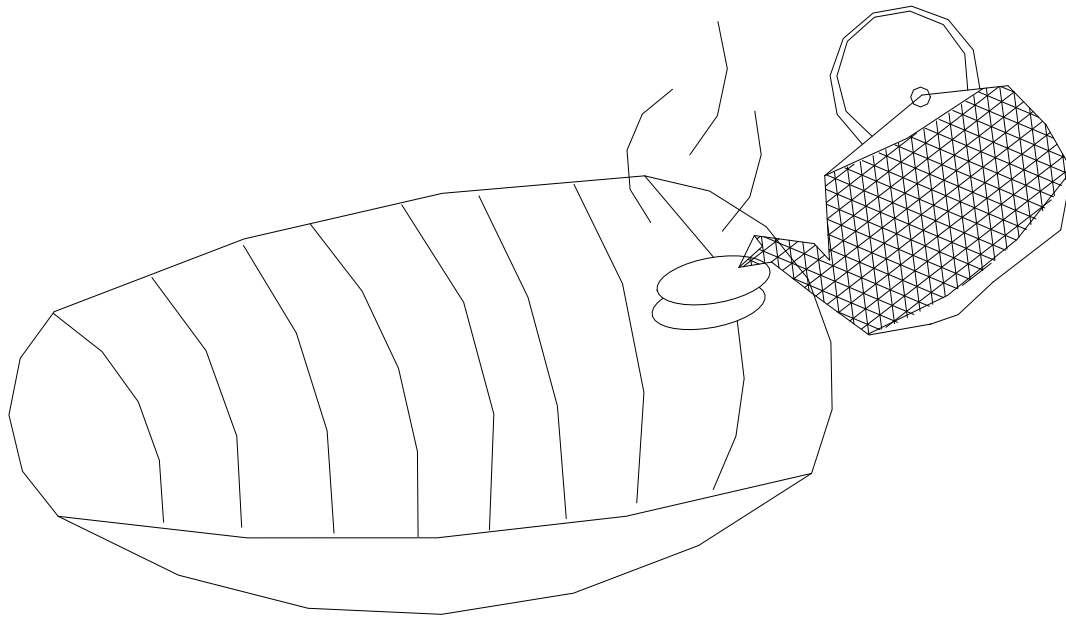
(1077) warmer

(1077) warmer



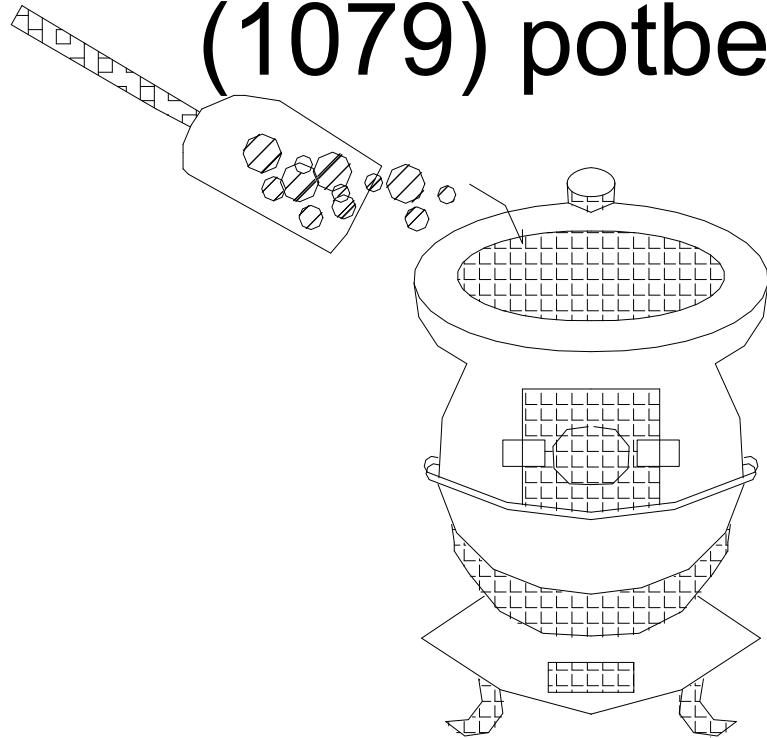
(1078) hot water bottle

(1078) hot water bottle



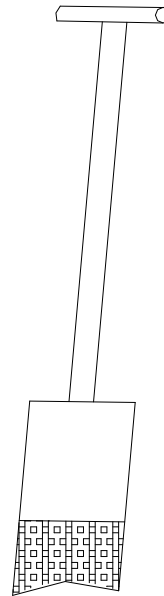
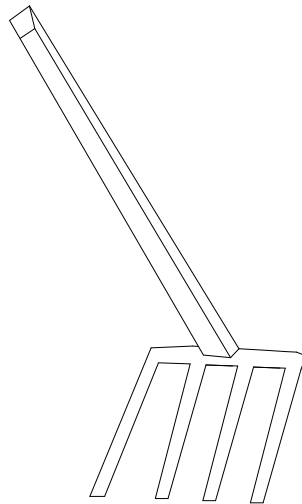
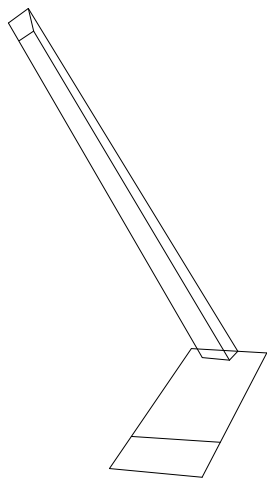
(1079) potbelly stove

(1079) potbelly stove



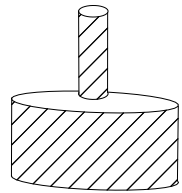
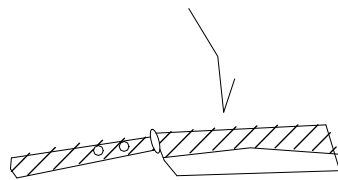
(1080) hoe plow

(1080) hoe plow



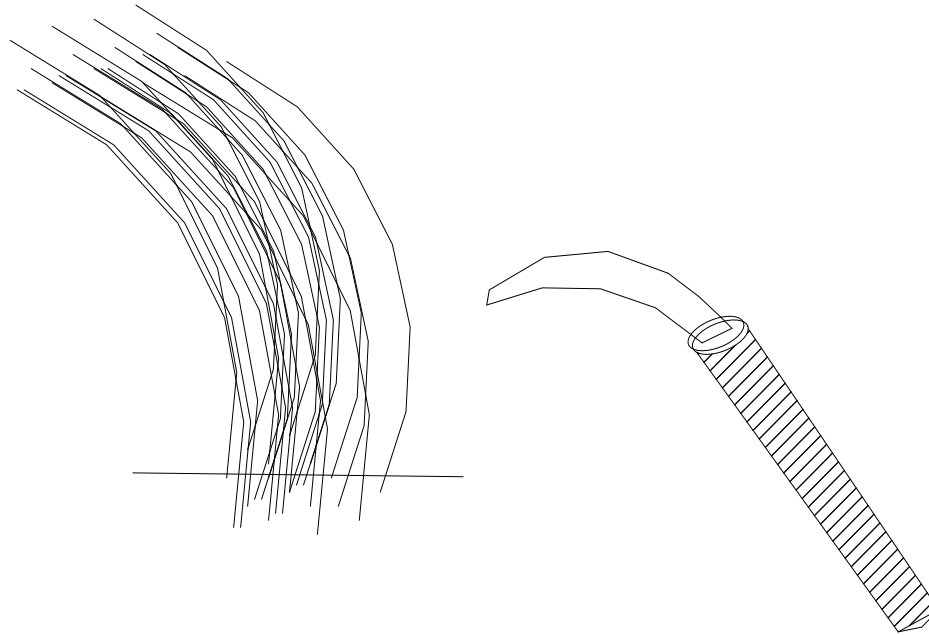
(1081) hatchet

(1081) hatchet



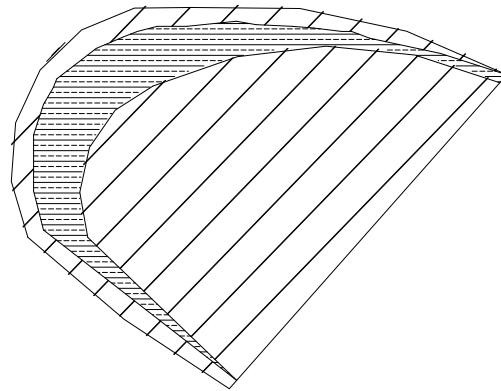
(1082) sickle

(1082) sickle



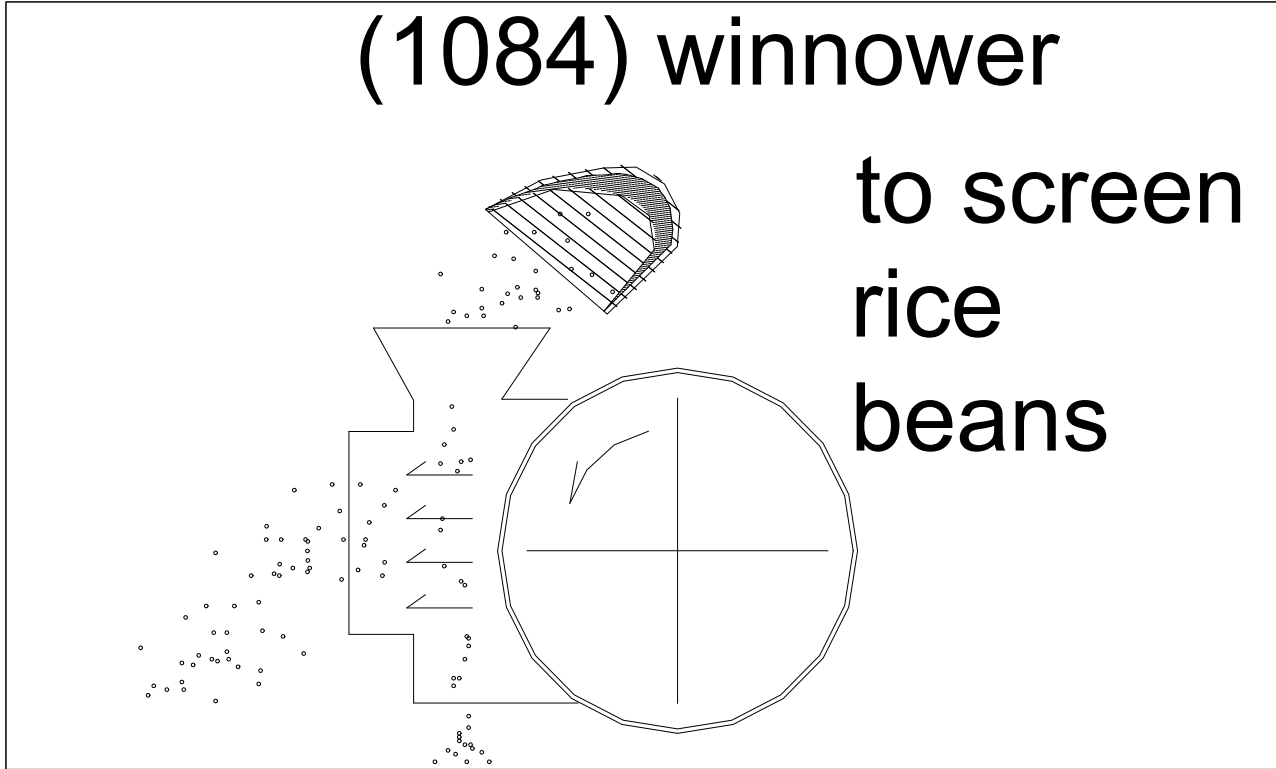
(1083) winnow

(1083) winnow



(1084) winnower

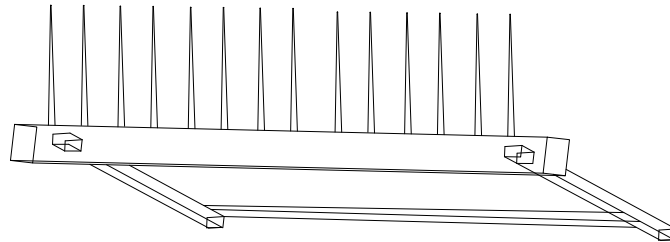
(1084) winnower



to screen
rice
beans

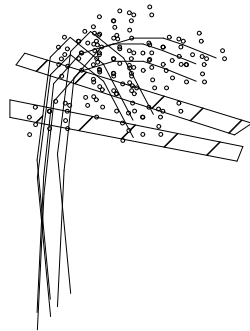
(1085) hand threshing

(1085) hand threshing



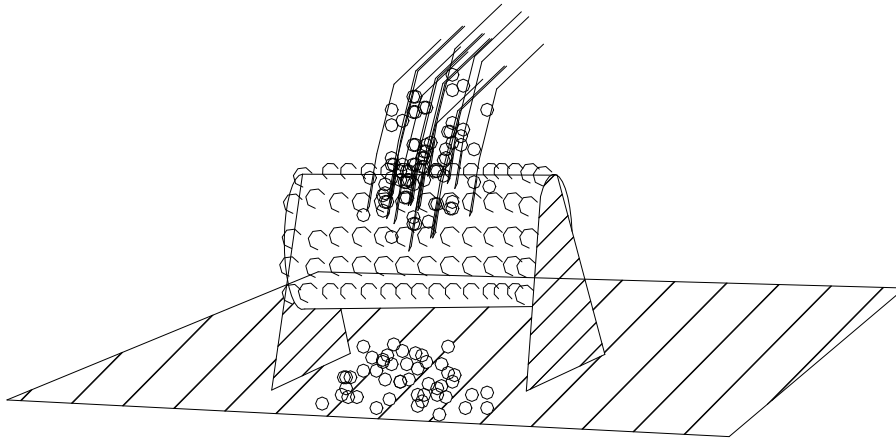
(1086) hand threshing

(1086) hand threshing



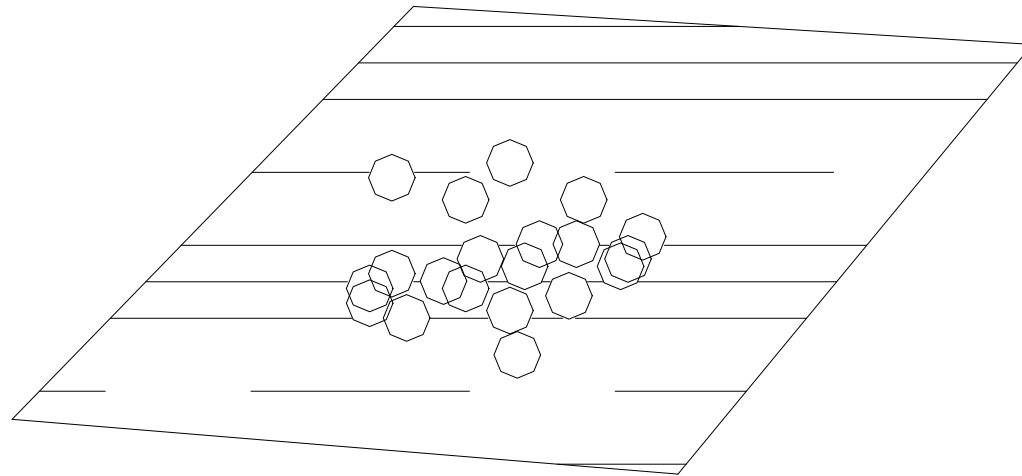
(1087) grain threshing machine

(1087) grain threshing machine



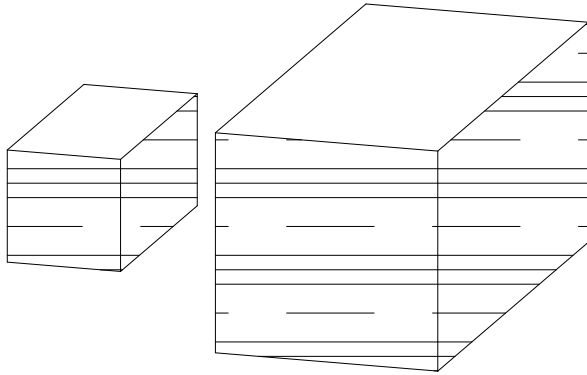
(1088) matting

(1088) matting



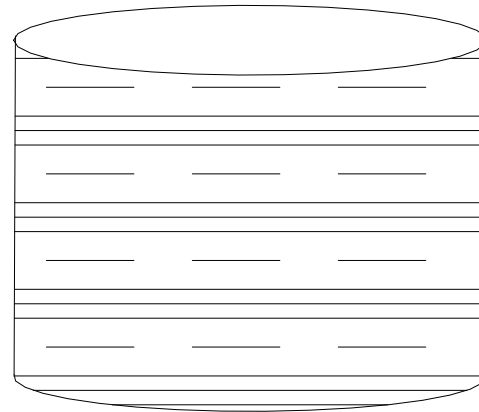
(1089) trout

(1089) trout



180cc

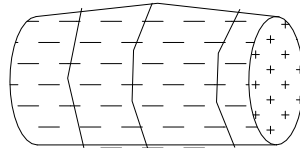
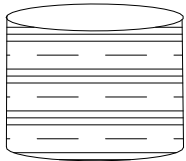
X10



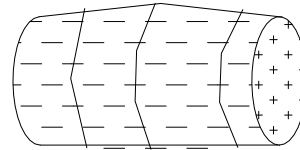
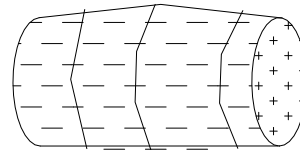
X10

(1090) (straw) bagel

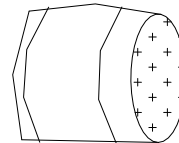
(1090) (straw) bagel



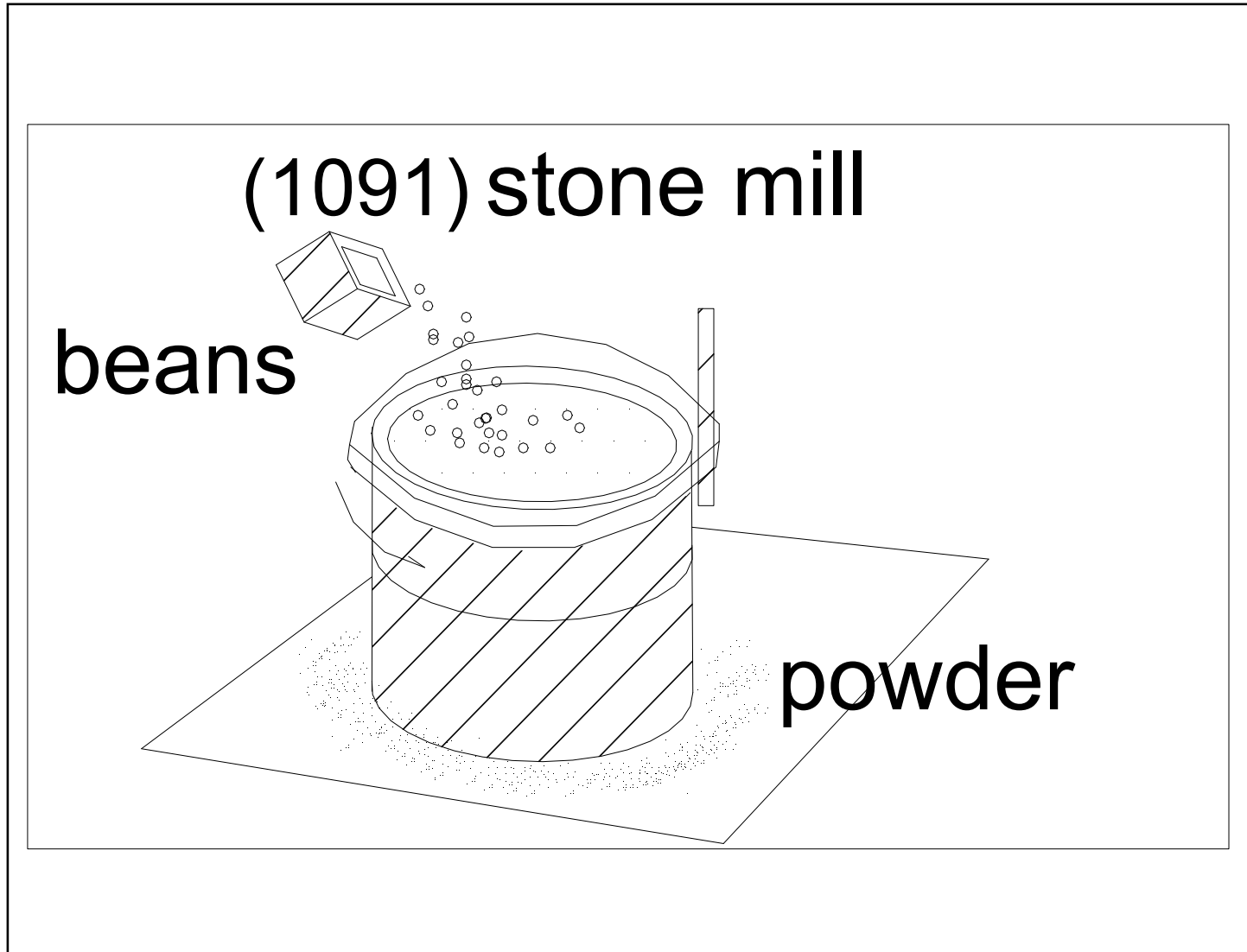
X4



X10



(1091) stone mill

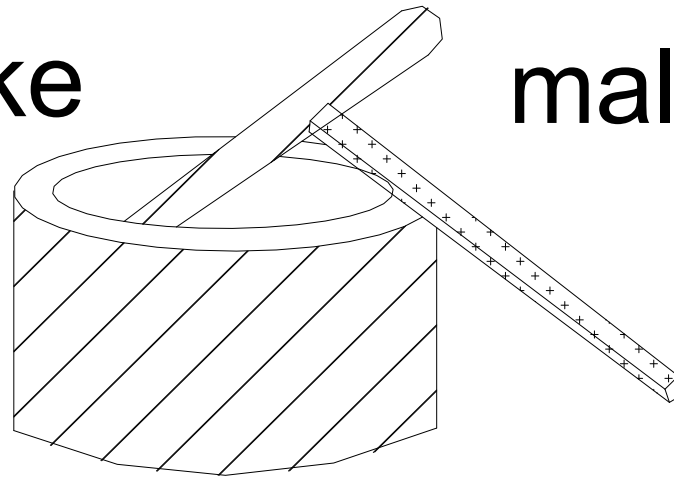


(1092) mortar mallet

(1092) mortar mallet

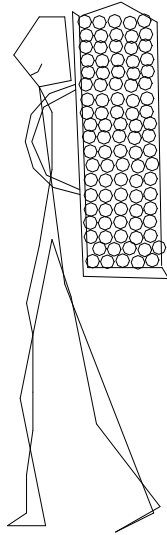
rice cake

malle



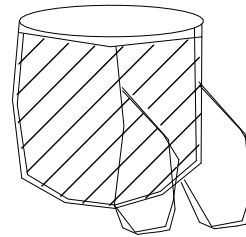
(1093) pack frame

(1093) pack frame



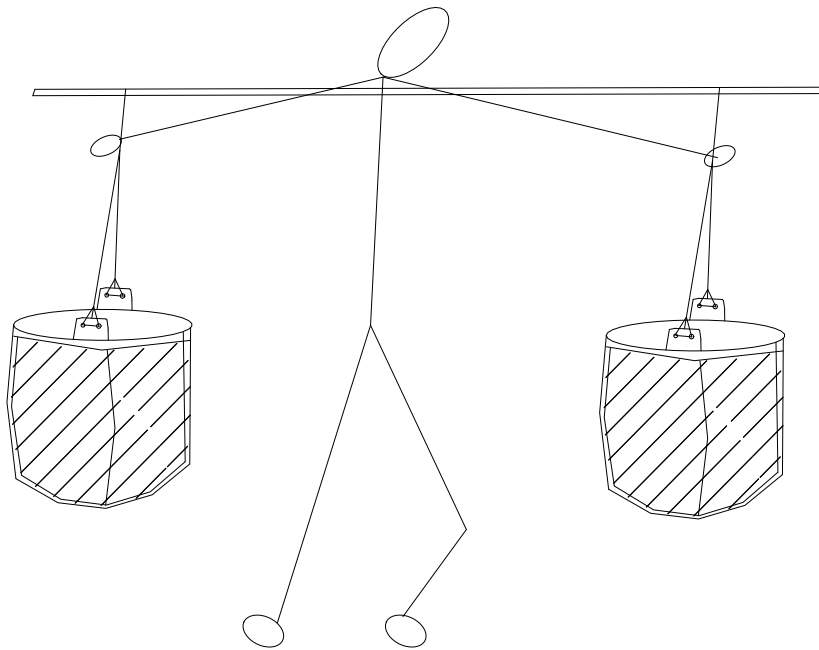
carrying pole

basket



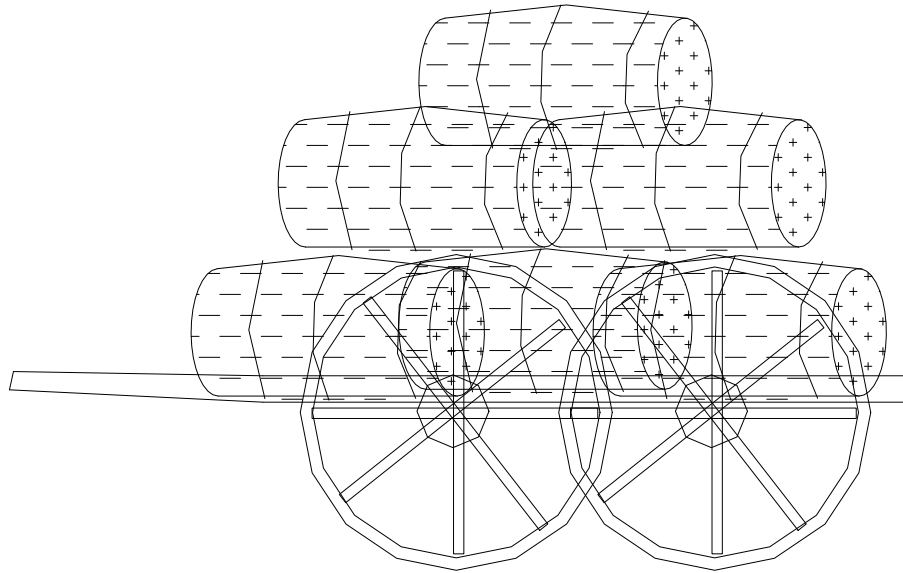
(1094) pack frame

(1094) pack frame



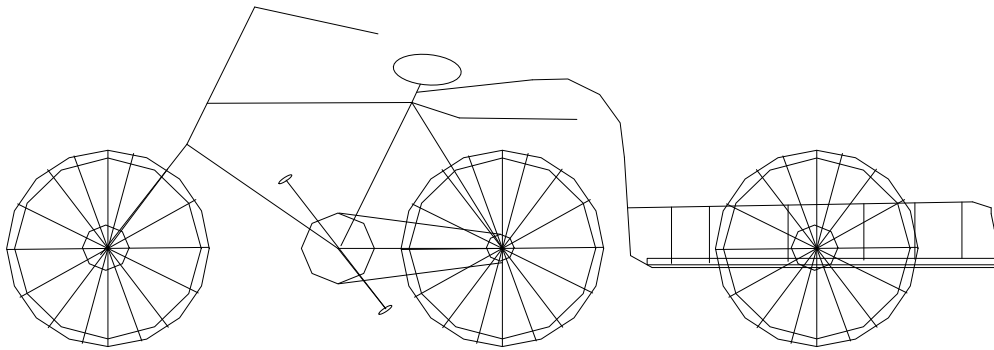
(1095) large hand drawn cart

(1095) large hand drawn cart



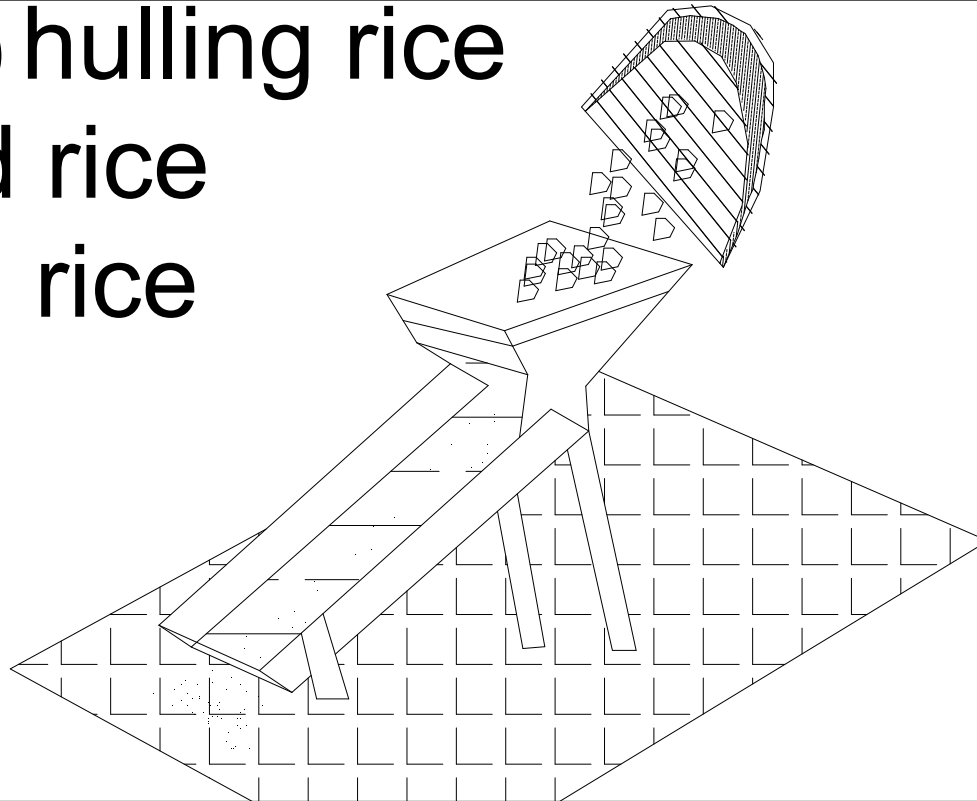
(1096) rea rcar

(1096) rear car



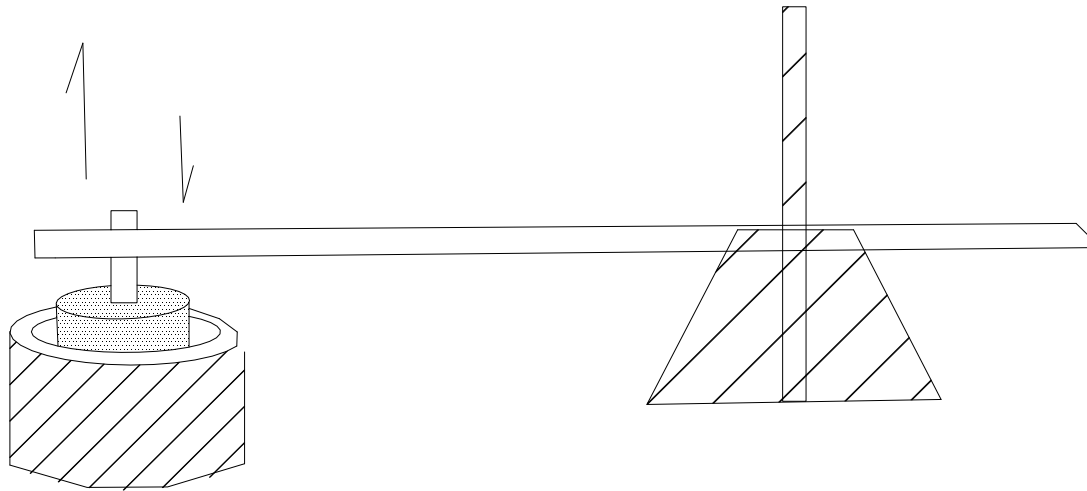
(1097) hulling rice

(1097) hulling rice
hulled rice
rough rice



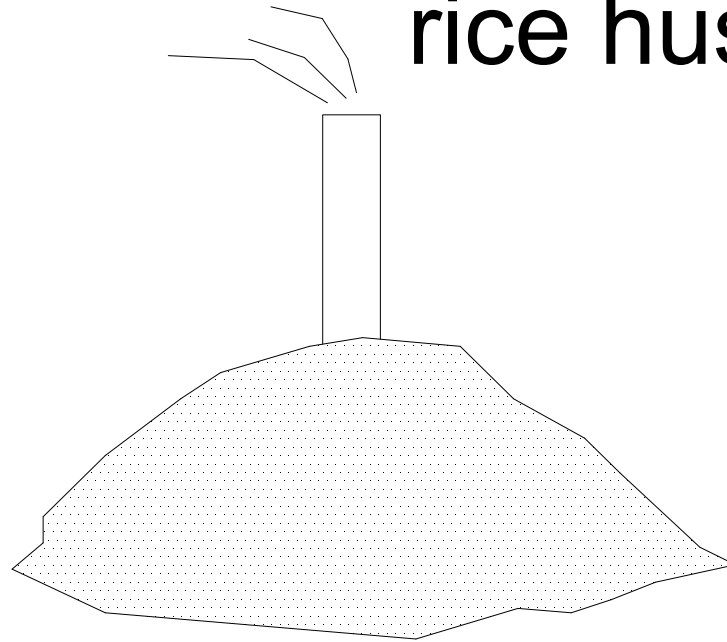
(1098) polished rice

(1098) polished rice



(1099) manure

(1099) manure
rice husks



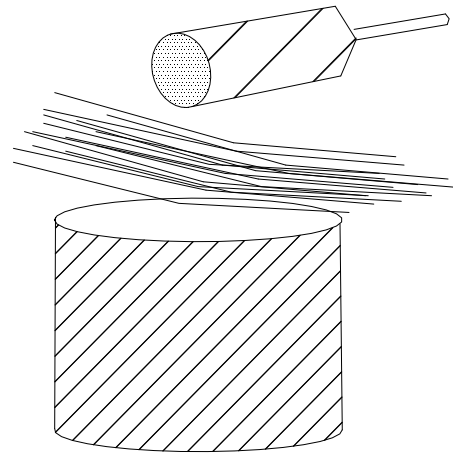
(1100) manure

(1100) manure
fallen leaves
dropping



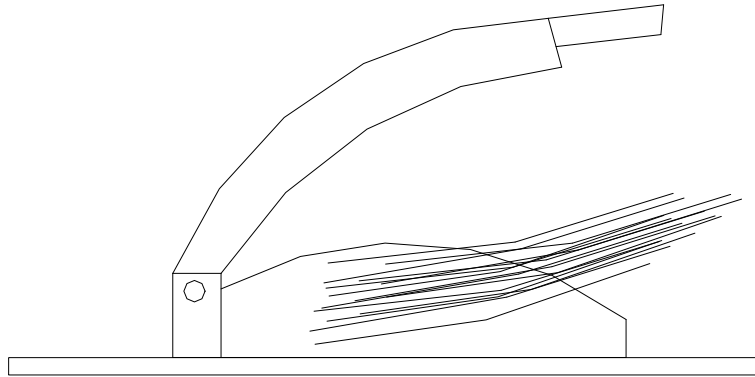
(1101) straw damper

(1101) straw damper



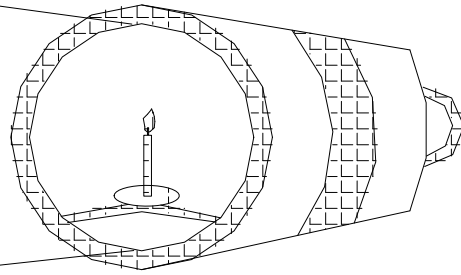
(1102) straw damper

(1102) straw damper



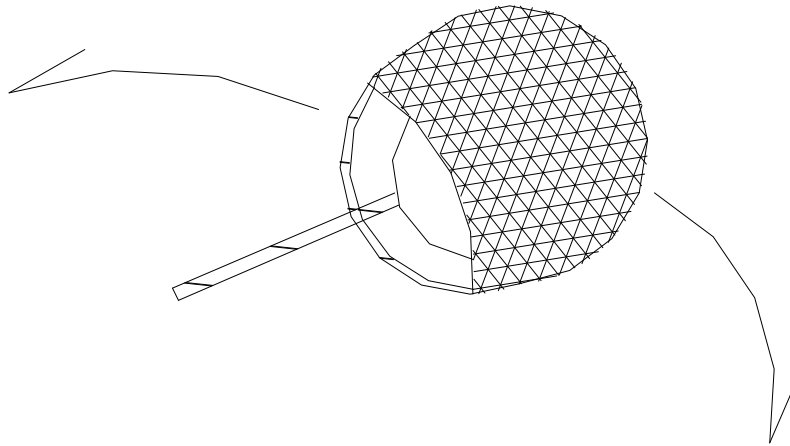
(1103) straw damper

(1103) straw damper candle



(1104) round fan

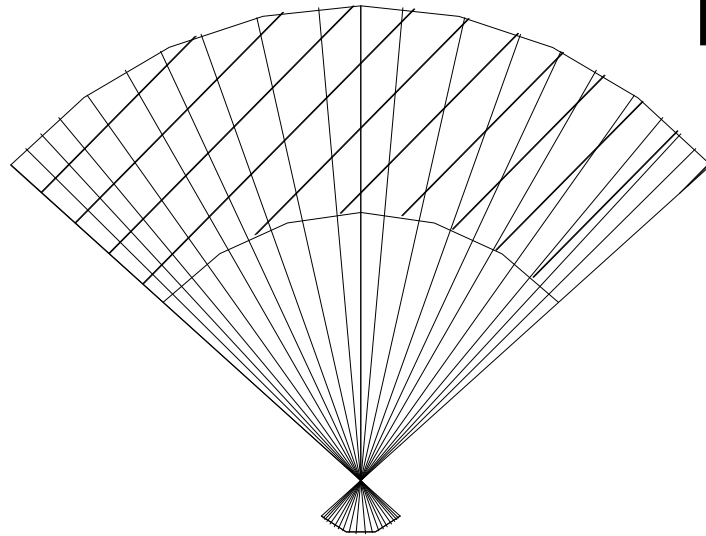
(1104) round fan
breeze



(1105) folding fan

(1105) folding fan

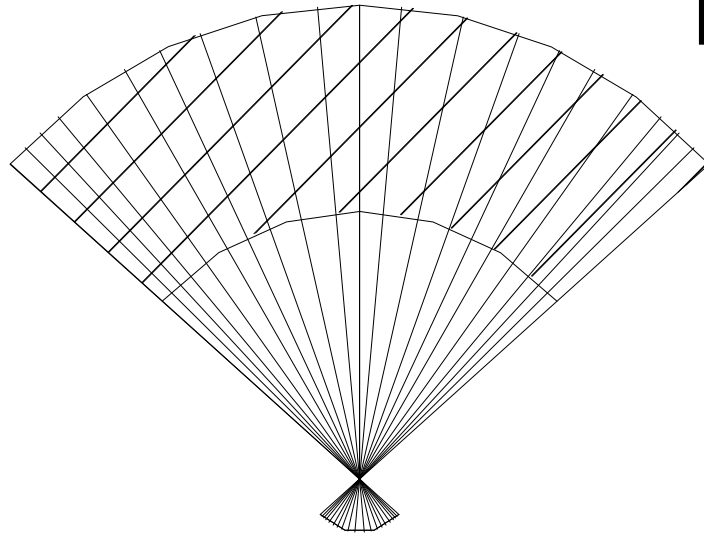
breeze



(1106) firewood

(1105) folding fan

breeze



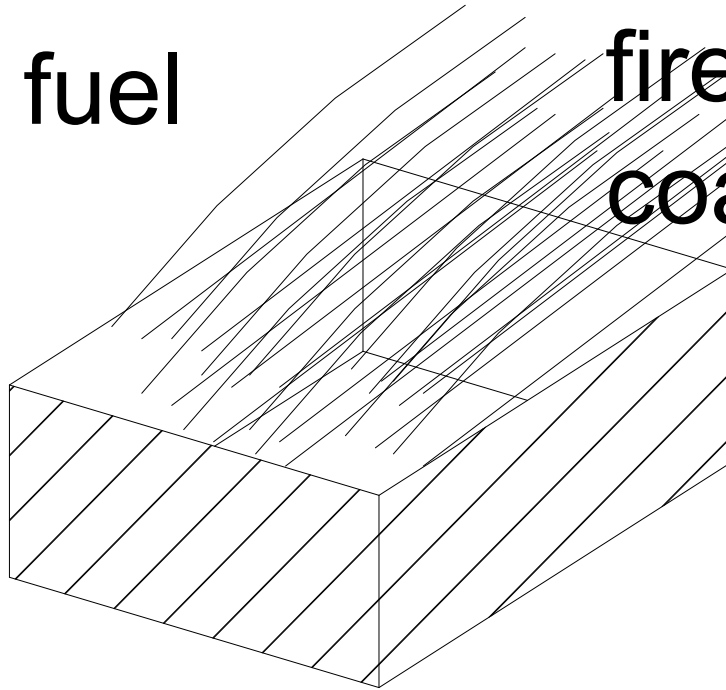
(1107) brushwood

(1107) brushwood

fuel

firewood

coal powder

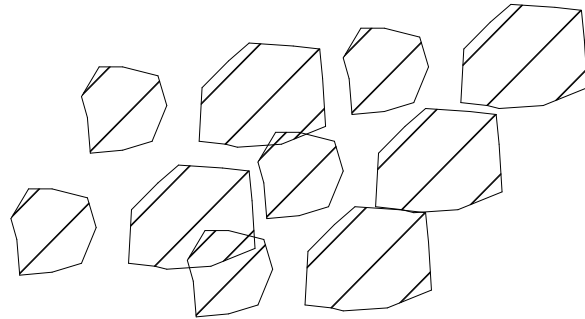


(1108) charcoal briquette

(1108) charcoal briquette

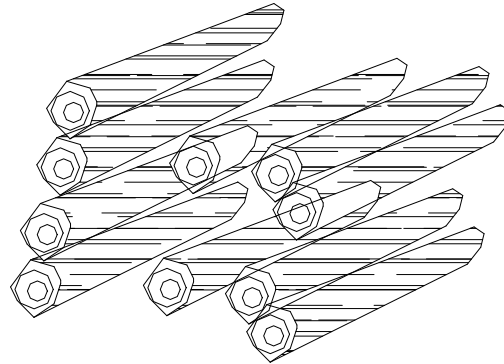
coal powder

fuel + seaweed gliopeltis



(1109) reduce wood to charcoal

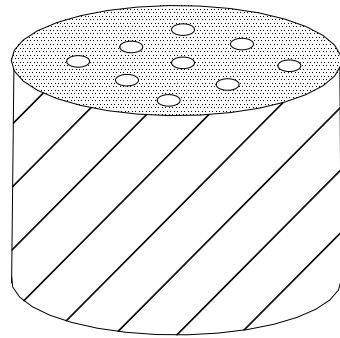
(1109) reduce wood to charcoal
fuel



(1110) briquette

(1110) briquette

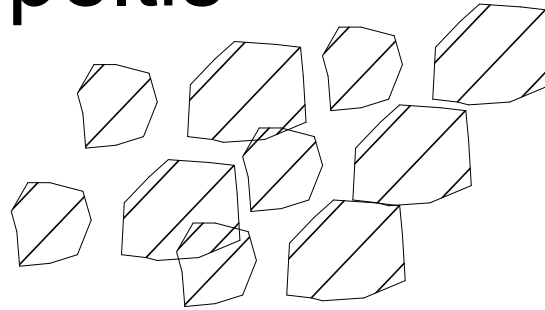
fuel coal powder +
seaweed gliopeltis



(1111) small round charcoal briquette

(1111) small round
charcoal briquette
coal powder +
seaweed gliopeltis

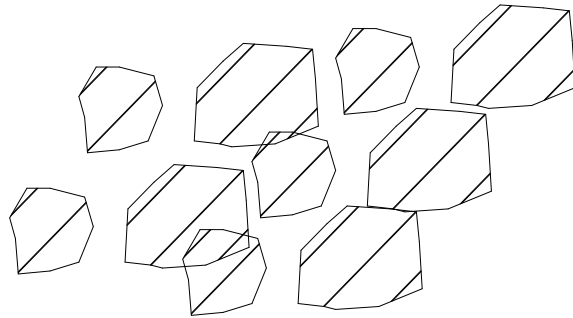
fuel



(1112) coal

(1112) coal

fuel

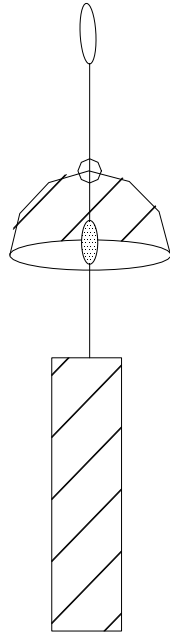


(1113) wind-bell

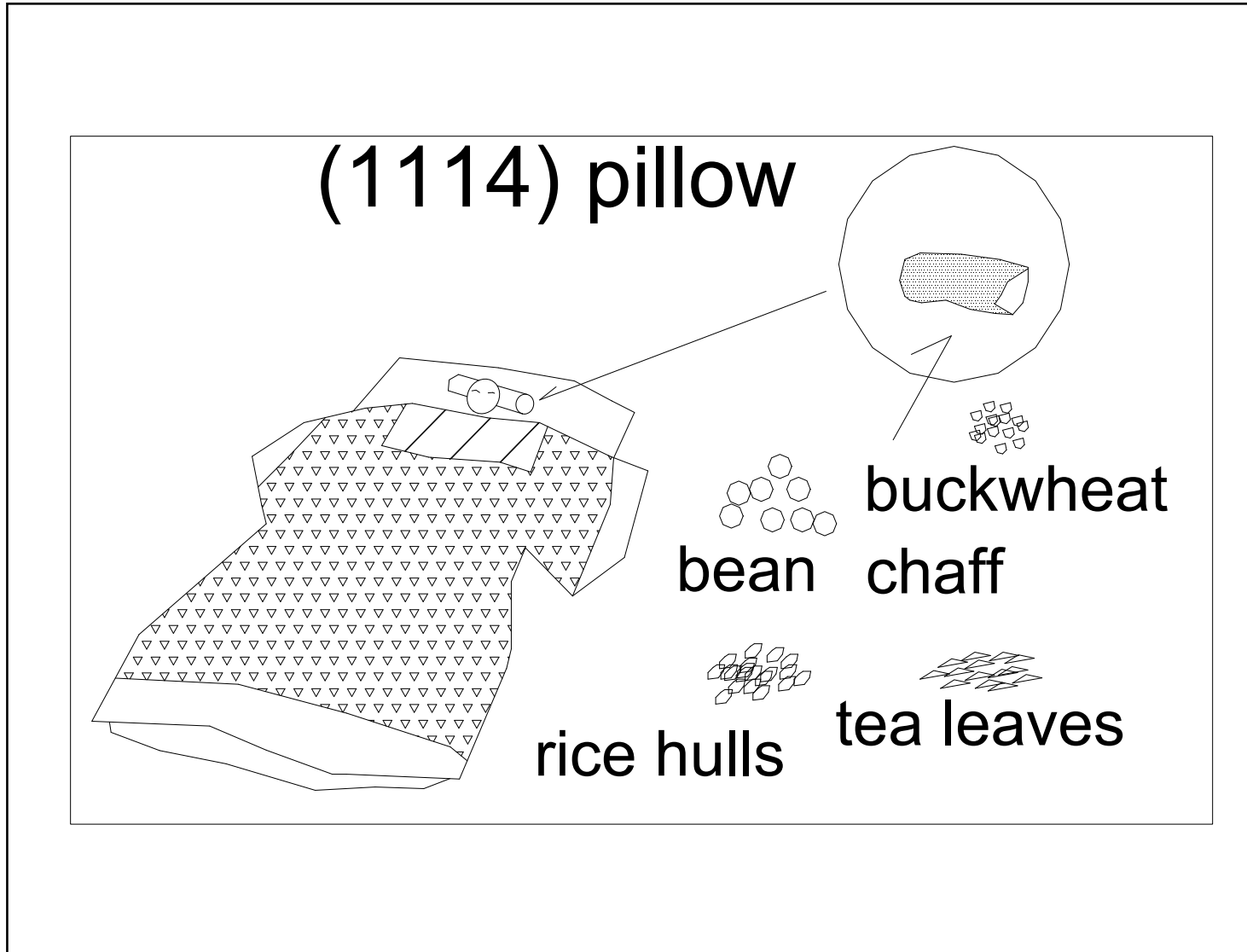
(1113) wind-bell

fuel

bell

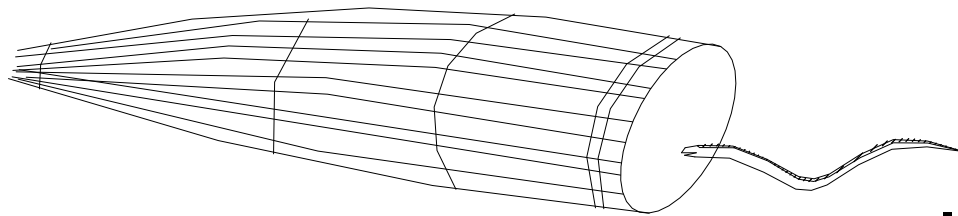


(1114) pillow



(1115) fishing

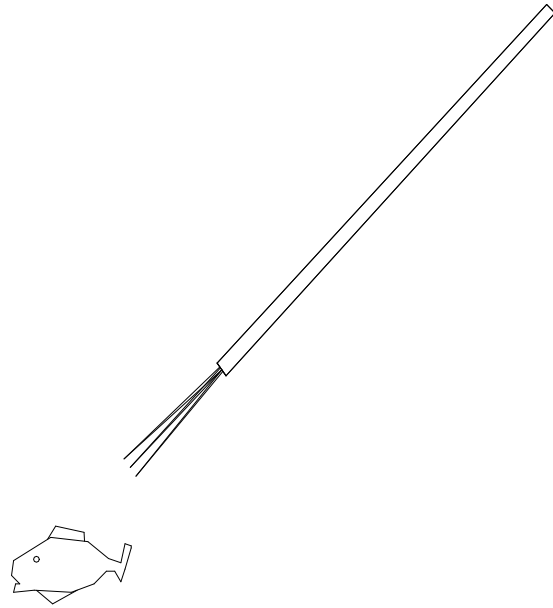
(1115) fishing



eel

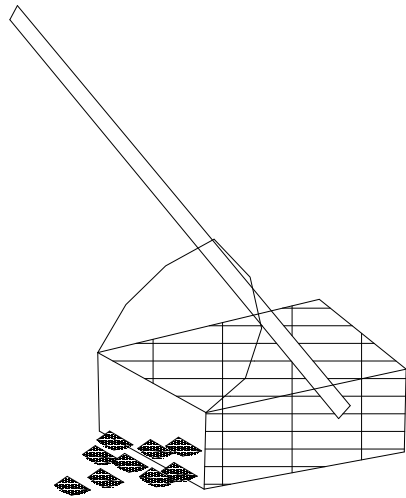
(1116) fish spear

(1116) fish spear



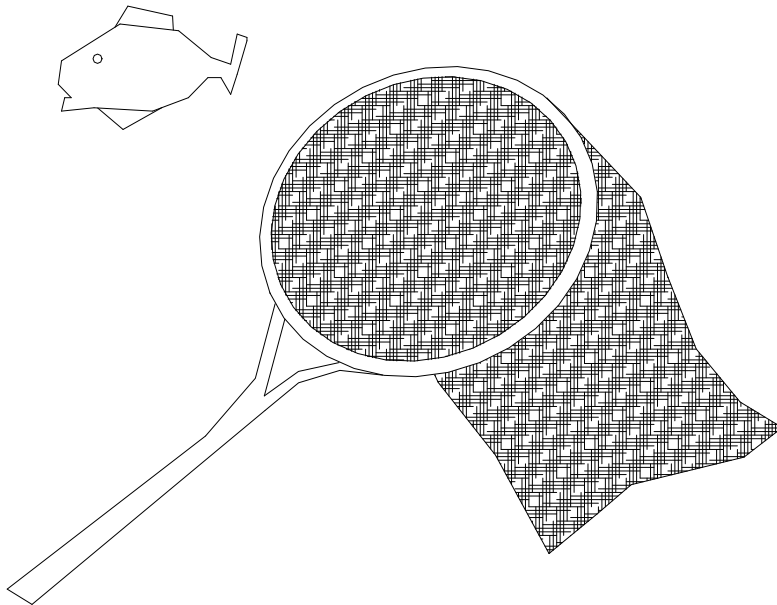
(1117) clam basket

(1117) clam basket



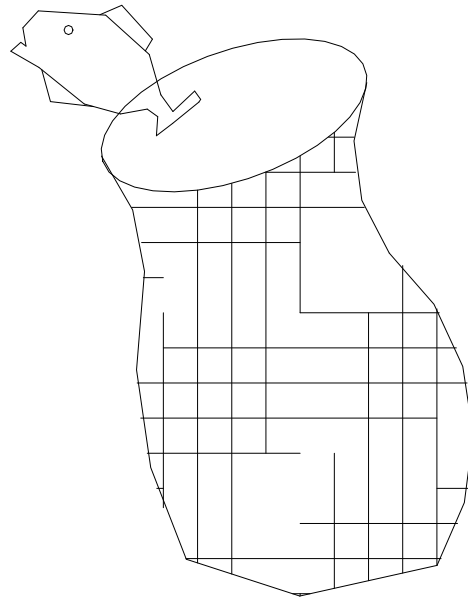
(1118) fishing net

(1118) fishing net



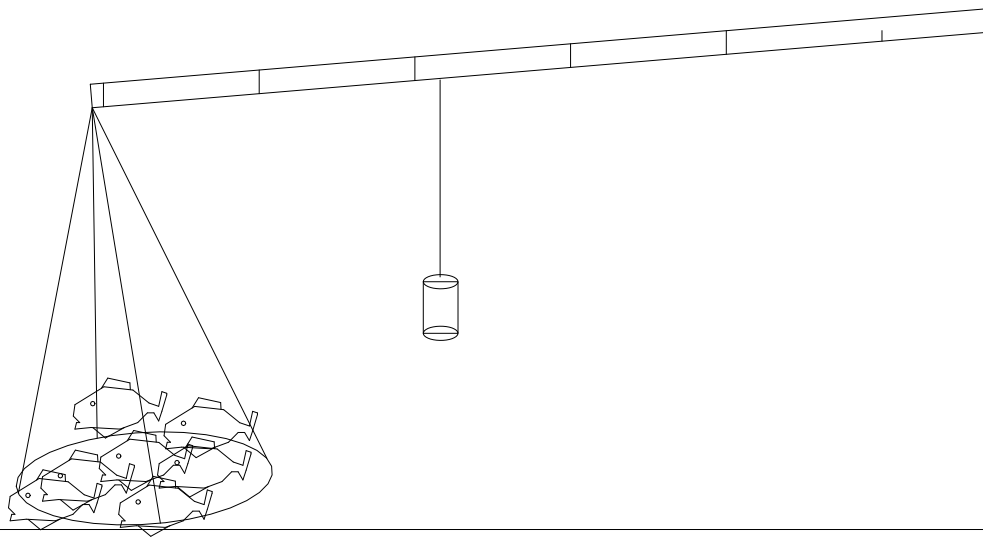
(1119) basket used for carrying fish

(1119) basket used for carrying fish



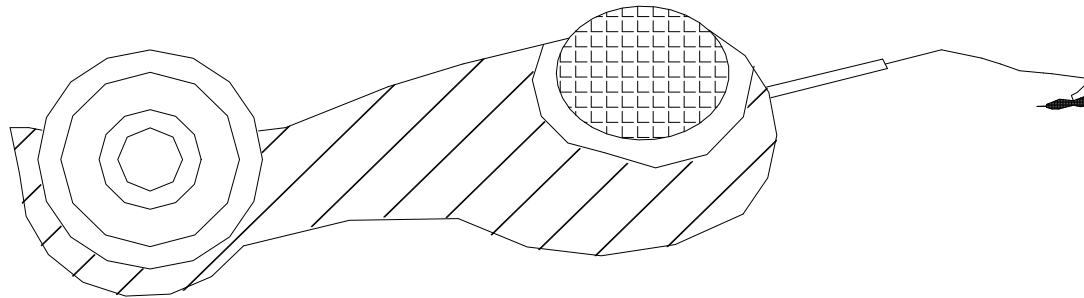
(1120) beam balance

(1120) beam balance



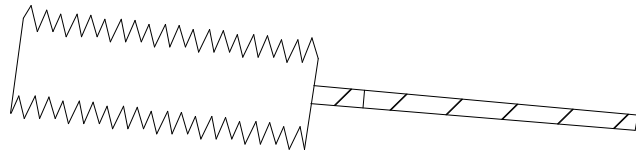
(1121) tool for marking

**(1121) tool for marking
long straight lines**



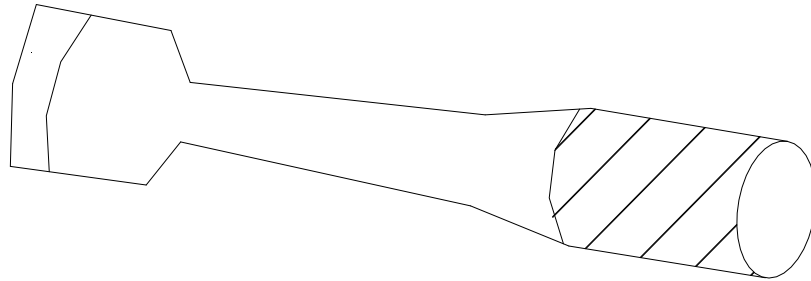
(1122) saw

(1122) saw



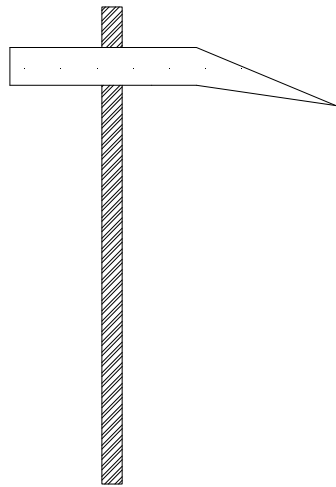
(1123) chisel

(1123) chisel



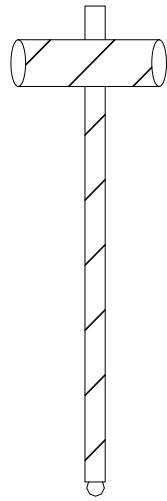
(1124) hammer

(1124) hammer



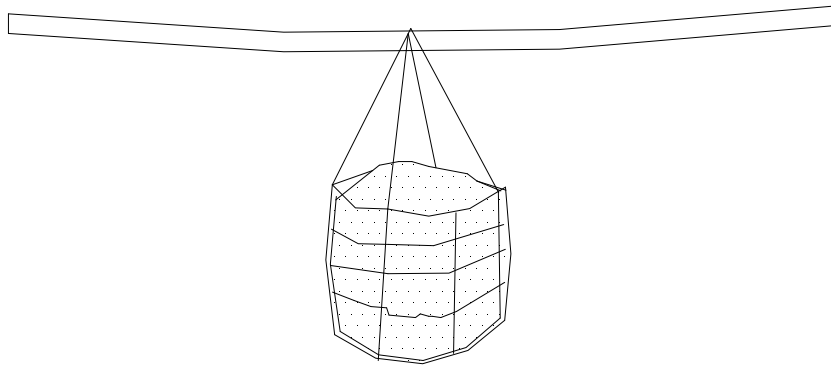
(1125) wooden hammer

(1125) wooden hammer



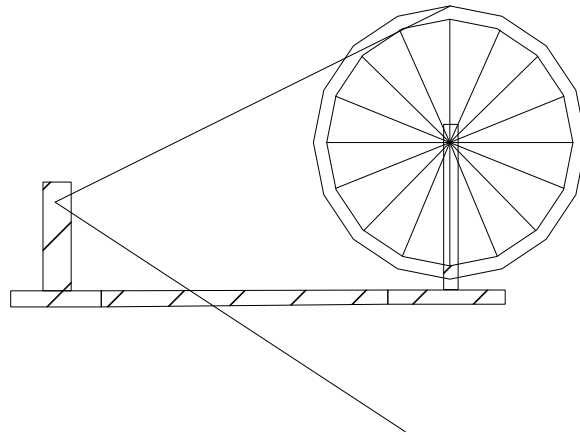
(1126) straw basket

(1126) straw basket



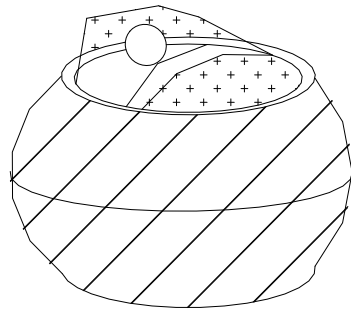
(1127) spinning wheel

(1127) spinning wheel



(1128) babies basket

(1128) babies basket
straw



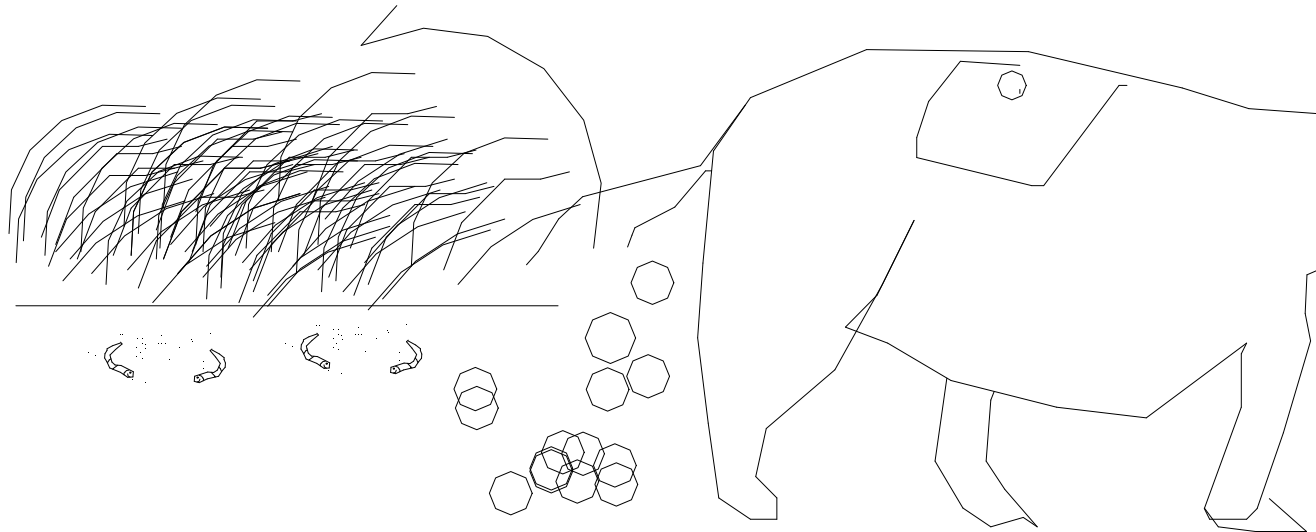
(1129) manure

(1129) manure
rice straw, paddy straw.
fallen leaves grass



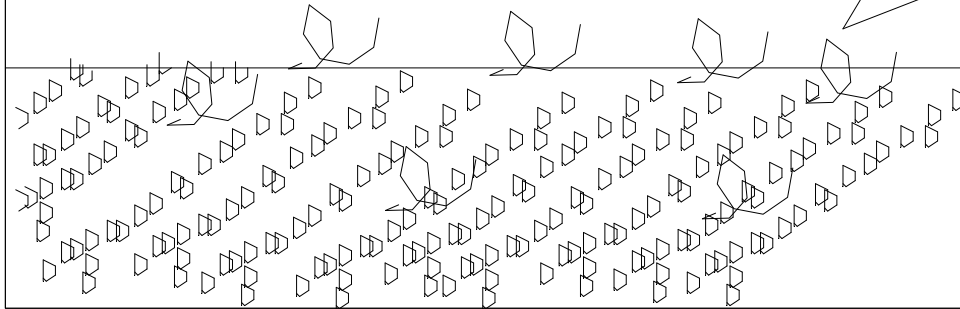
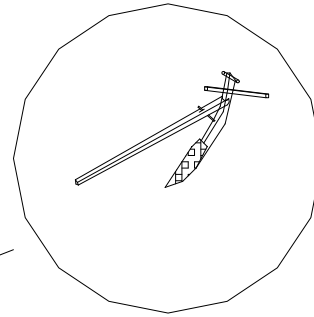
(1130) compost manure

(1130) compost manure



(1131) green manure crop

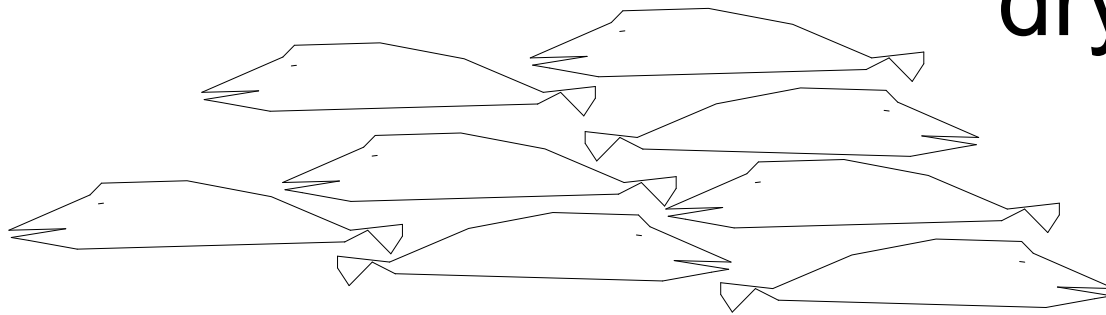
(1131) green manure crop
lotus flower
plow plowing-in



(1132) fertilizer made

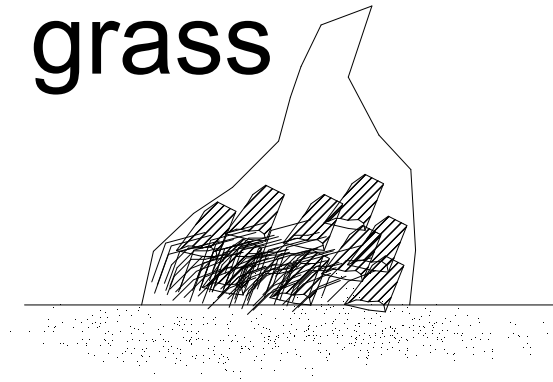
(1132) fertilizer made
from fish parts
sardine

dry



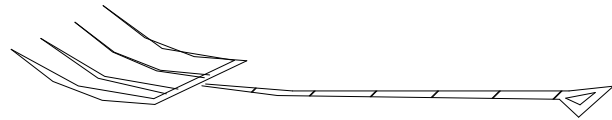
(1133) ash

(1133) ash
manure
wood
burn grass



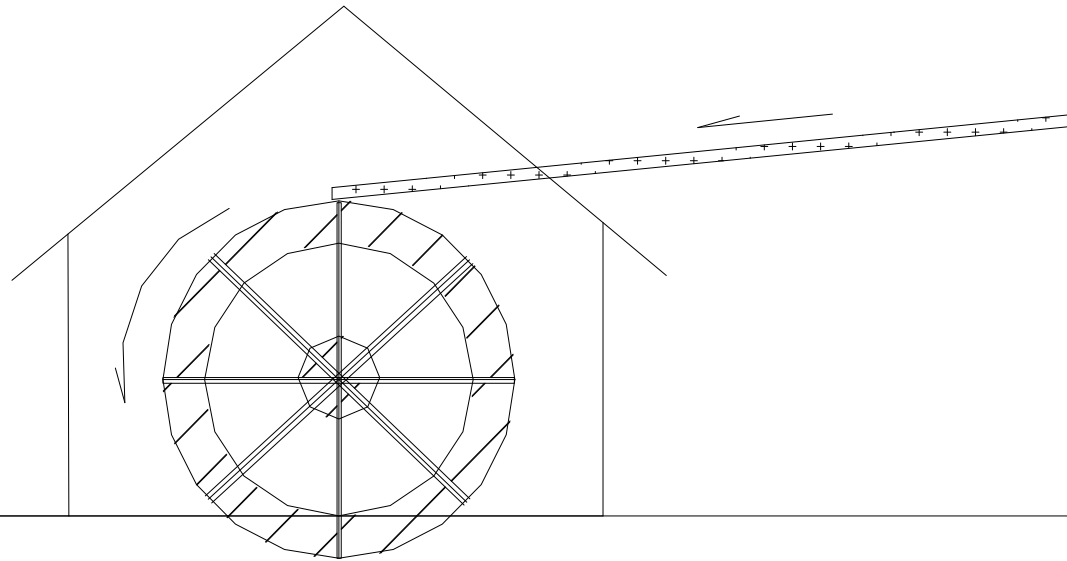
(1134) fork

(1134) fork

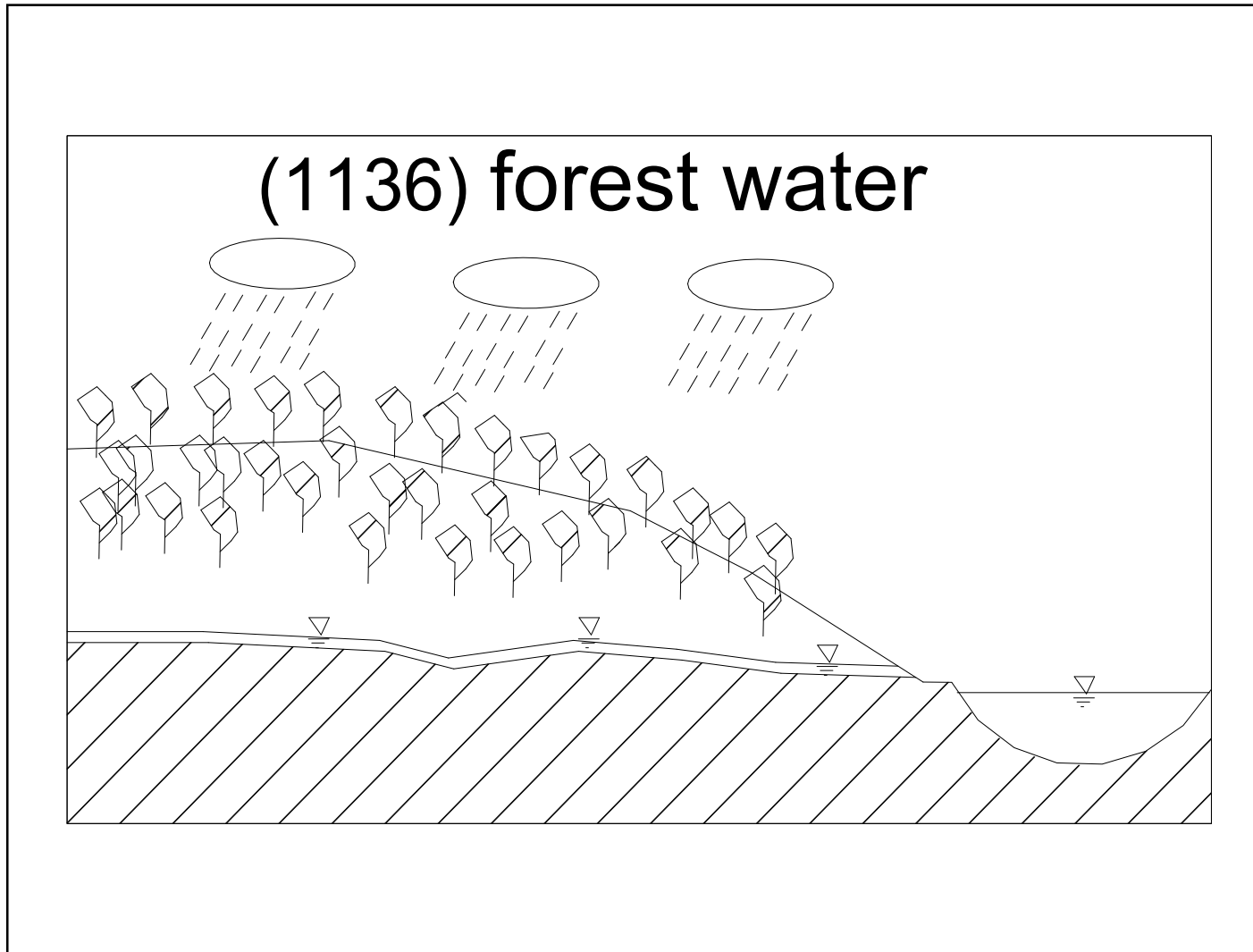


(1135) water wheel

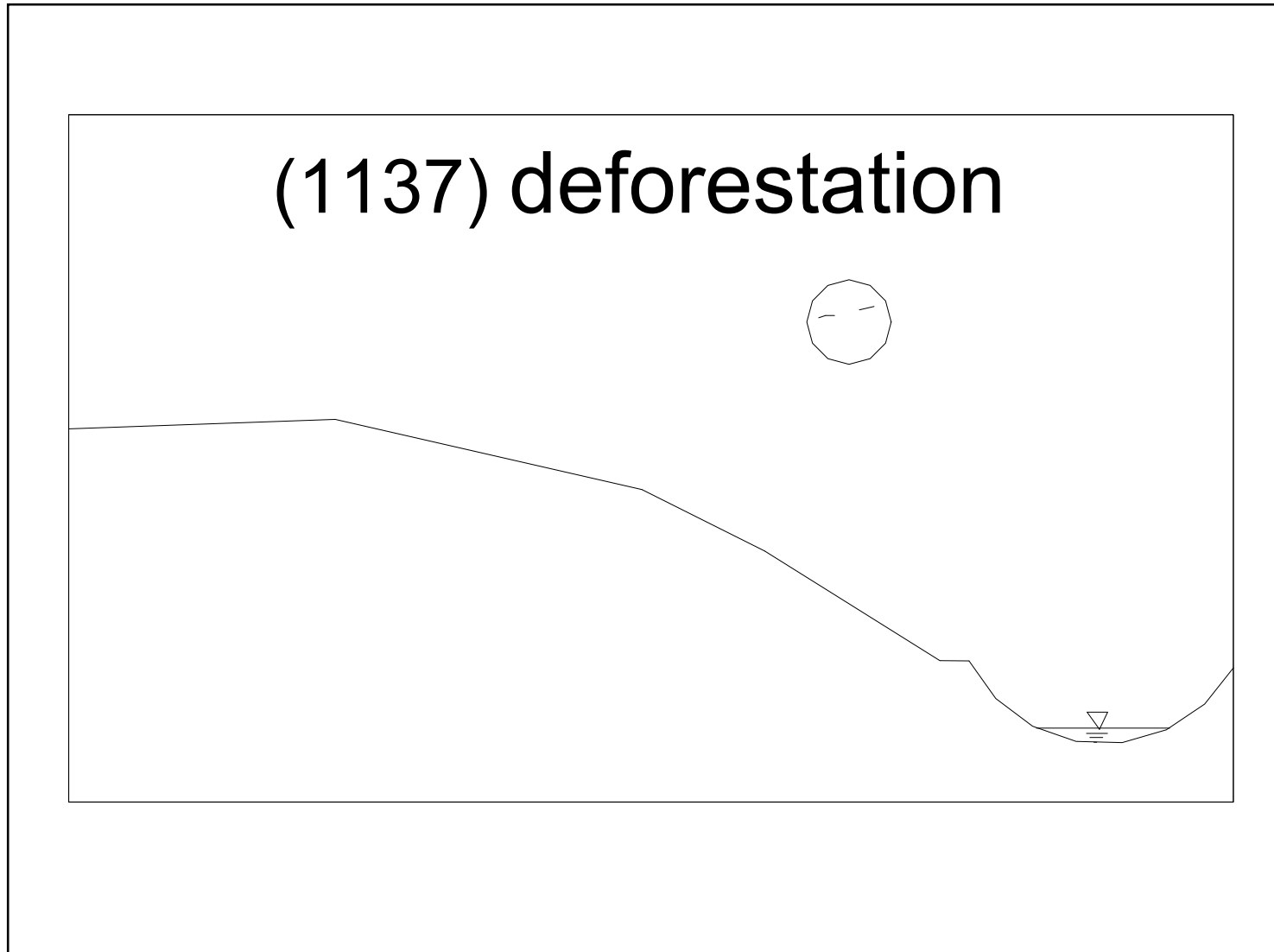
(1135) water wheel



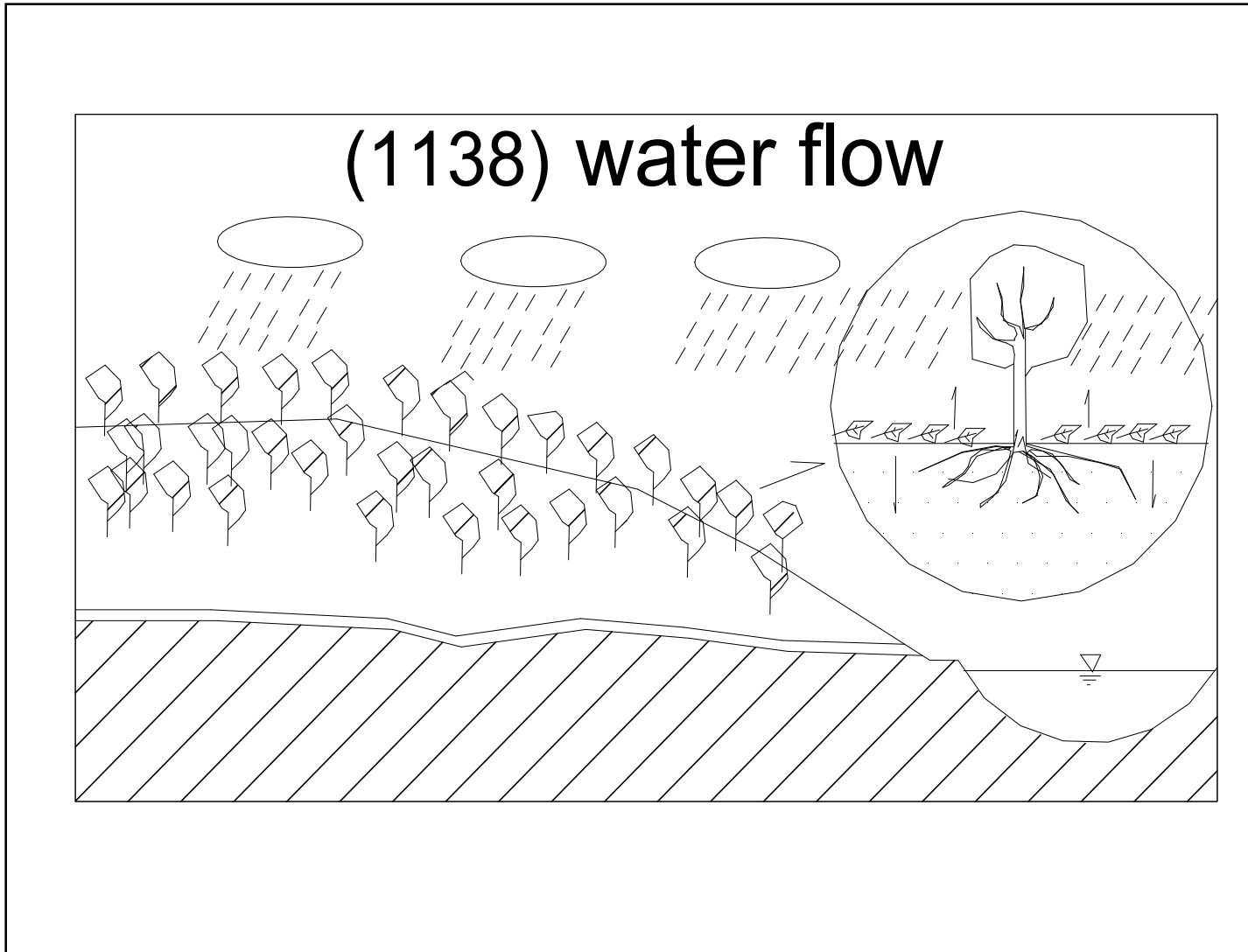
(1136) forest water



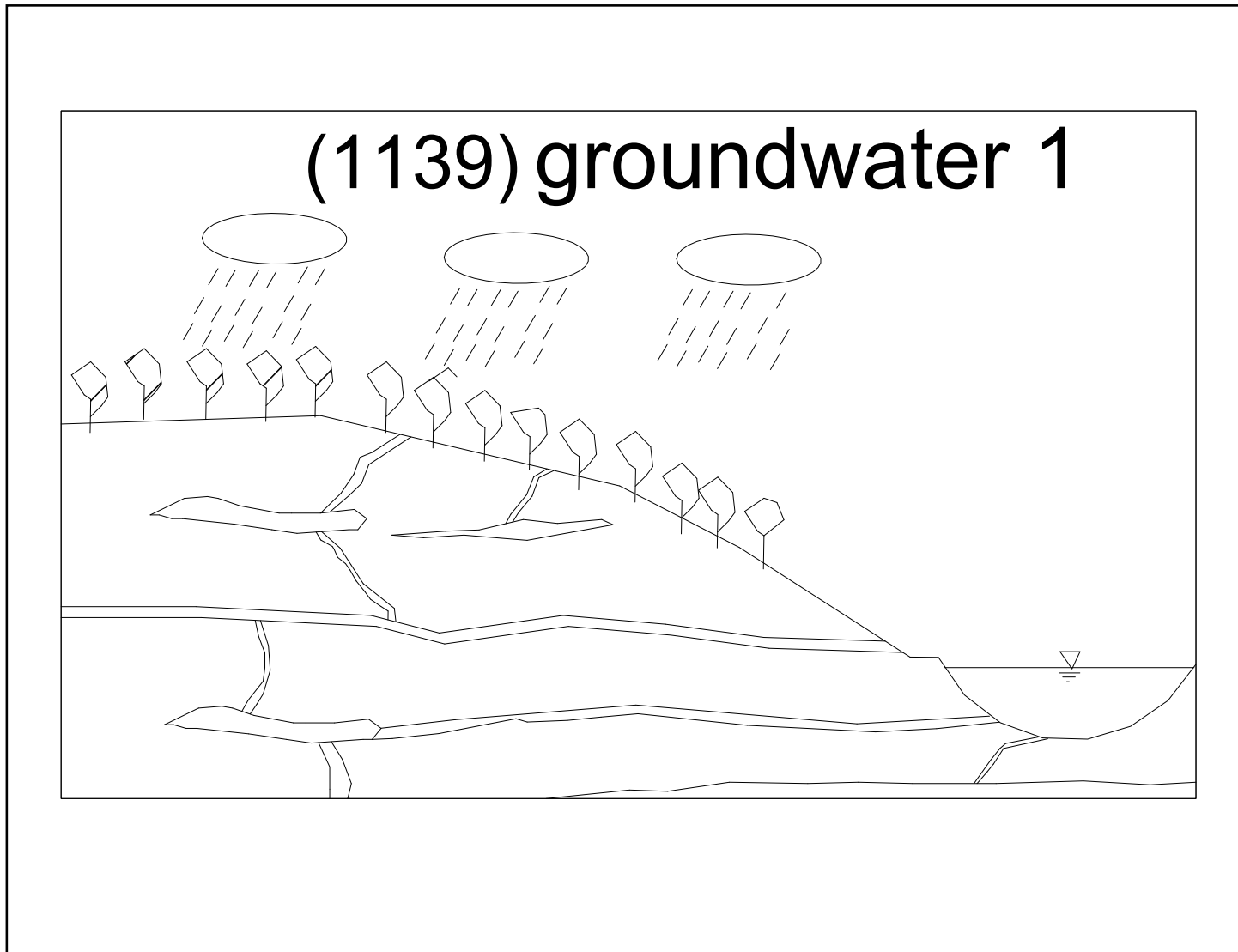
(1137) deforestation



(1138) water flow

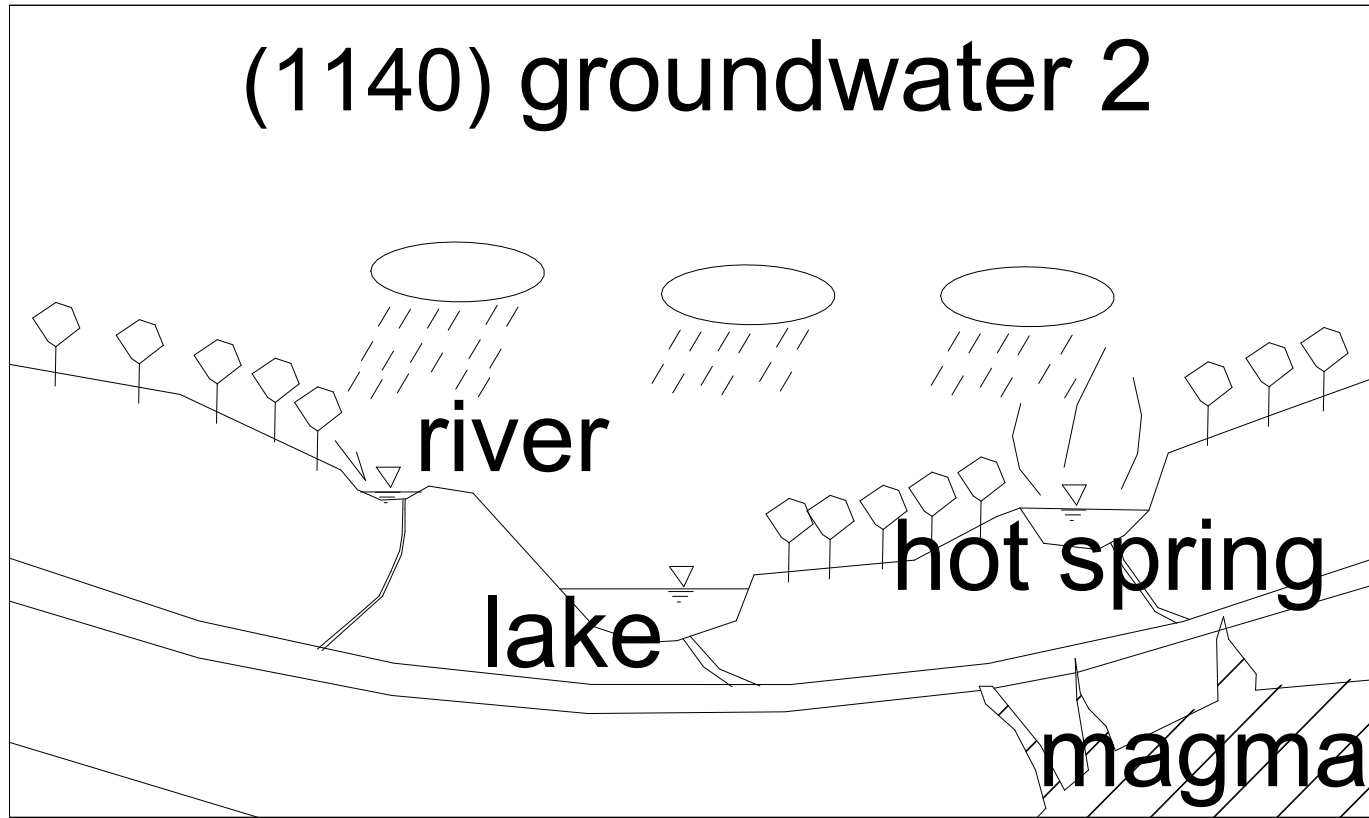


(1139) groundwater 1

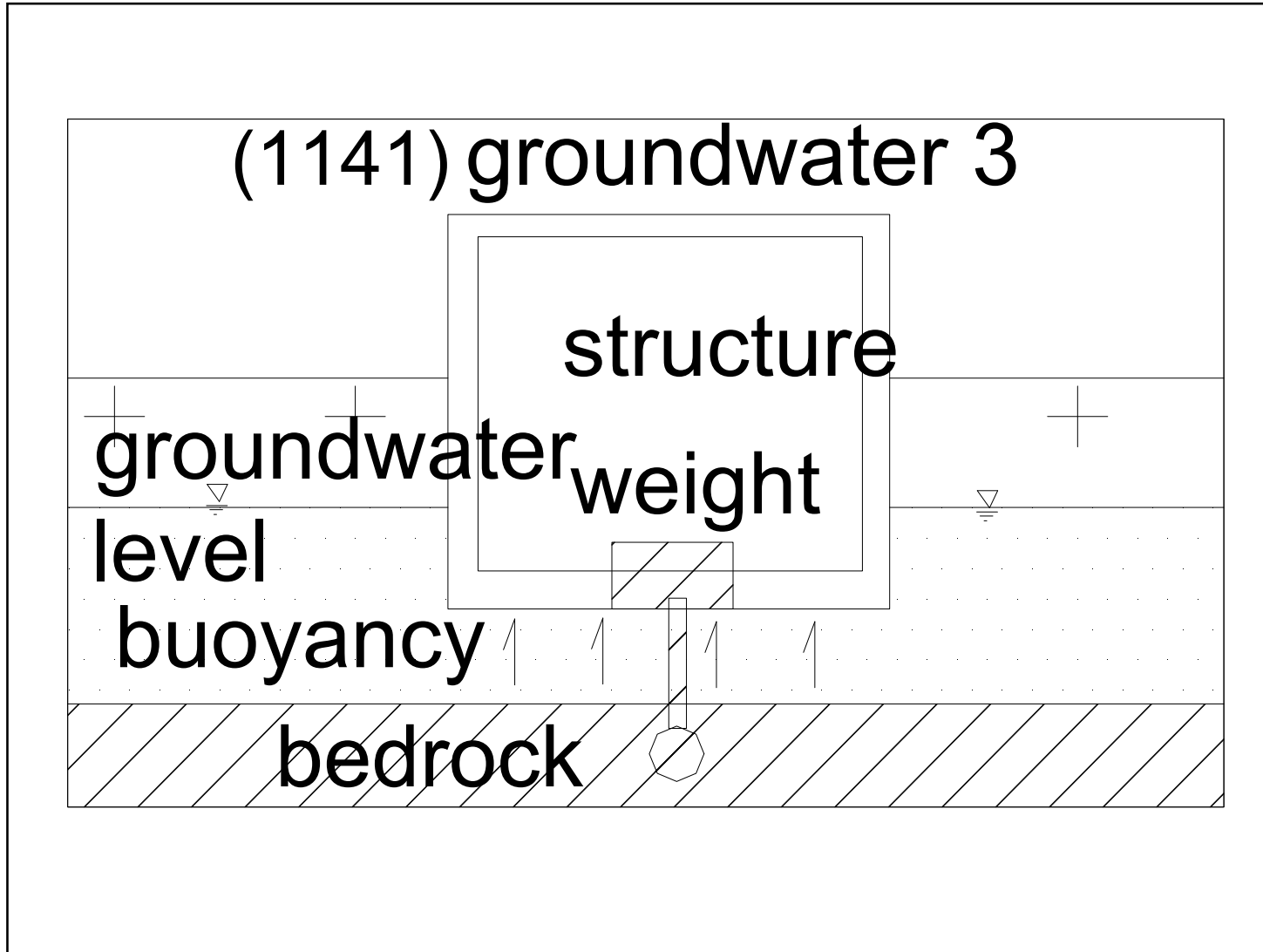


(1140) groundwater 2

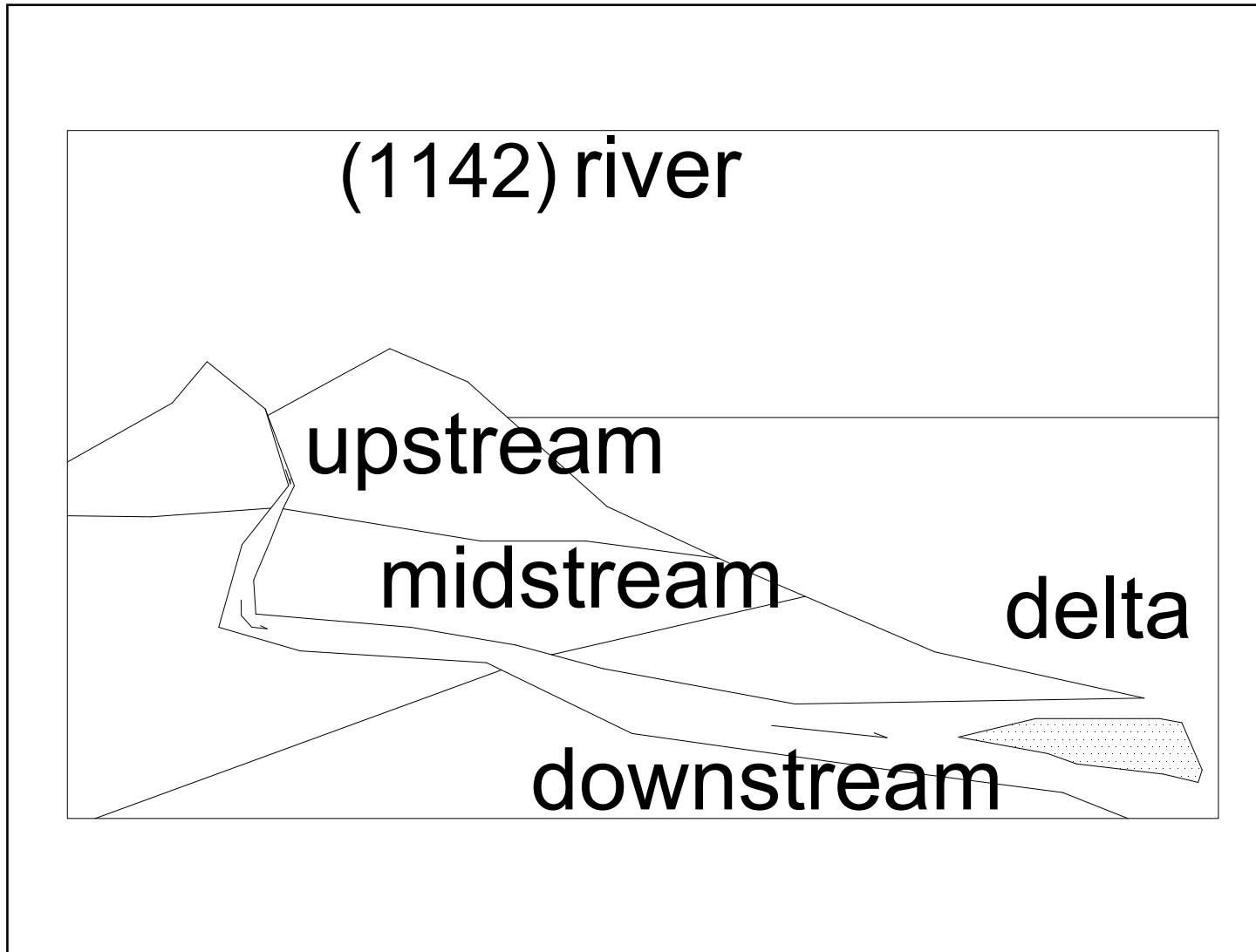
(1140) groundwater 2



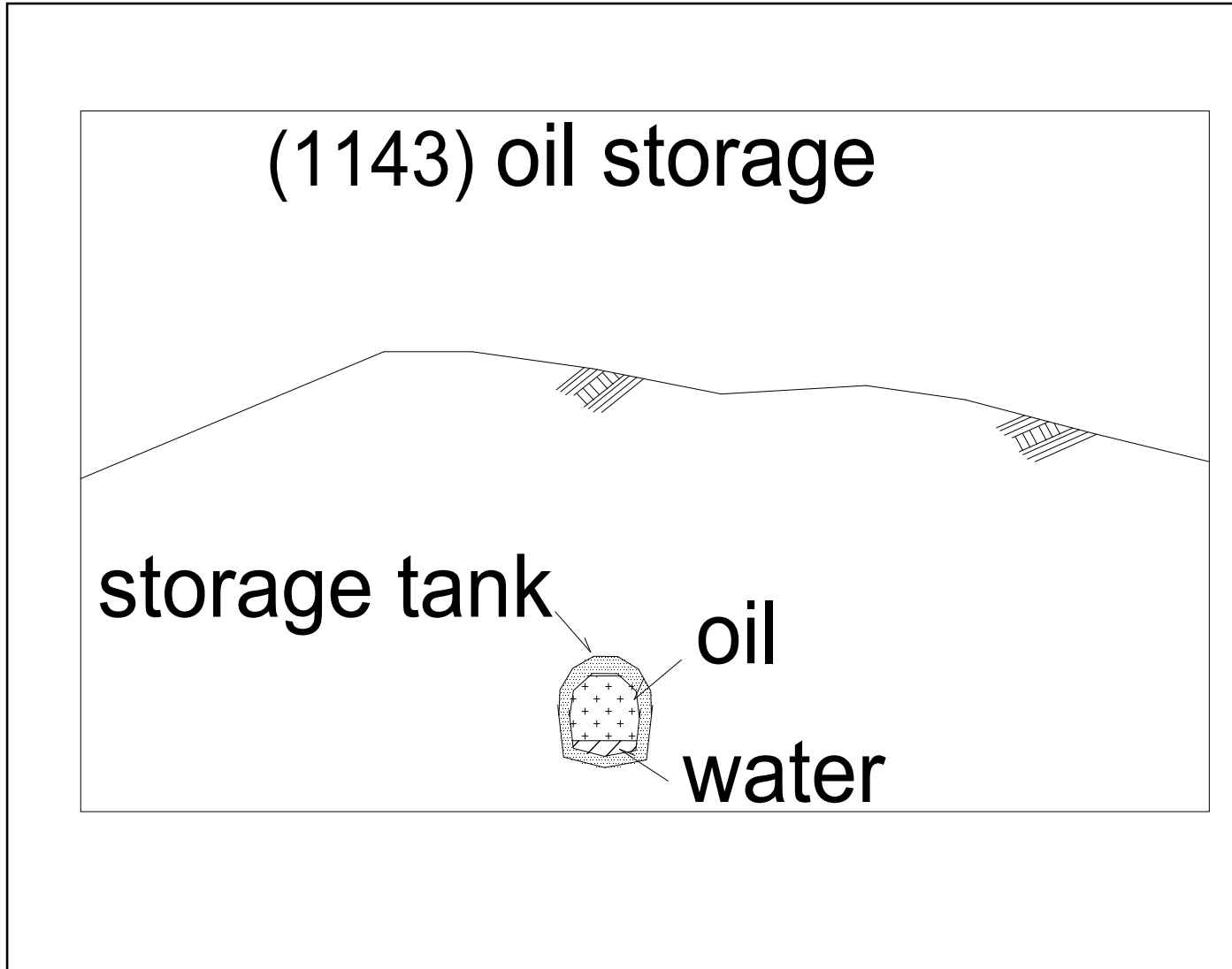
(1141) groundwater 3



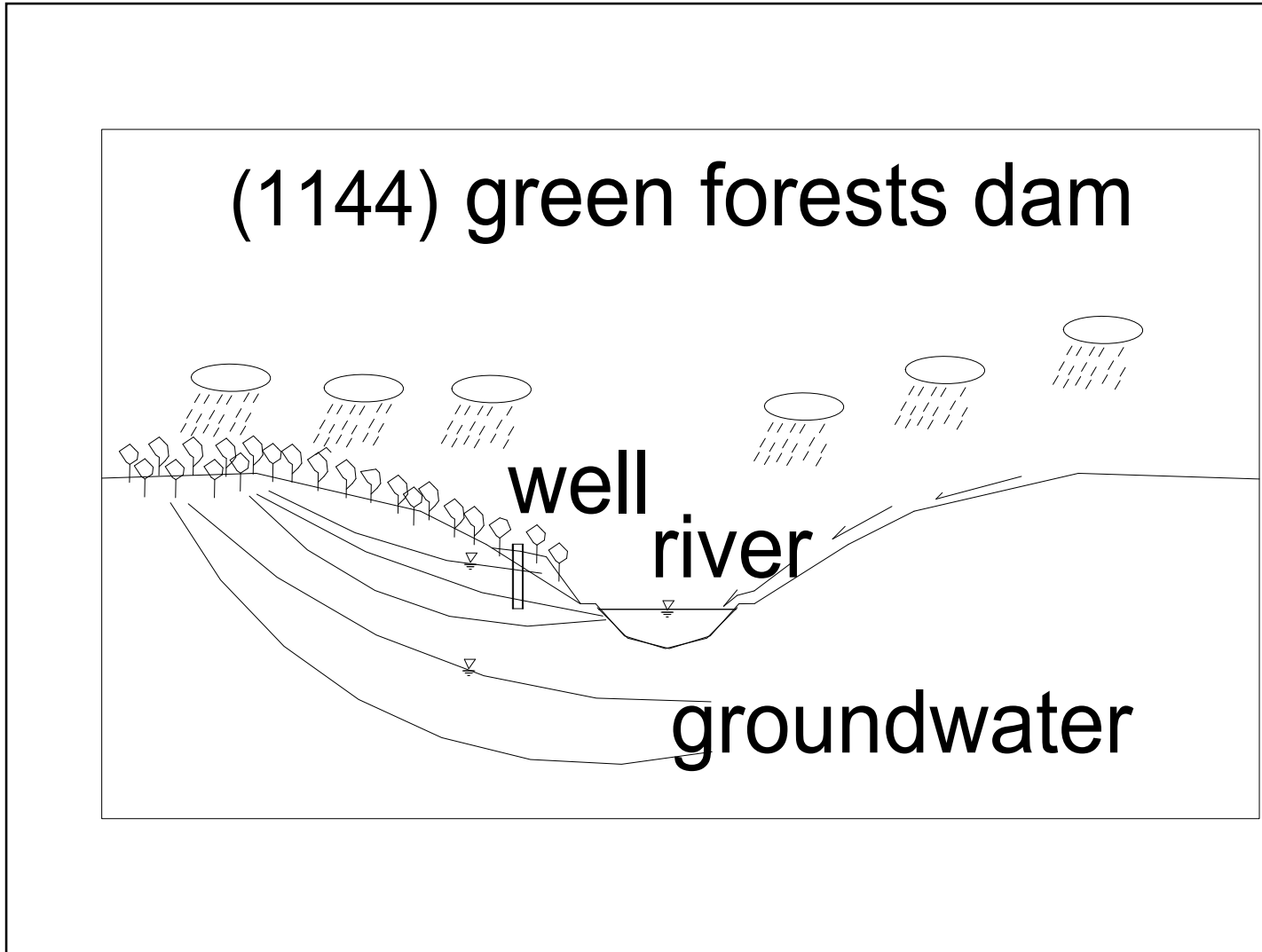
(1142) river



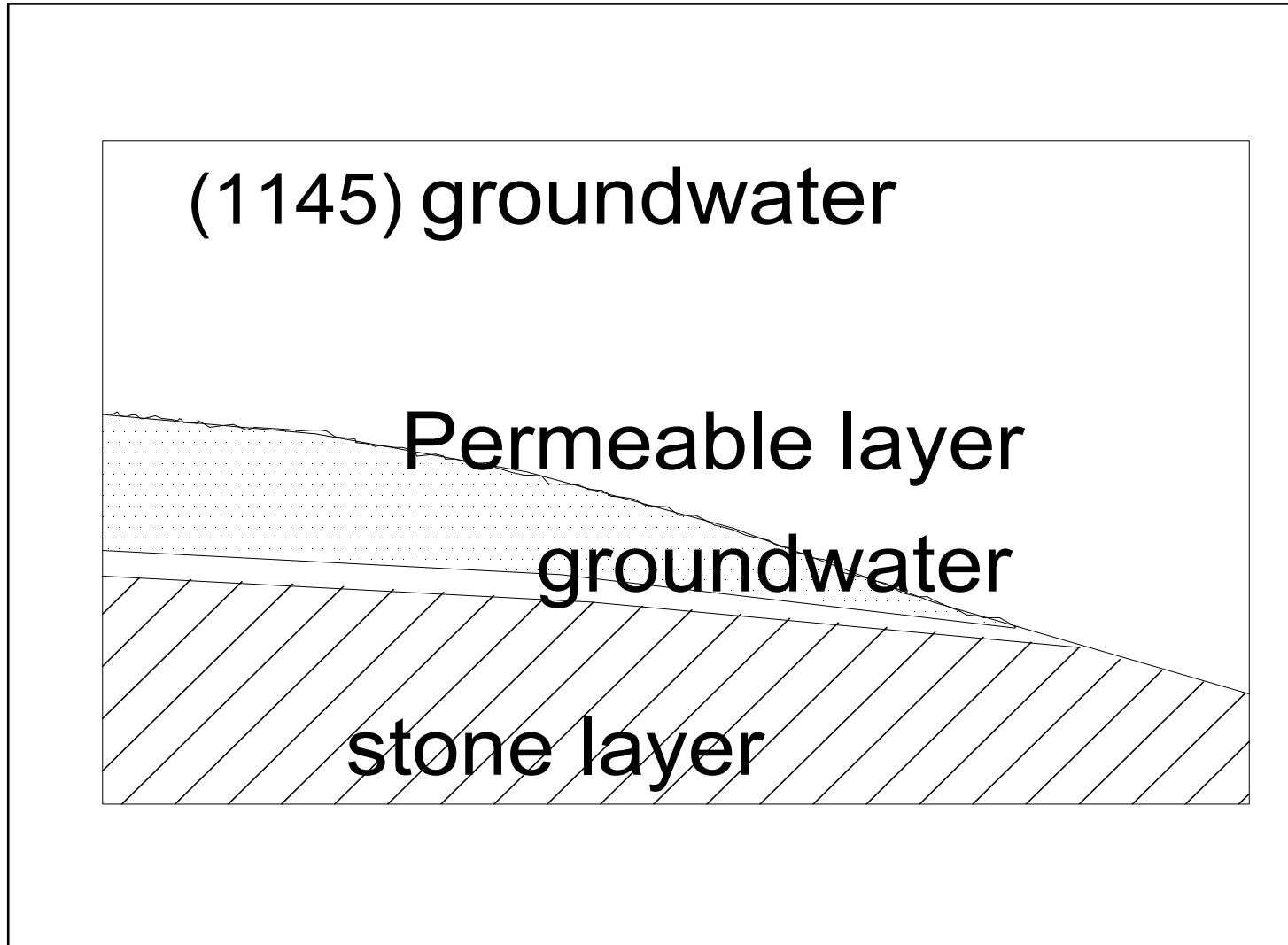
(1143) oil storage



(1144) green forests dam

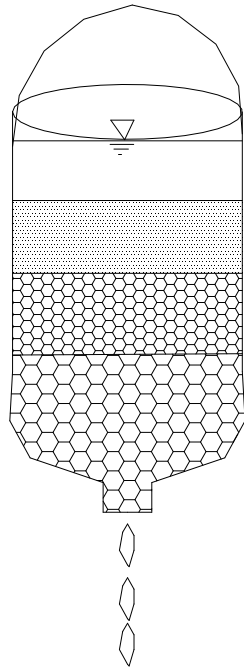


(1145) groundwater



(1146) water purifier 1

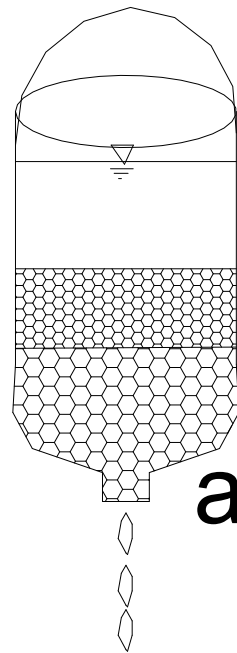
(1146) water purifier 1



water
pebbles
soil
sand

(1147) water purifier 2

(1147) water purifier 2



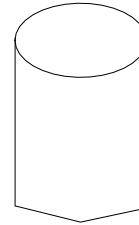
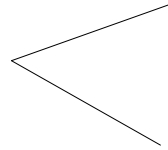
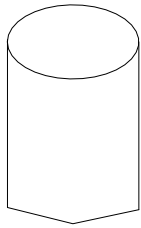
water
charcoal

activated carbon

(1148) softened water and hard water

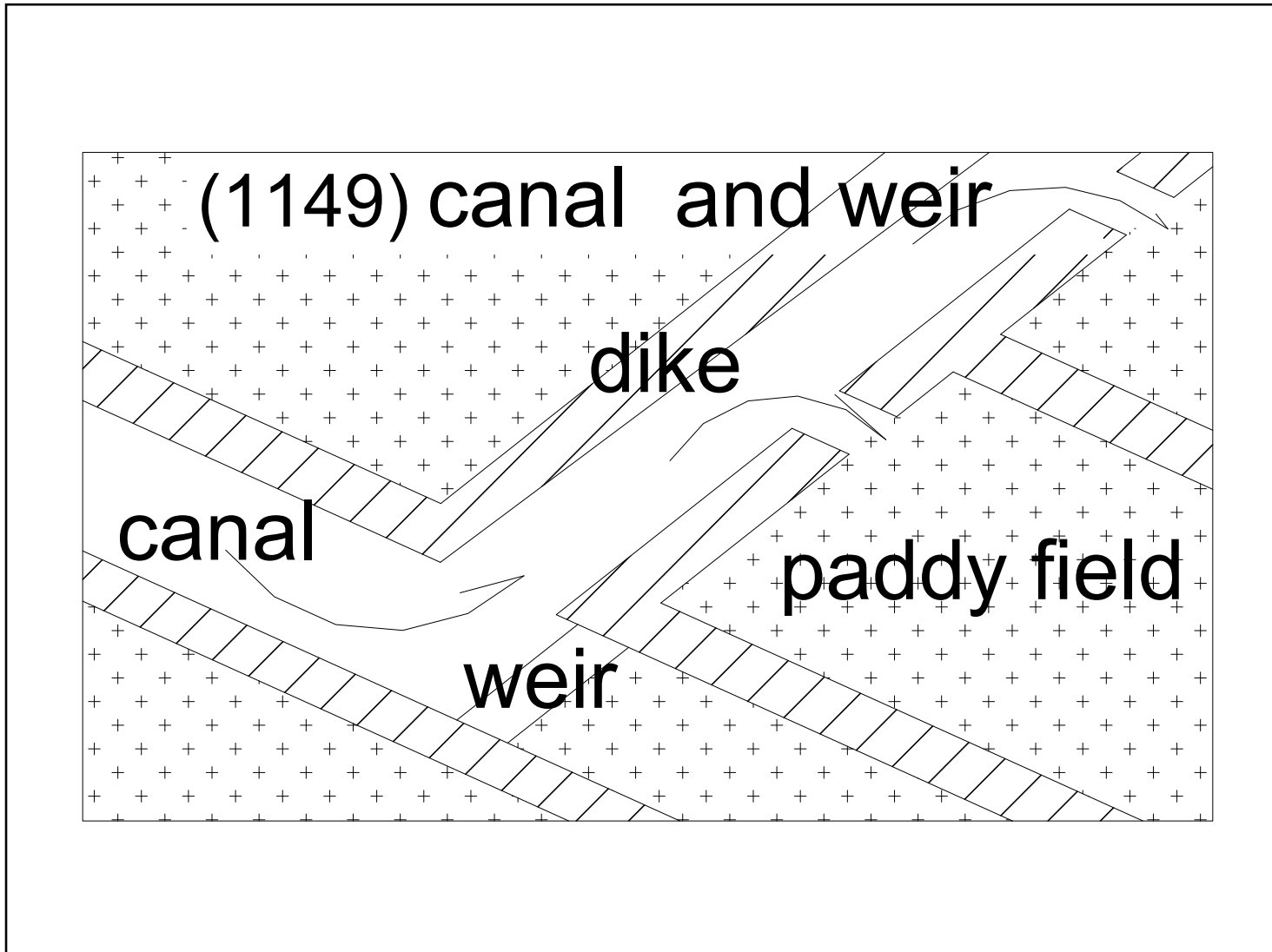
(1148) softened water and hard water

softened water hard water

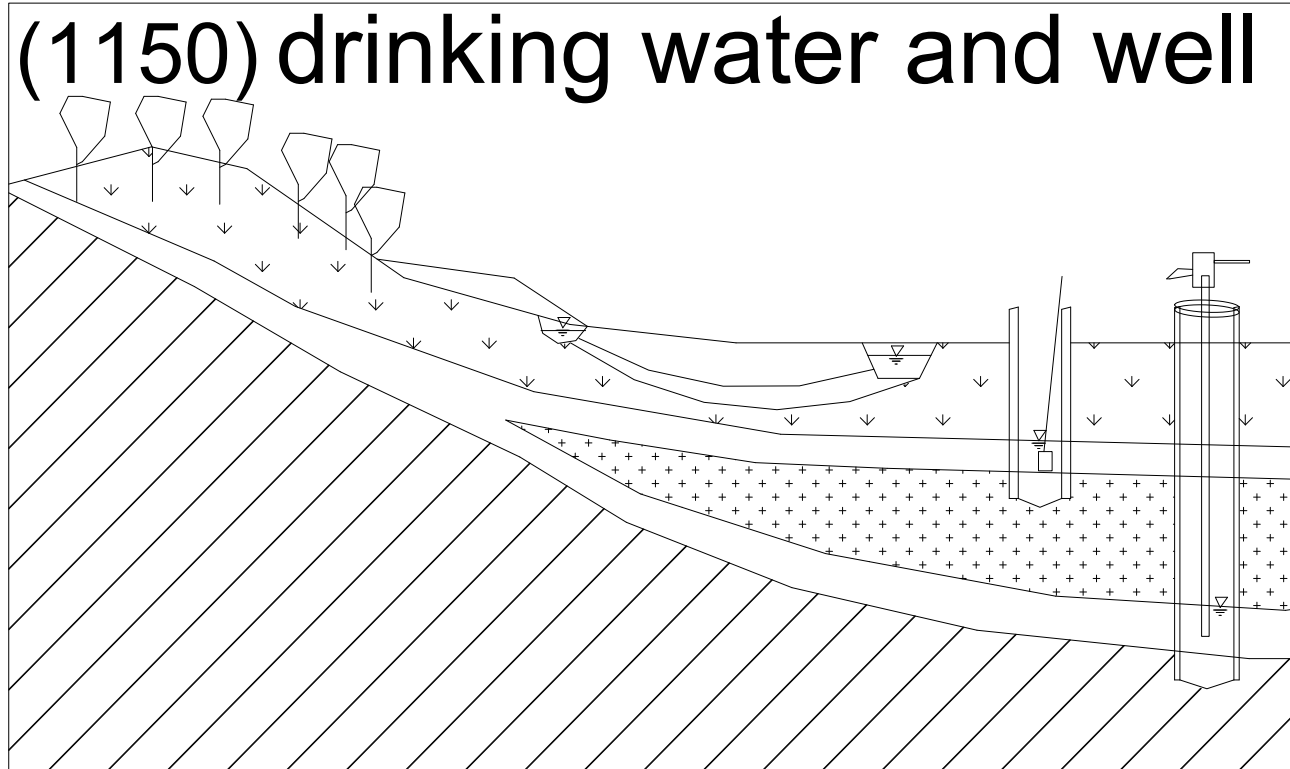


calcium magnesium

(1149) canal and weir

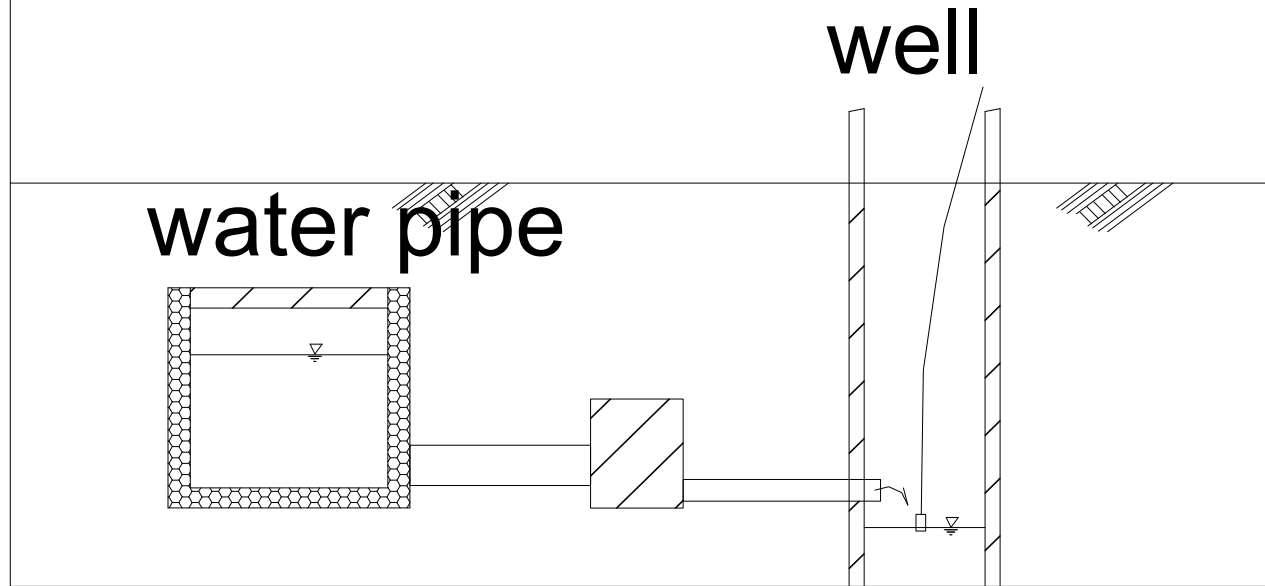


(1150) drinking water and well



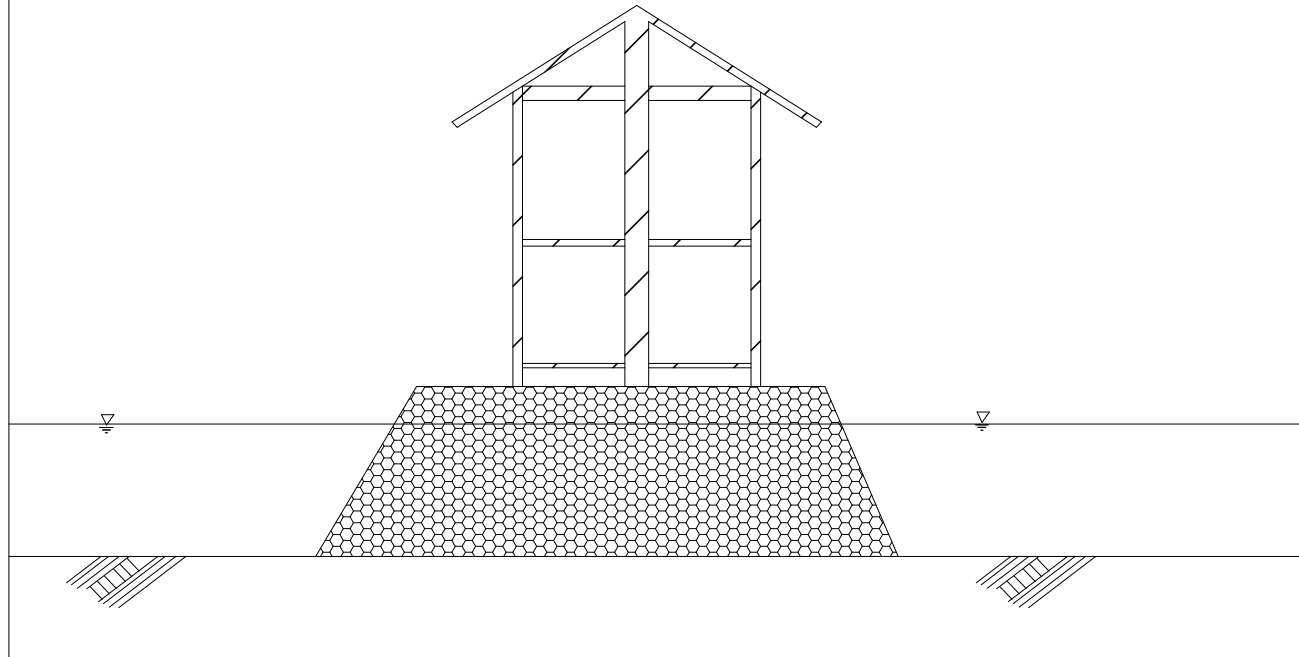
(1151) drinking water and well

(1151) drinking water and well

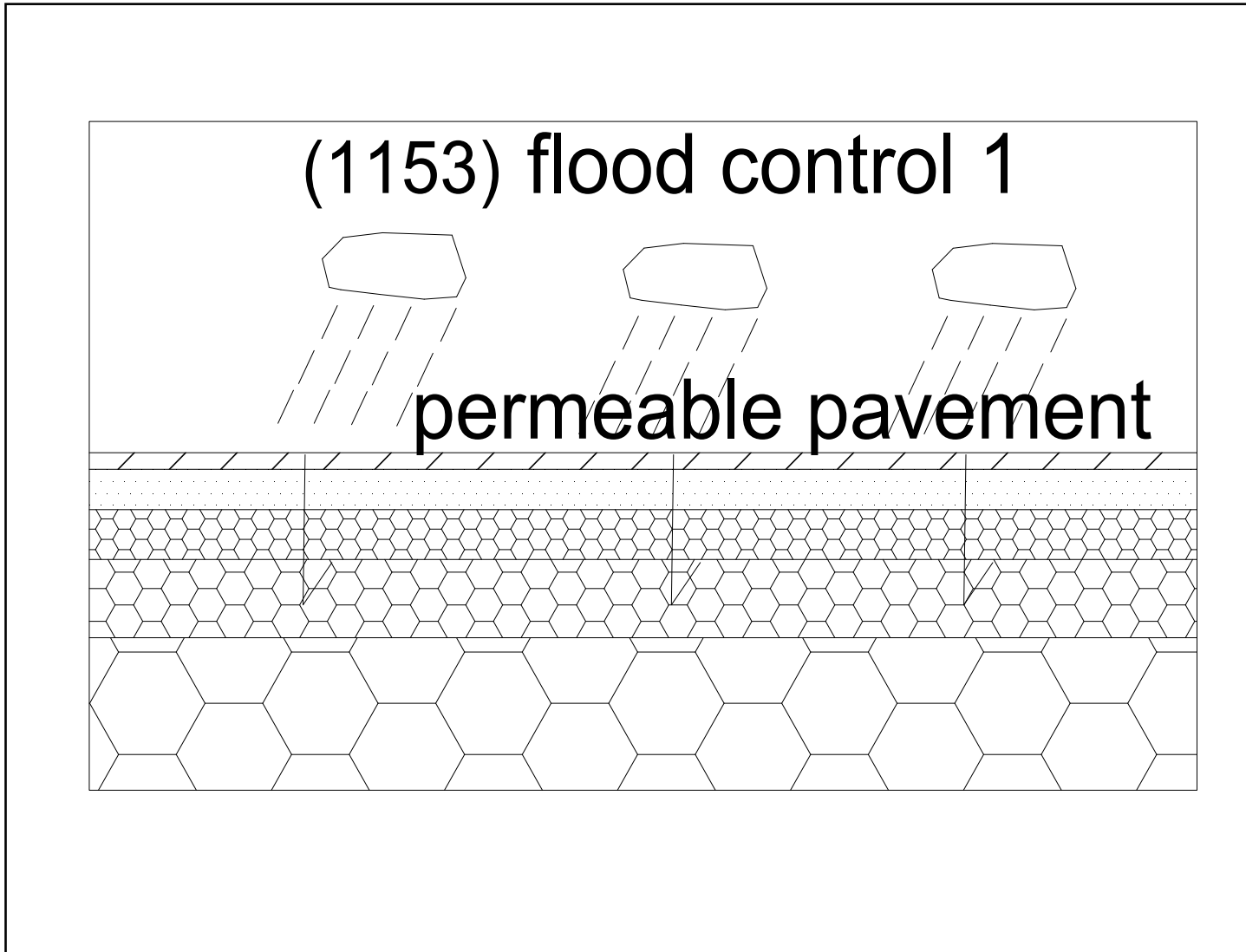


(1152) drinking water and well

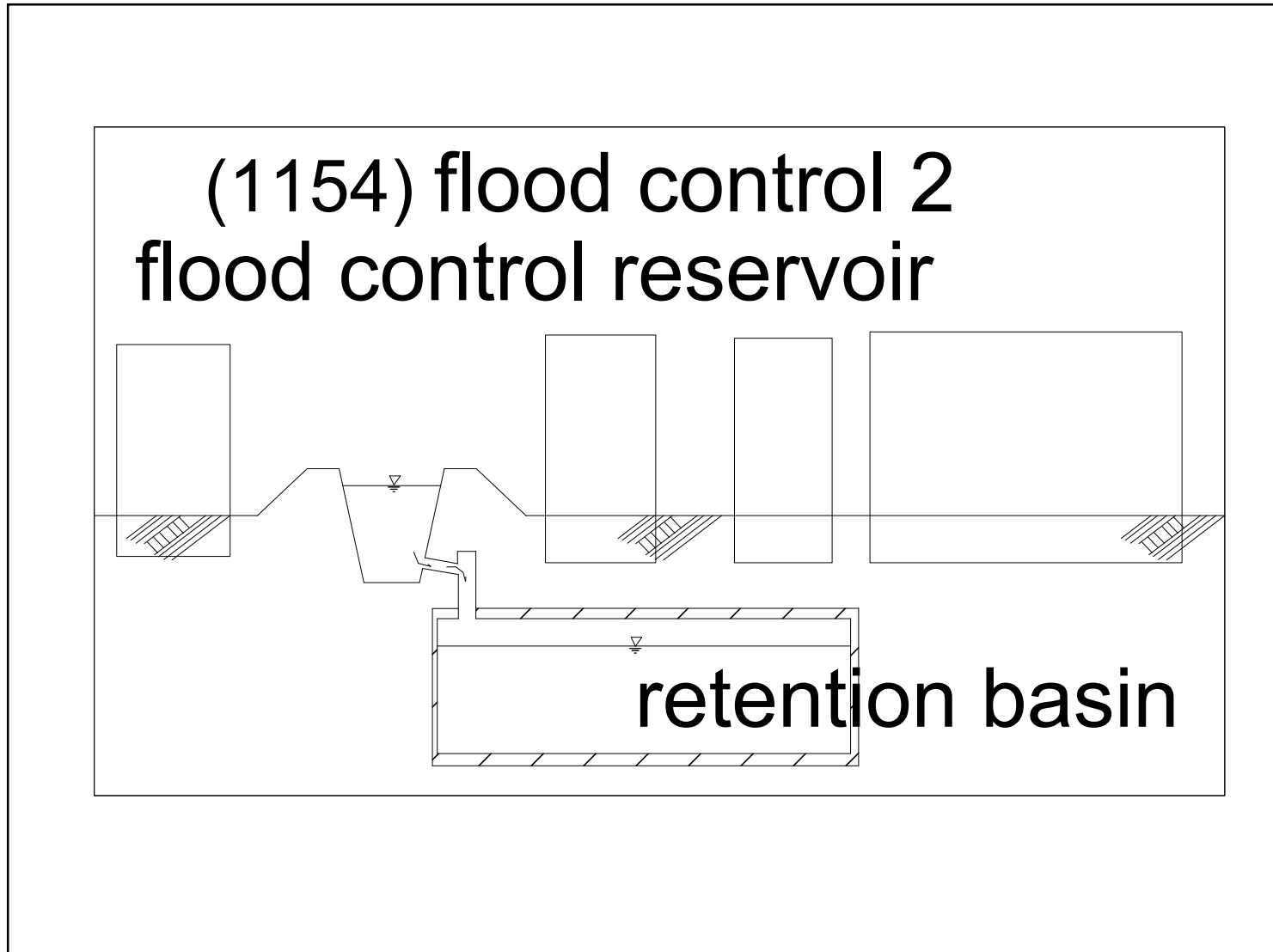
(1152) drinking water and well



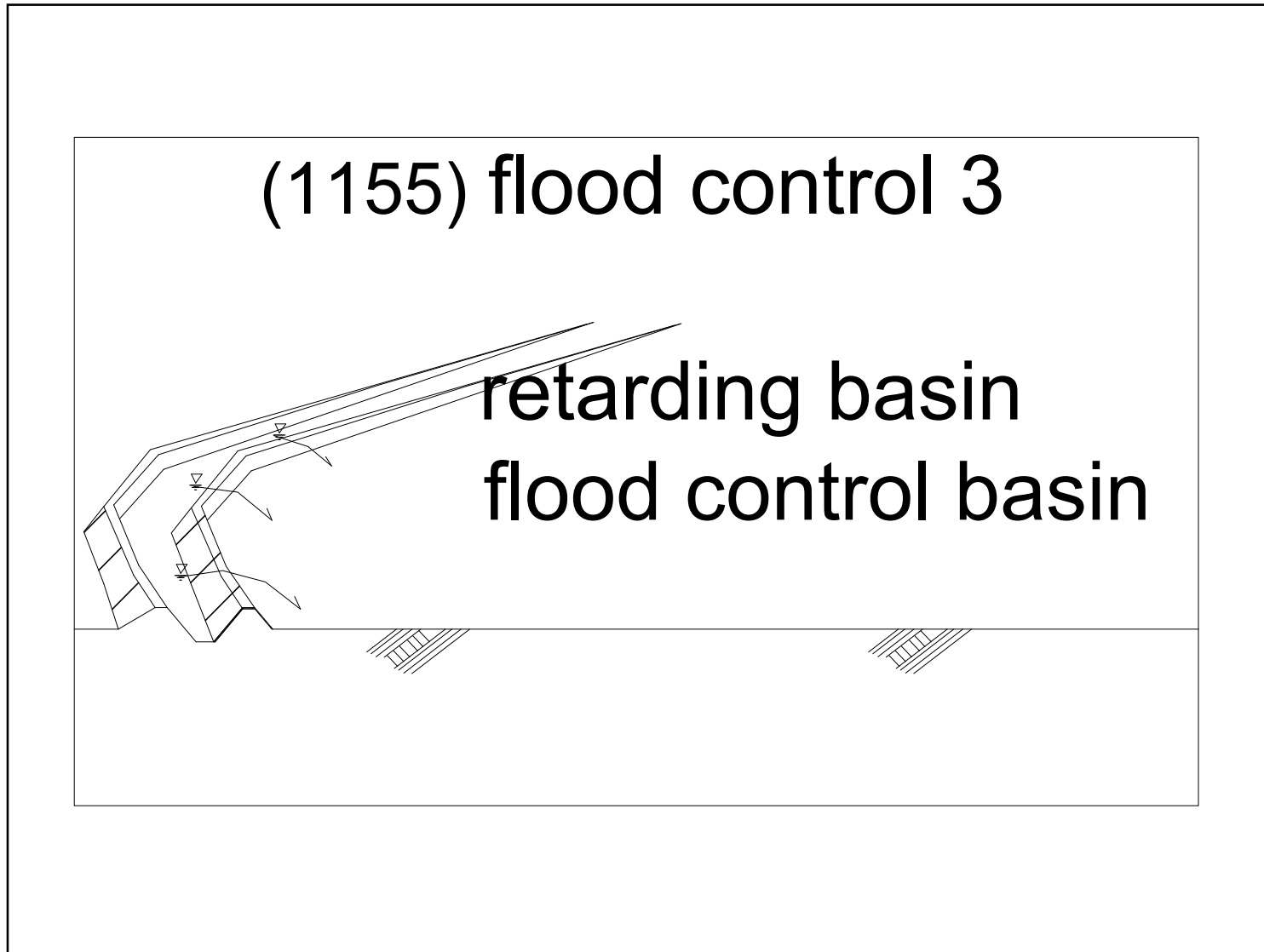
(1153) flood control 1



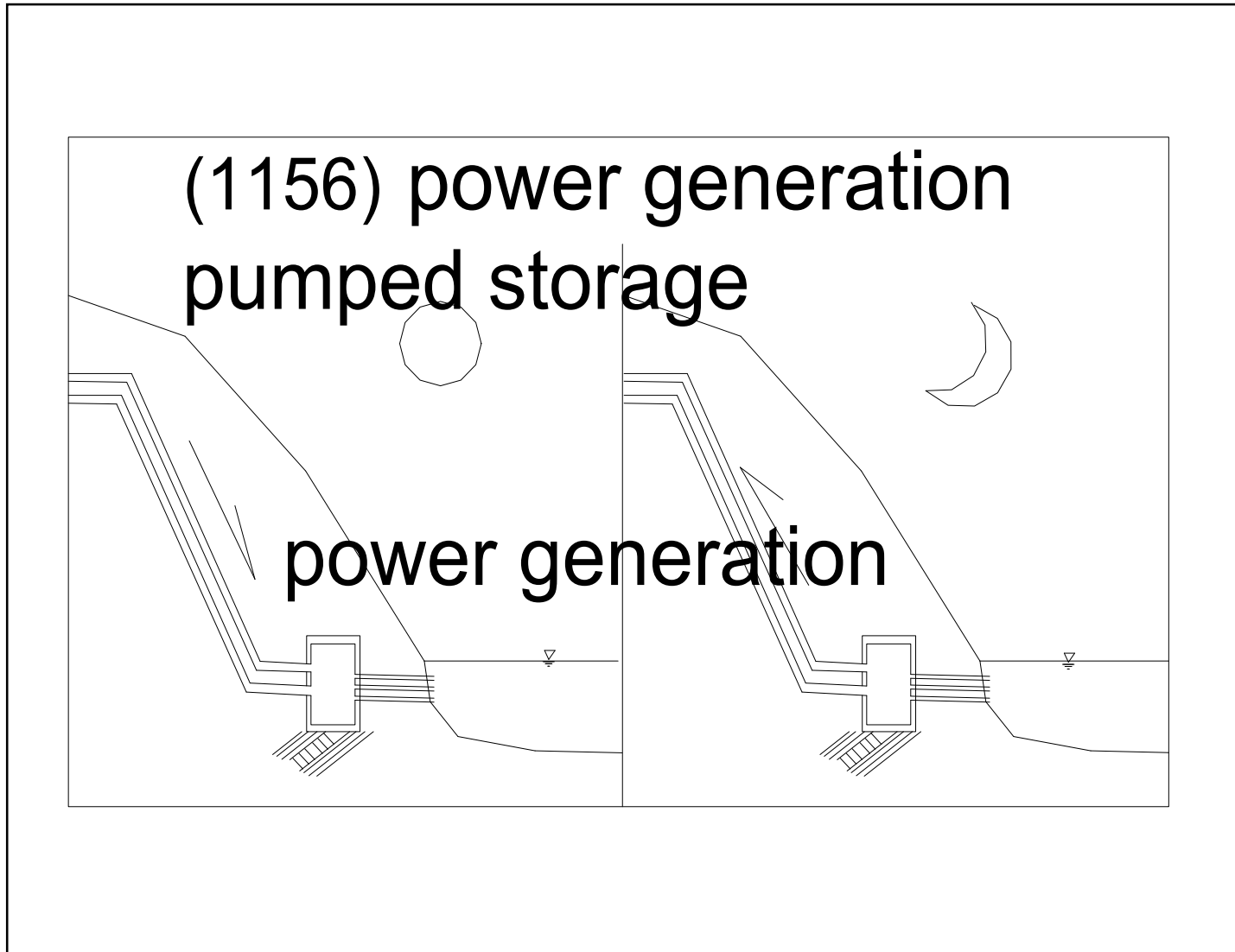
(1154) flood control 2



(1155) flood control 3

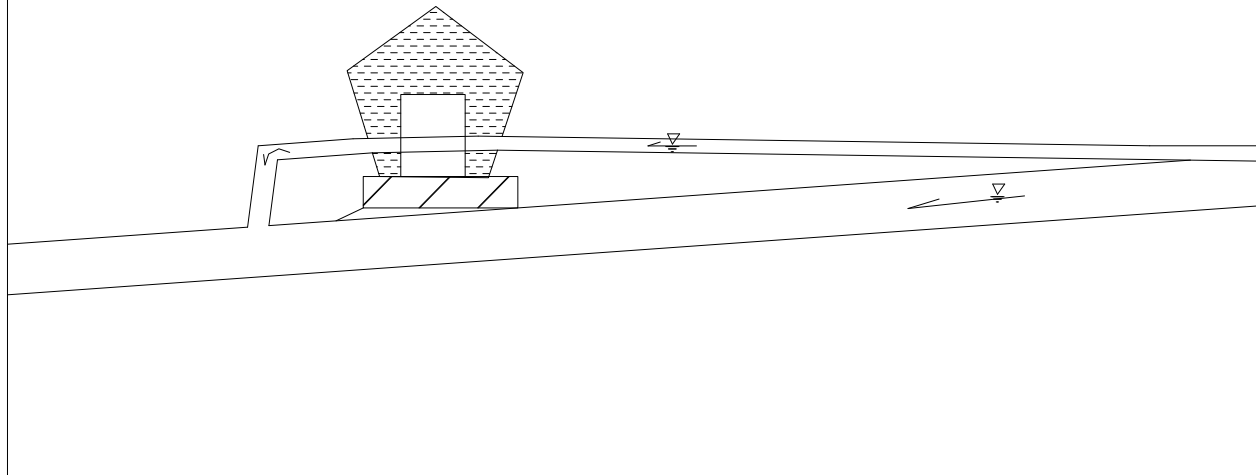


(1156) power generation



(1157) micro hydro power generation

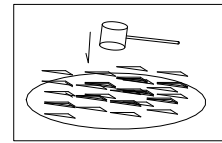
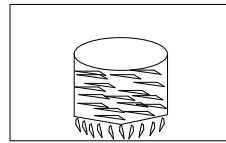
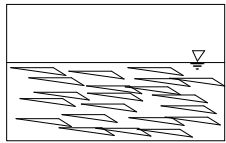
(1157) micro hydro power generation
small hydro power generation



(1158) Japanese traditional paper

(1158) Japanese traditional paper

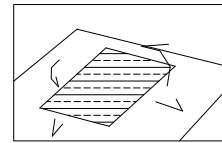
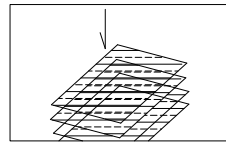
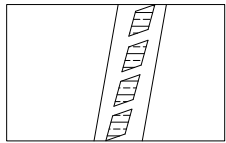
1 bark + water



2 boil

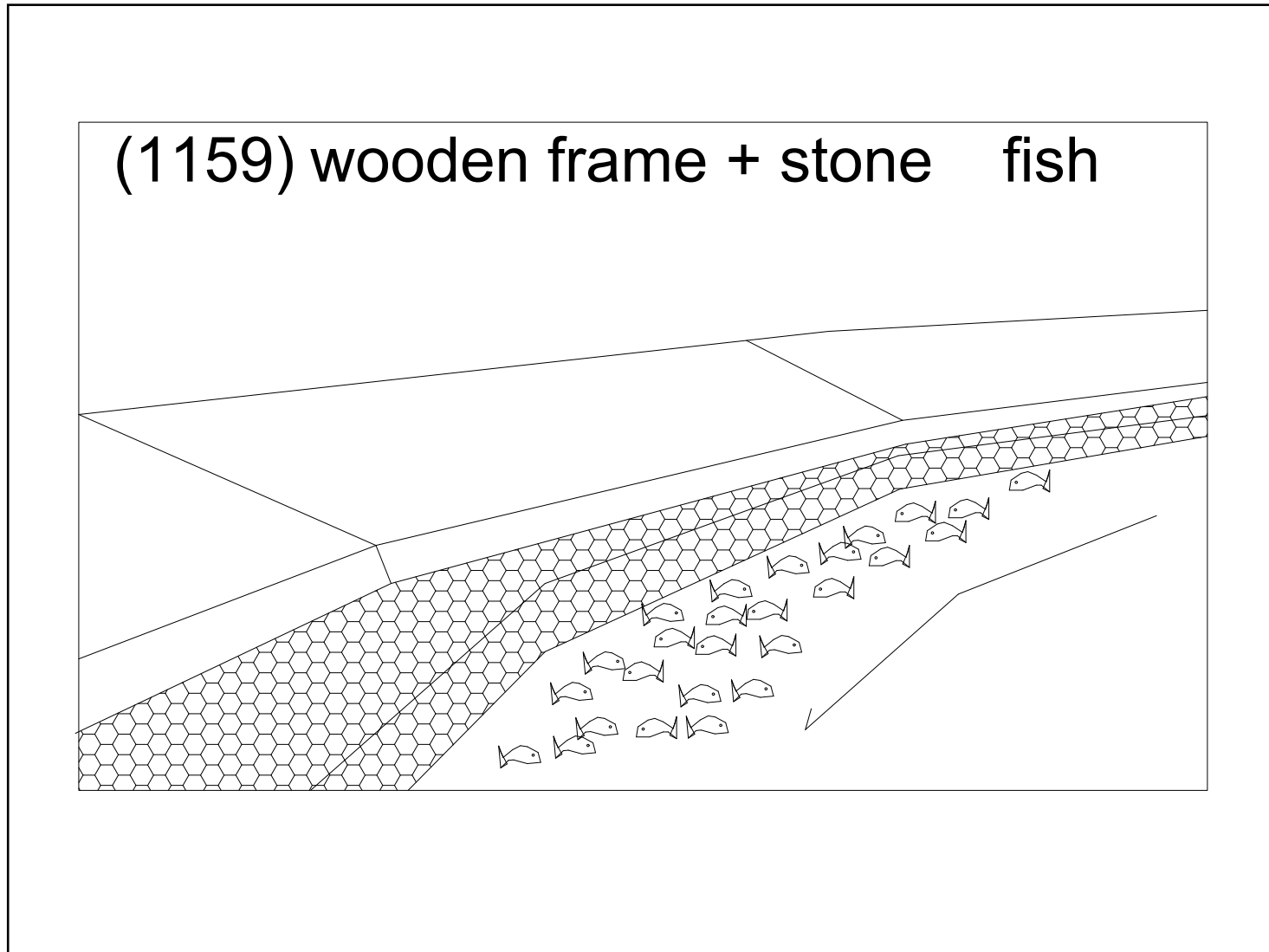
6 dry sunlight

4 scoop + in water

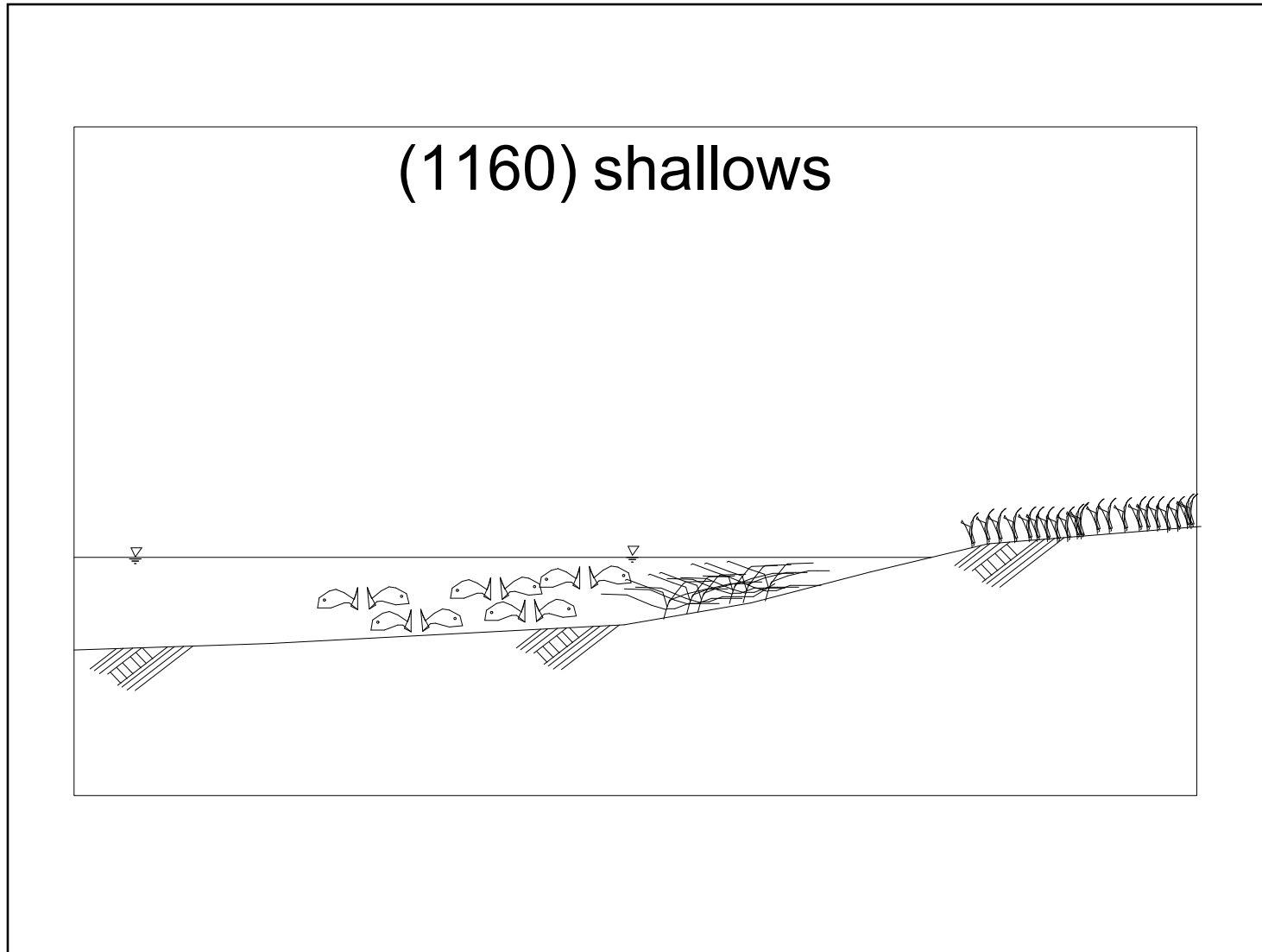


5 pressure

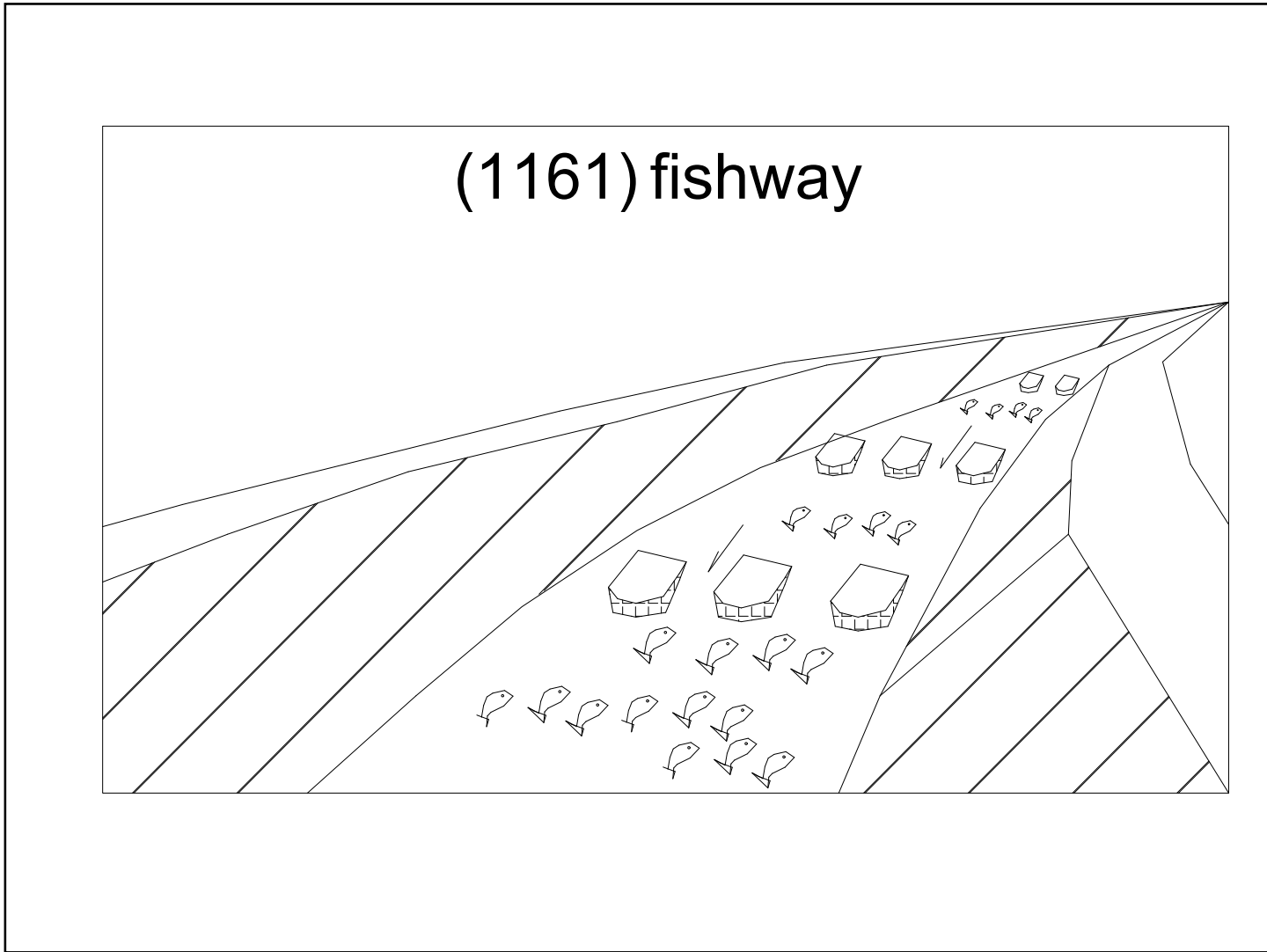
(1159) wooden frame stone fish



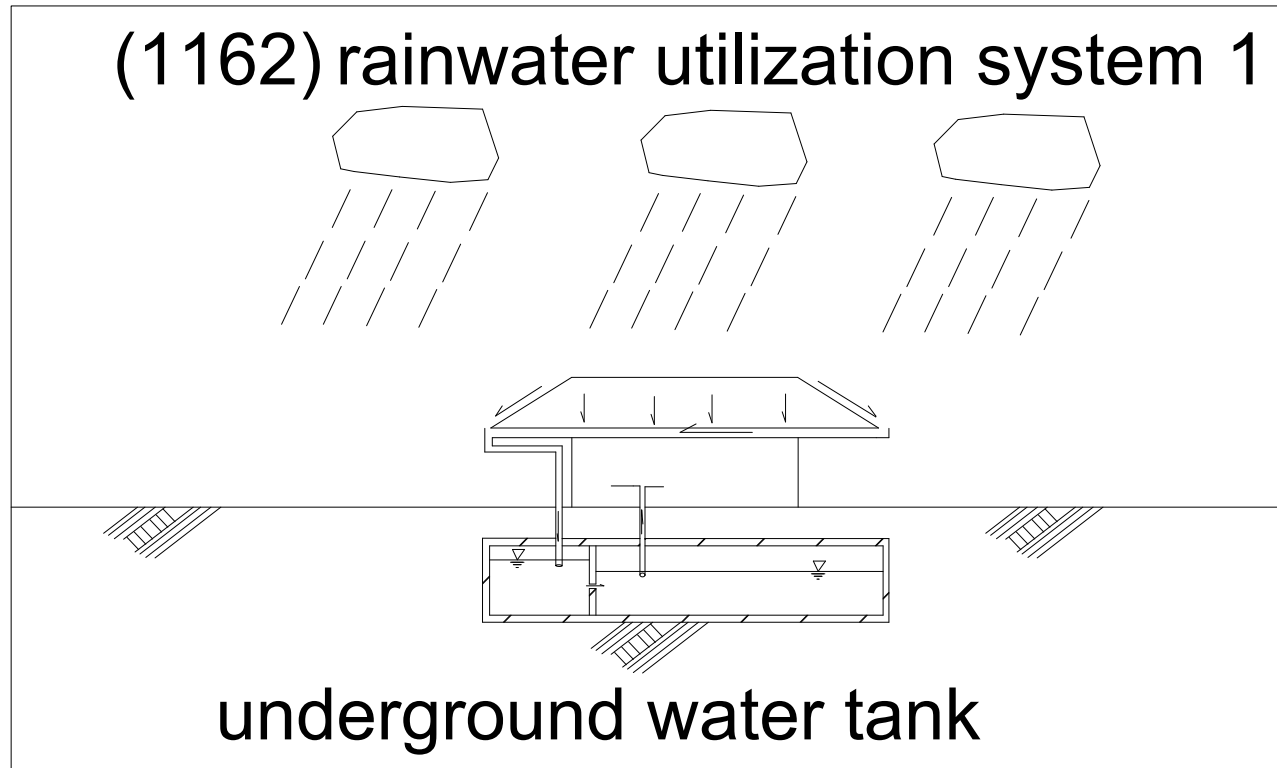
(1160) shallows



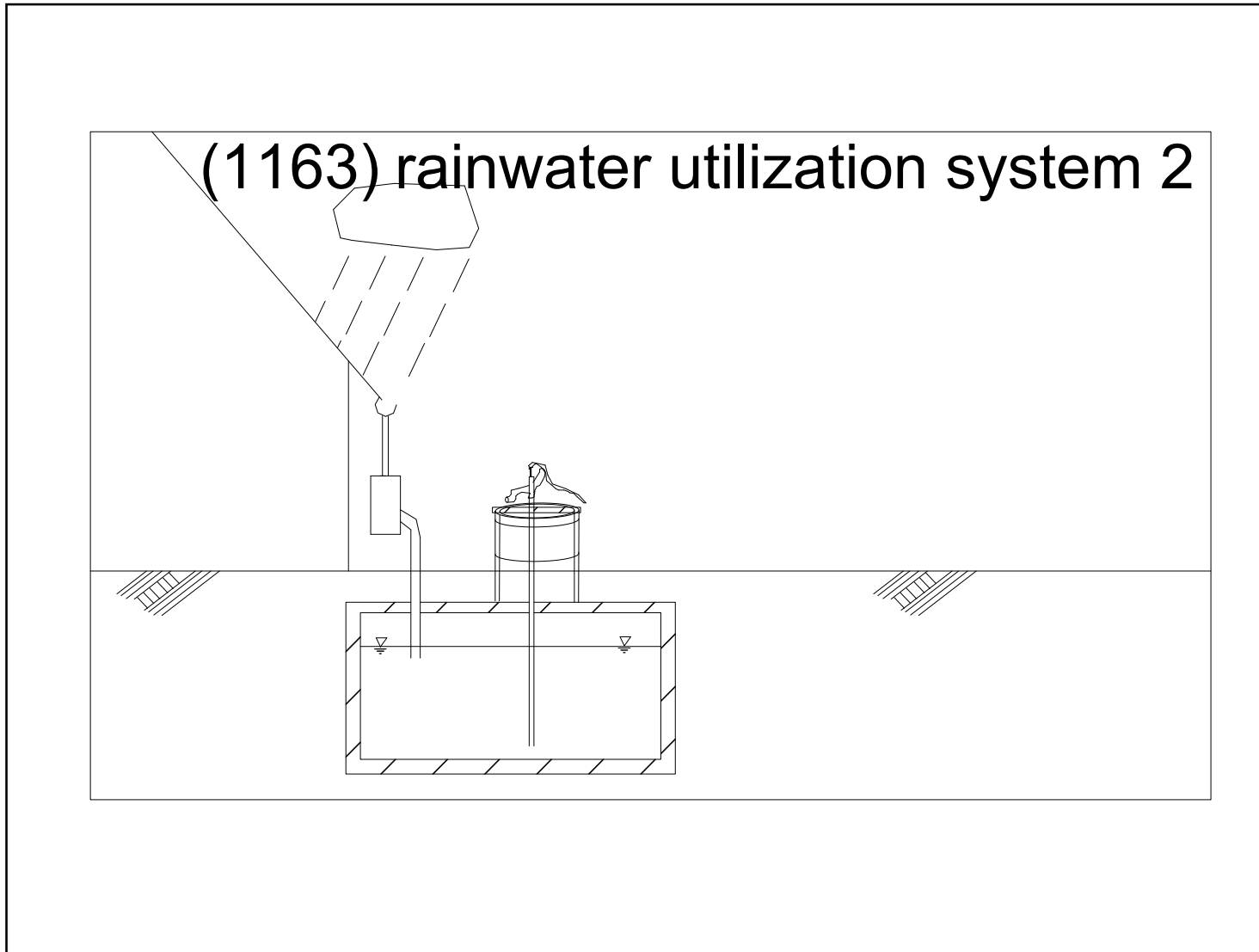
(1161) fish way



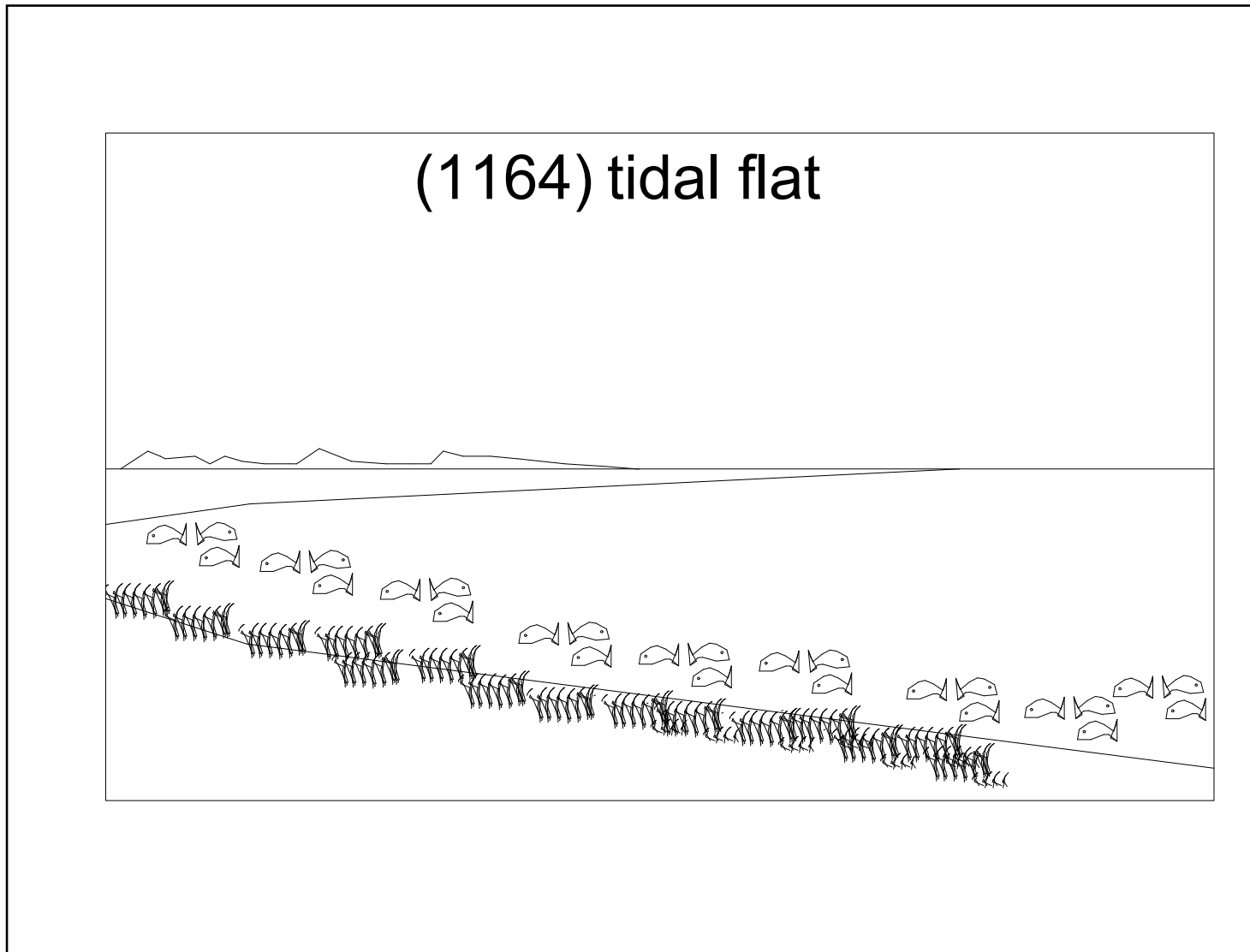
(1162) rainwater utilization system 1



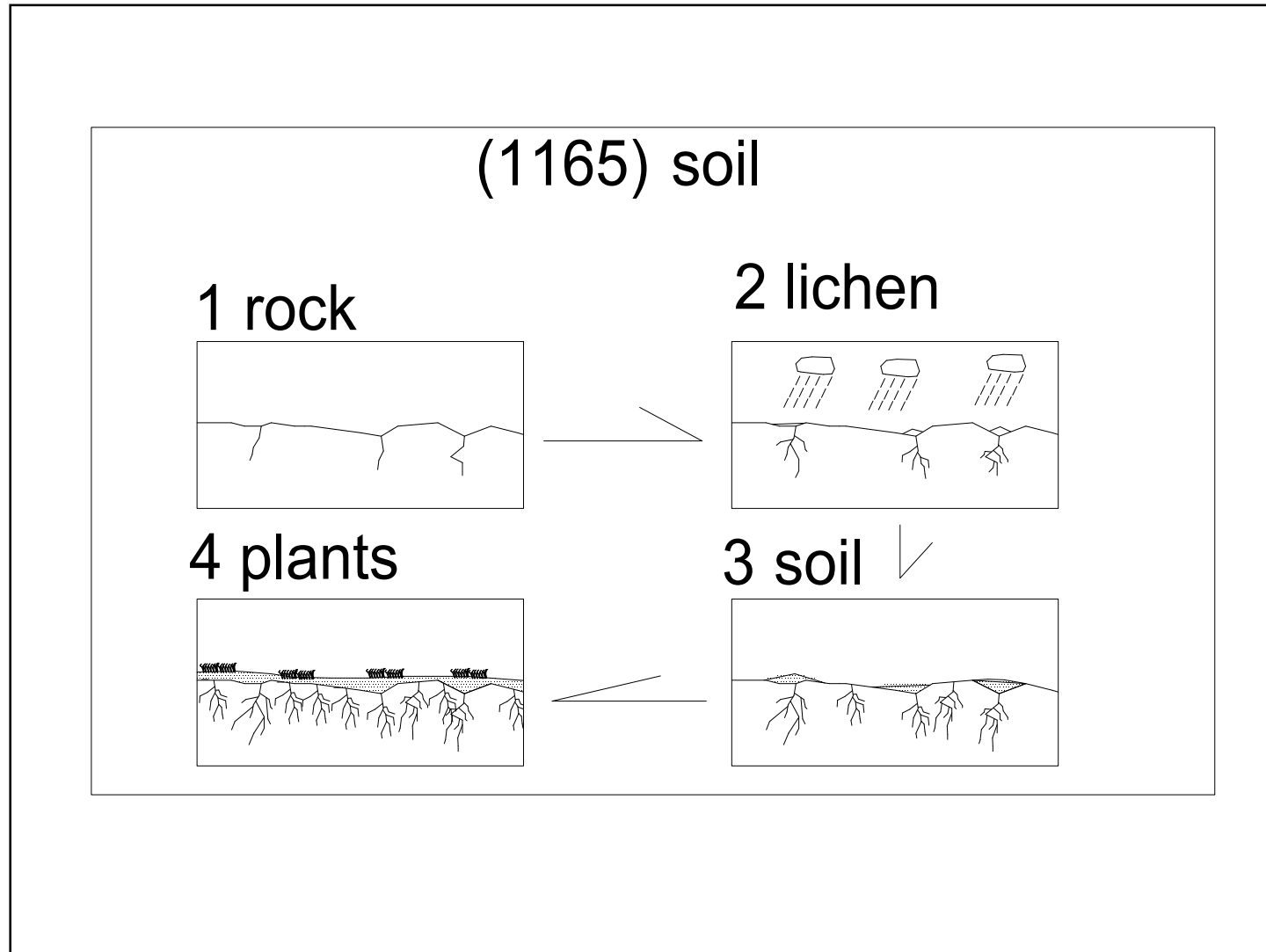
(1163) rainwater utilization system 2



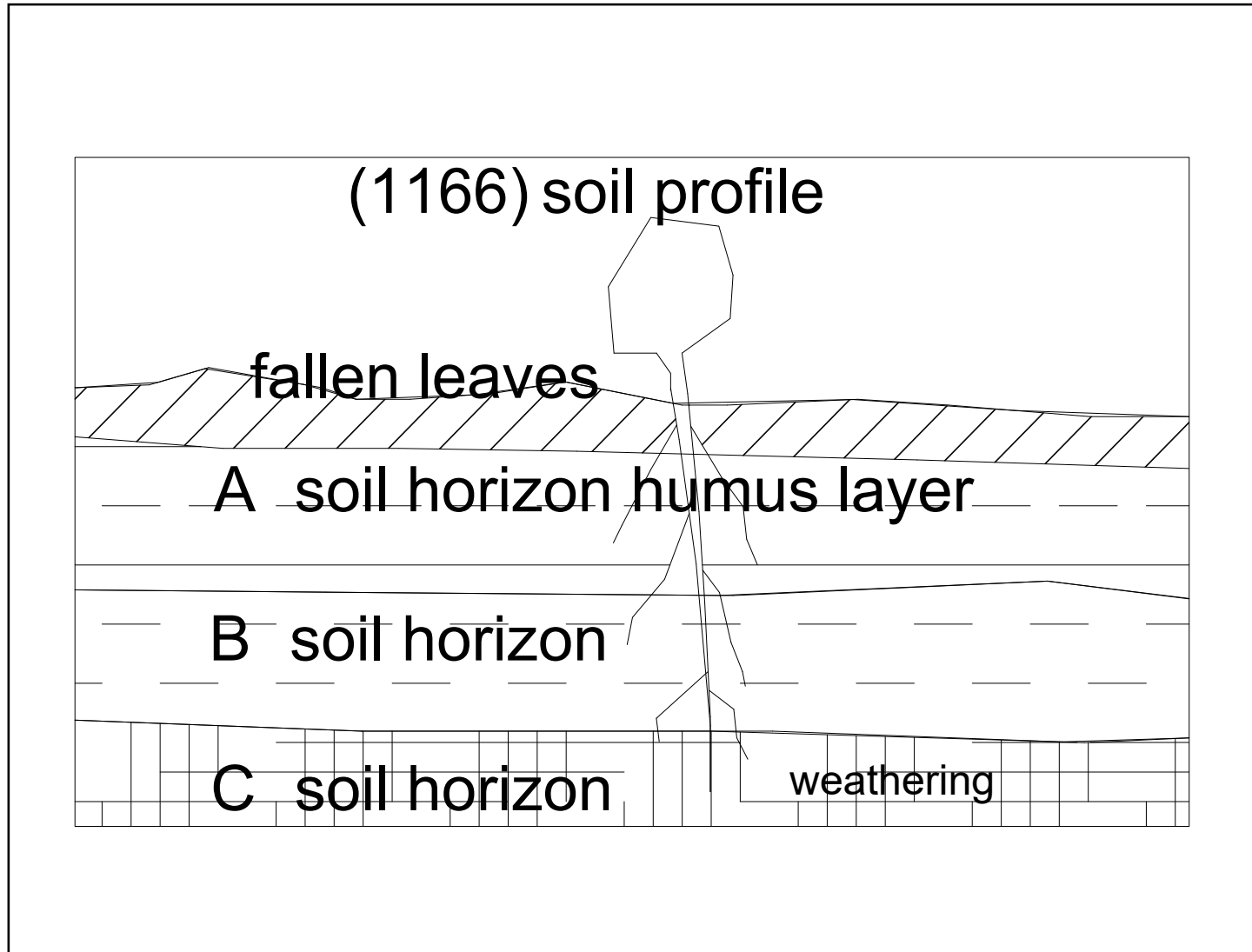
(1164) tidal flat



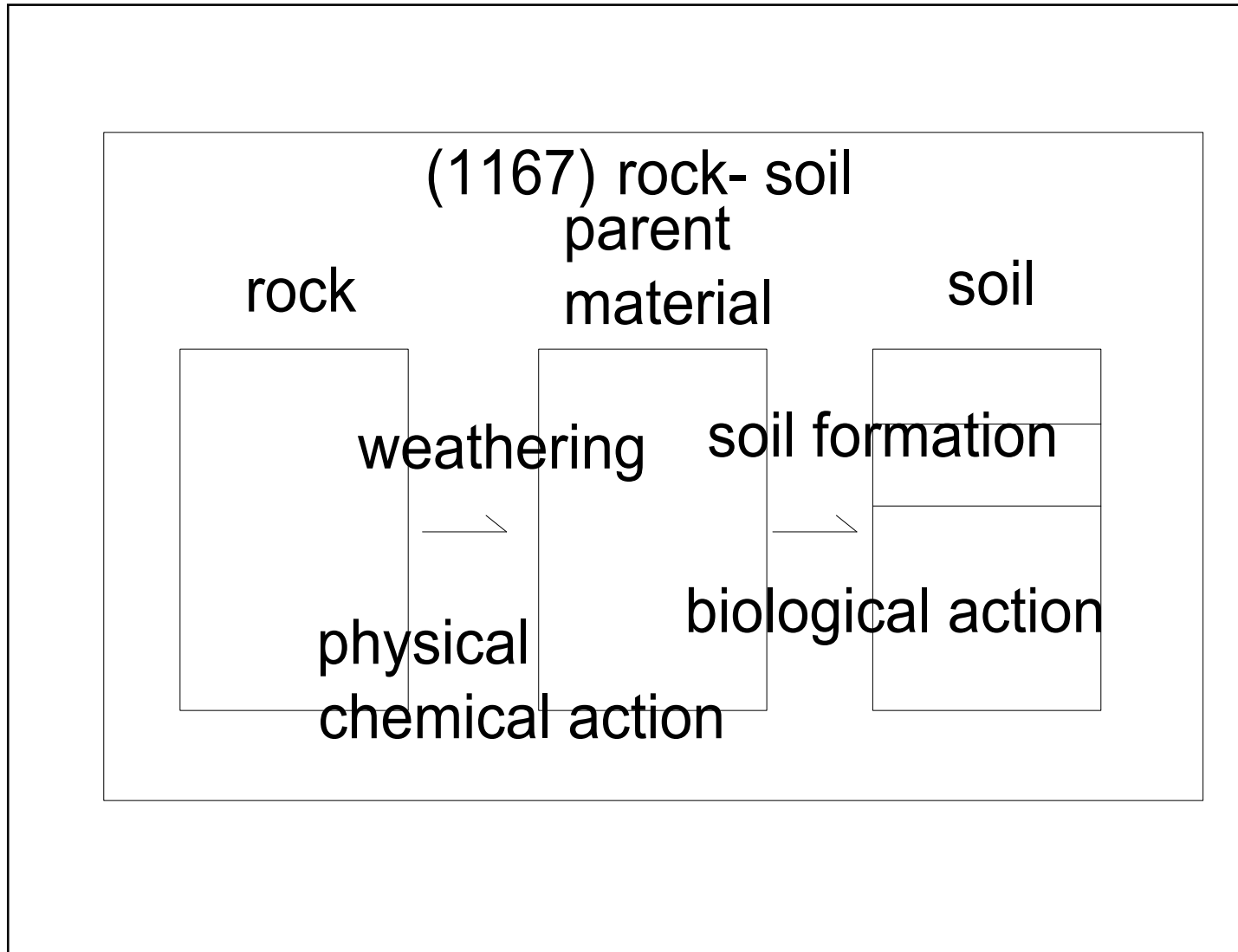
(1165) soil



(1166) soil profile



(1167) rock- soil



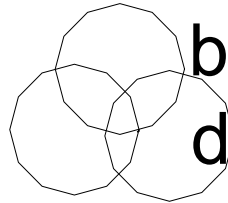
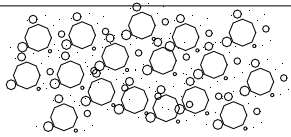
(1168) soil classification system

(1168) soil classification system

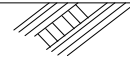
	grain size
rock	over 2mm
coarse sand	0.2~2mm
fine sand	0.02~0.2mm
silt	0.002~0.02mm
clay	below 0.002mm

(1169) aggregated soil

(1169) aggregated soil



breathable
drainage
water retention



(1170) soil structure

(1170) soil structure

air

water

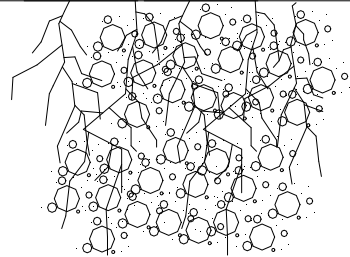
clay

humus

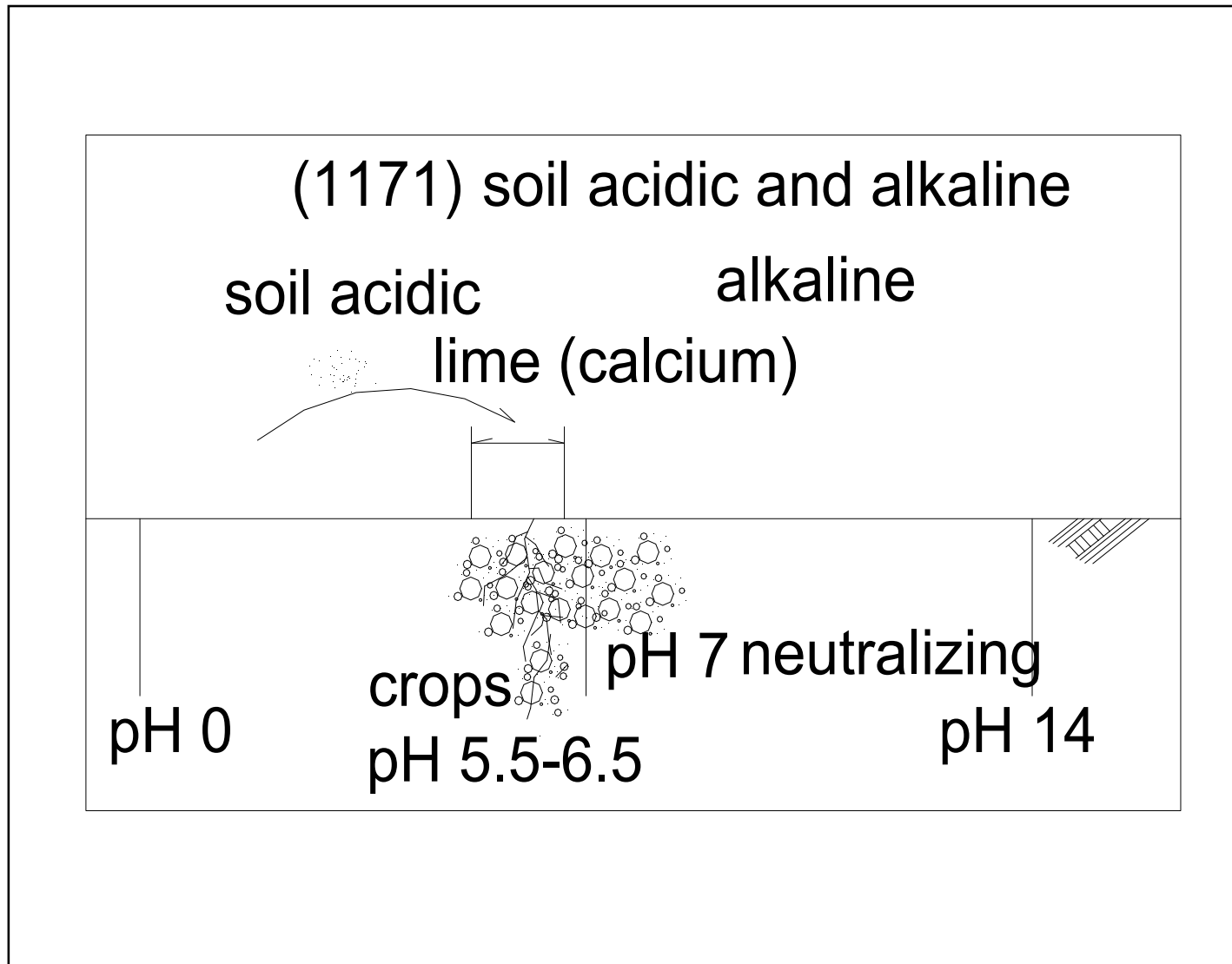
Microbial

silt

coarse sand

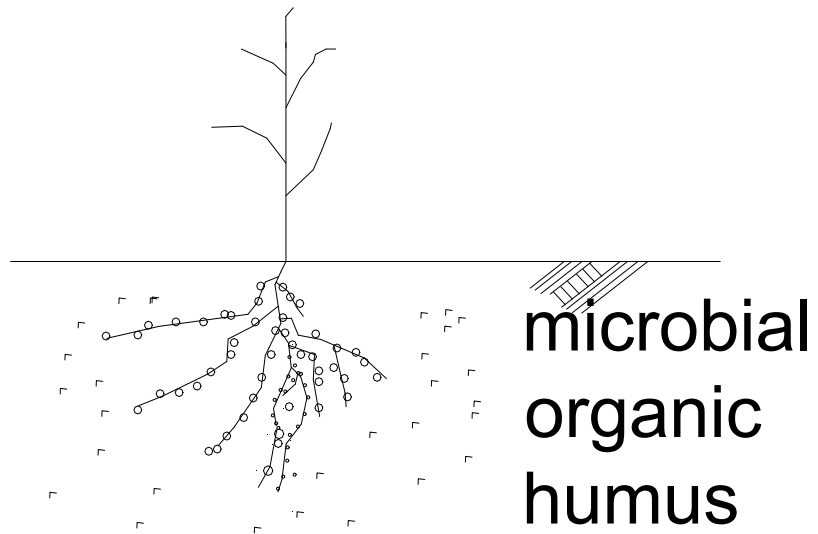


(1171) soil acidic and alkaline



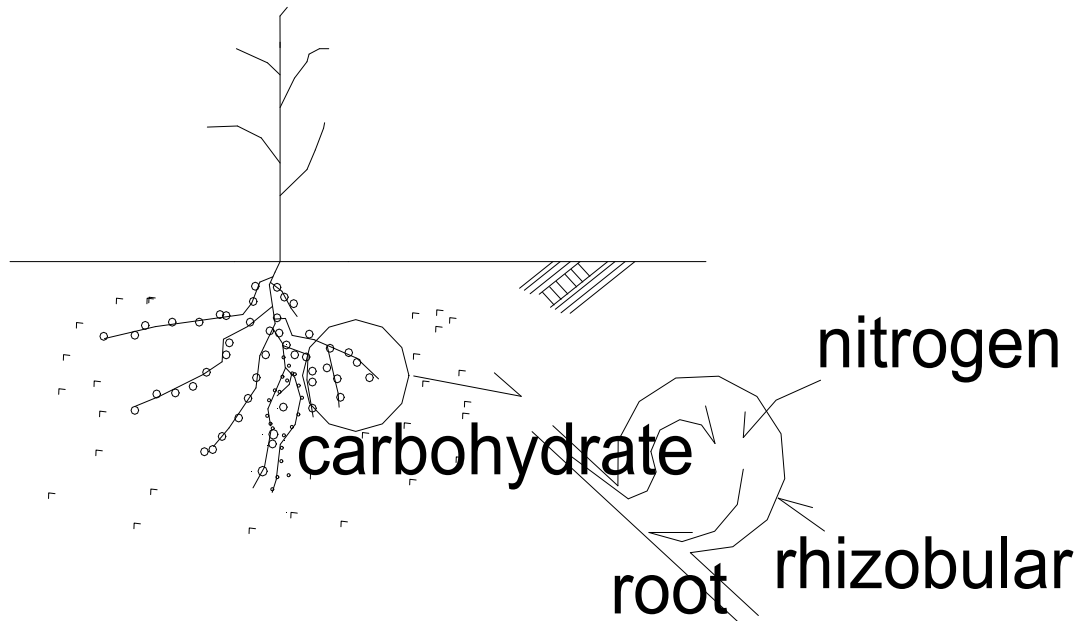
(1172) microbial

(1172) microbial



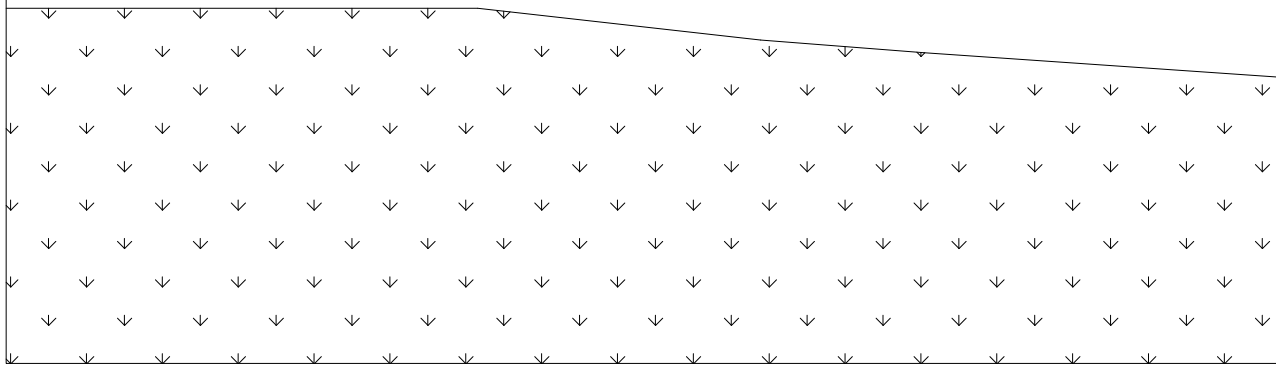
(1173) rhizobular

(1173) rhizobular (root nodule bacteria)



(1174) leguminous plant

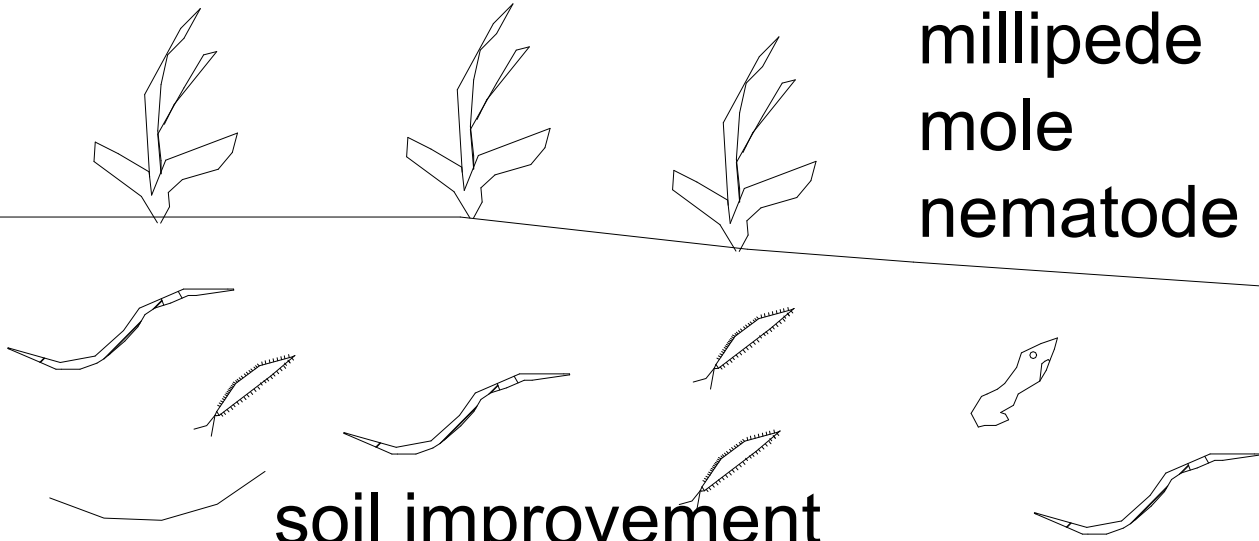
(1174) leguminous plant
fertilizer
astragalus sinicus



(1175) soil animal

(1175) soil animal

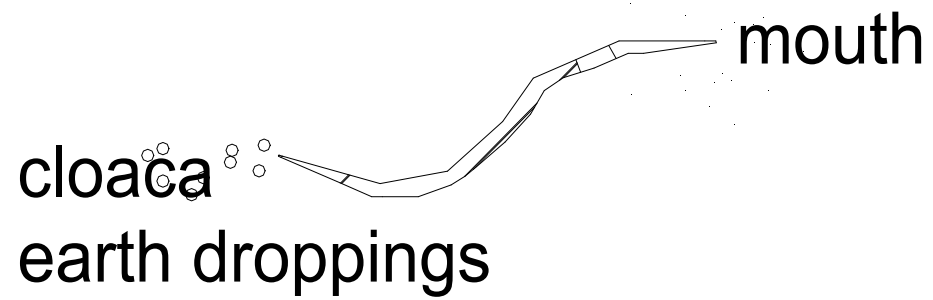
earthworm
millipede
mole
nematode



soil improvement

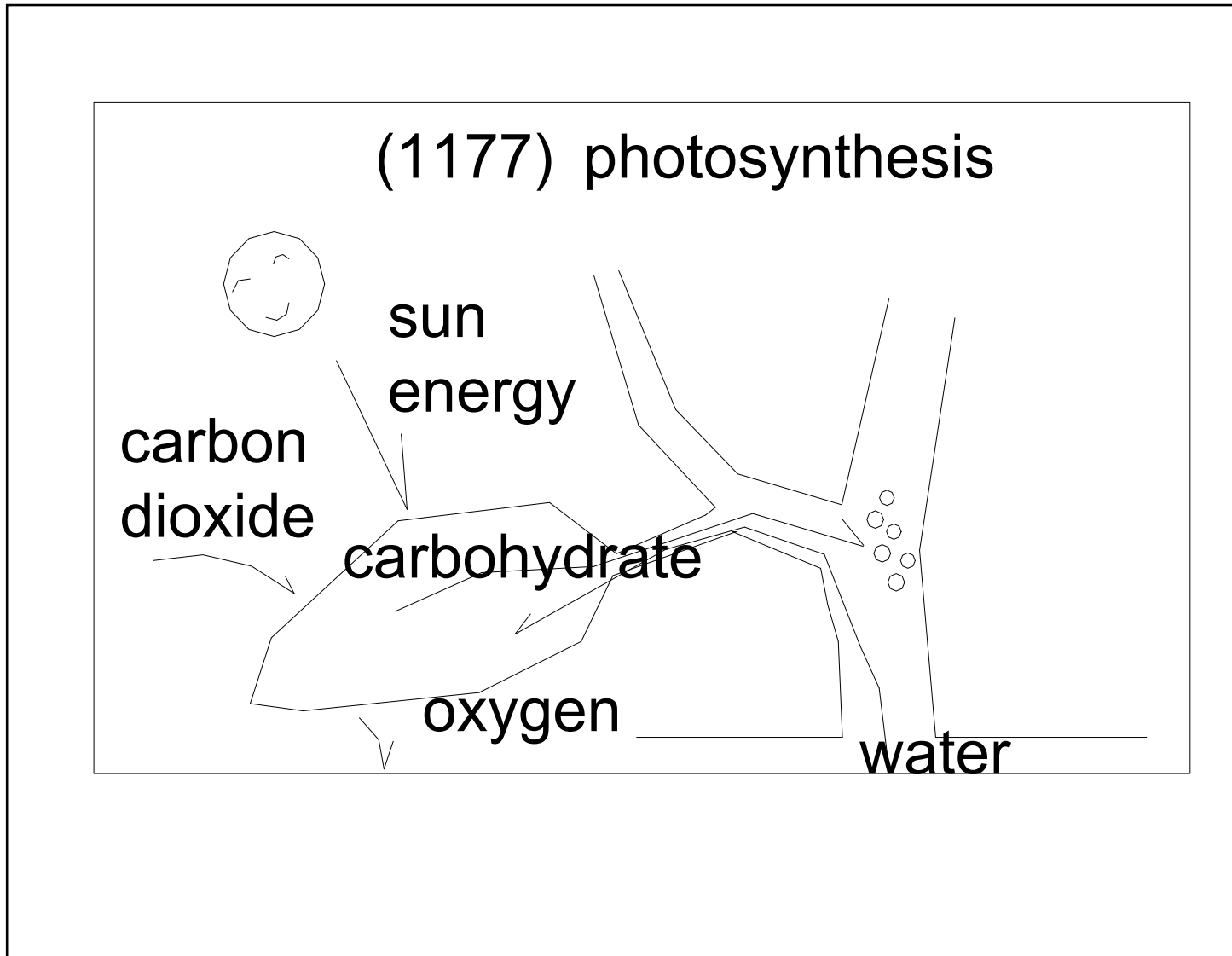
(1176) earthworm

(1176) earthworm

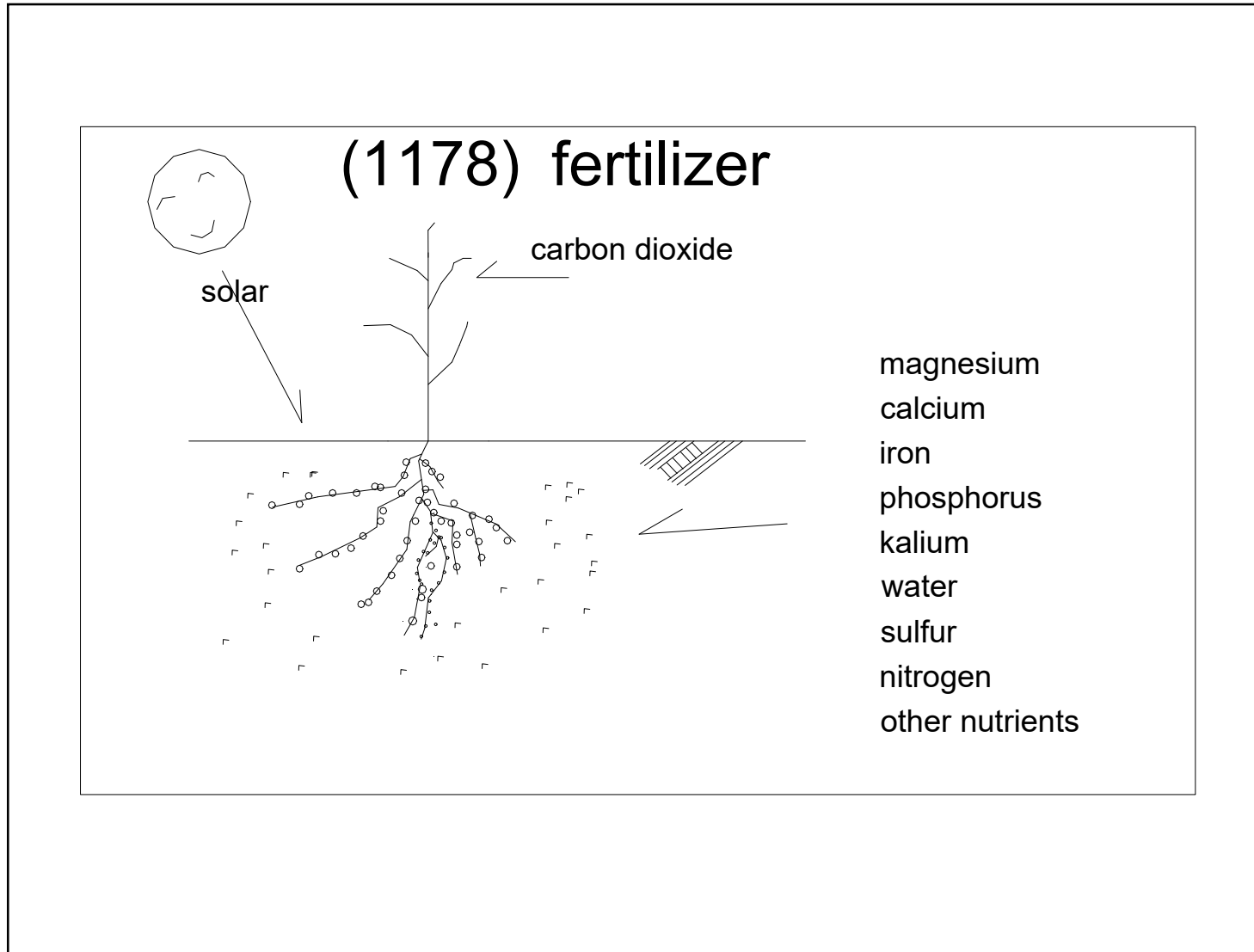


soil improvement

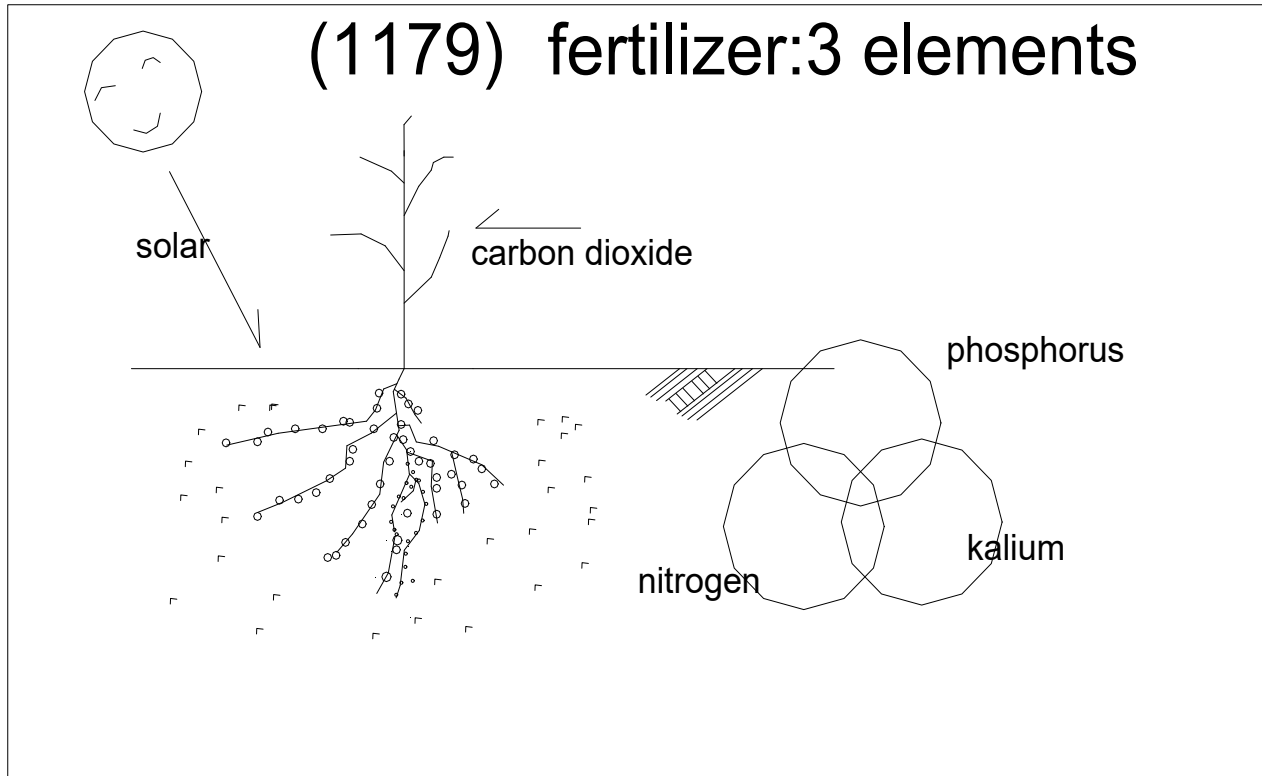
(1177) photosynthesis



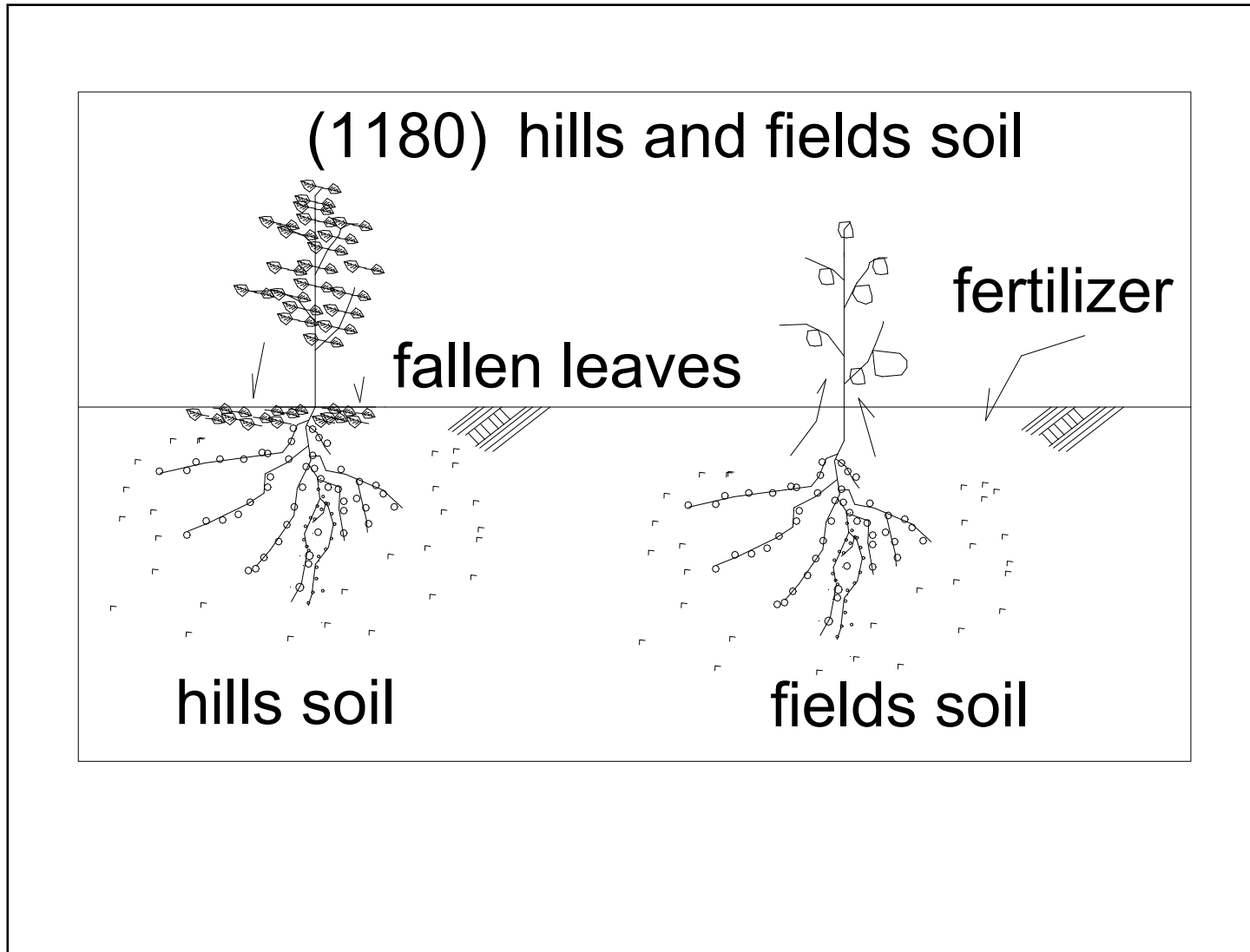
(1178) fertilizer



(1179) fertilizer:3 elements

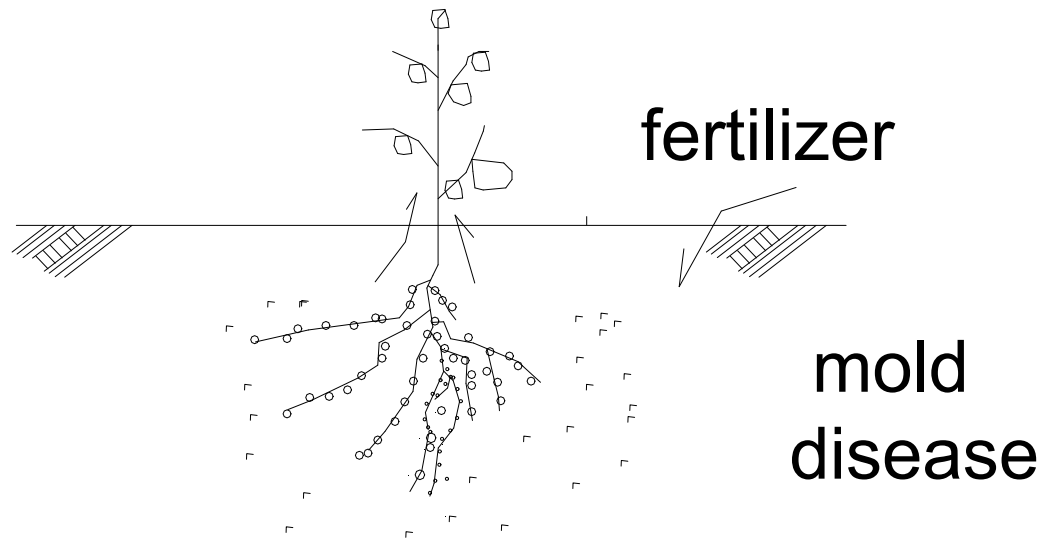


(1180) hills and fields soil

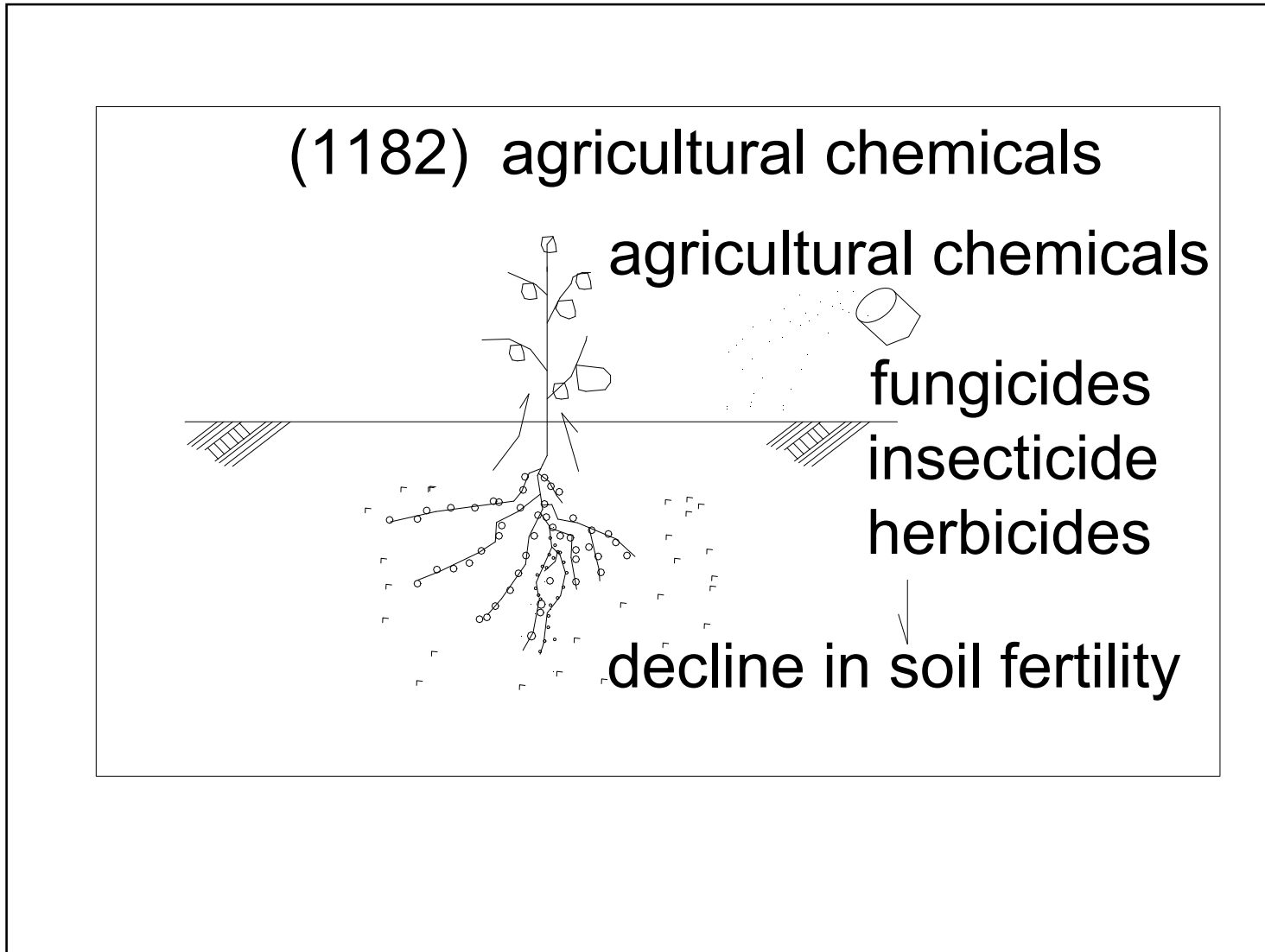


(1181) repeated cultivation damage

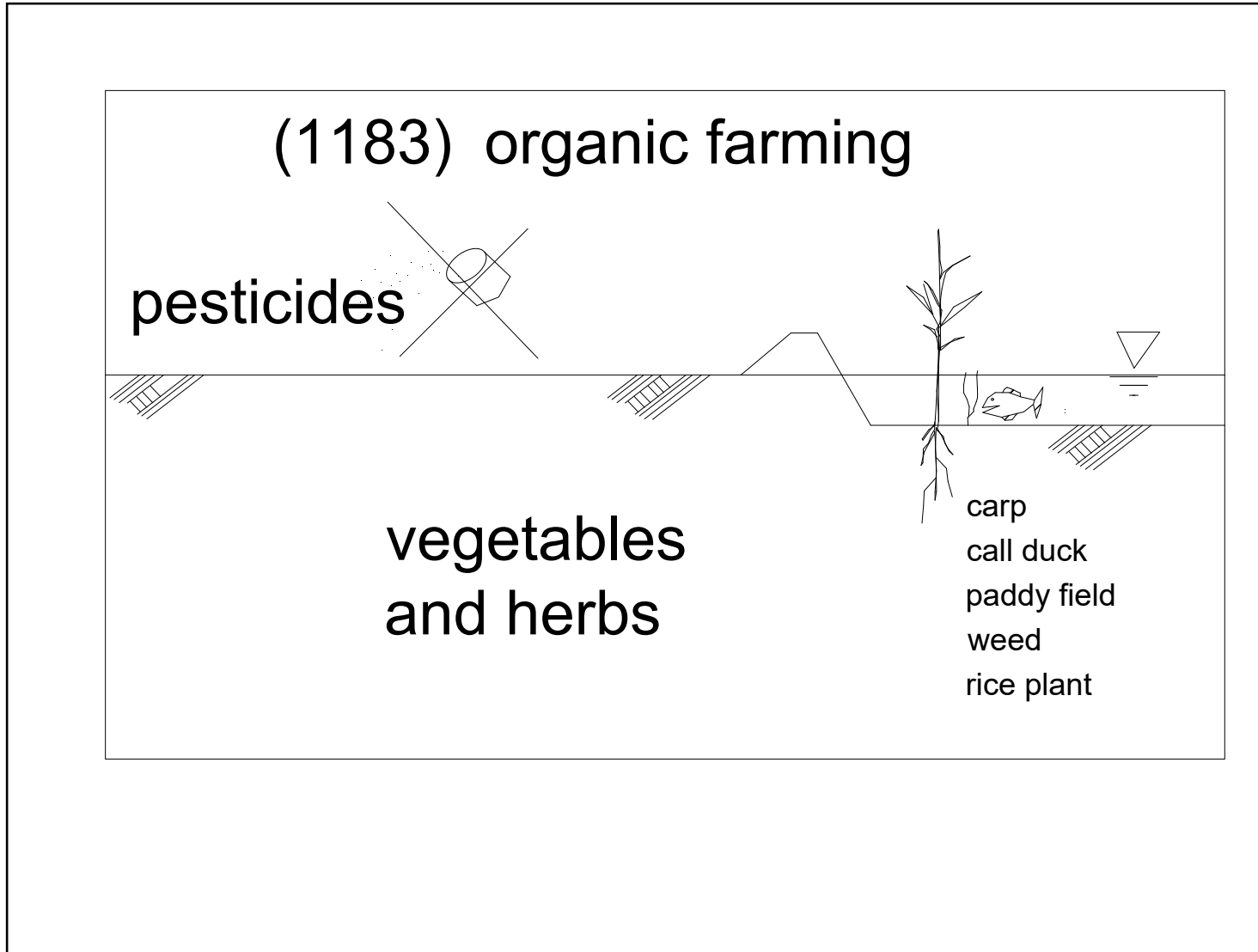
(1181) repeated cultivation damage



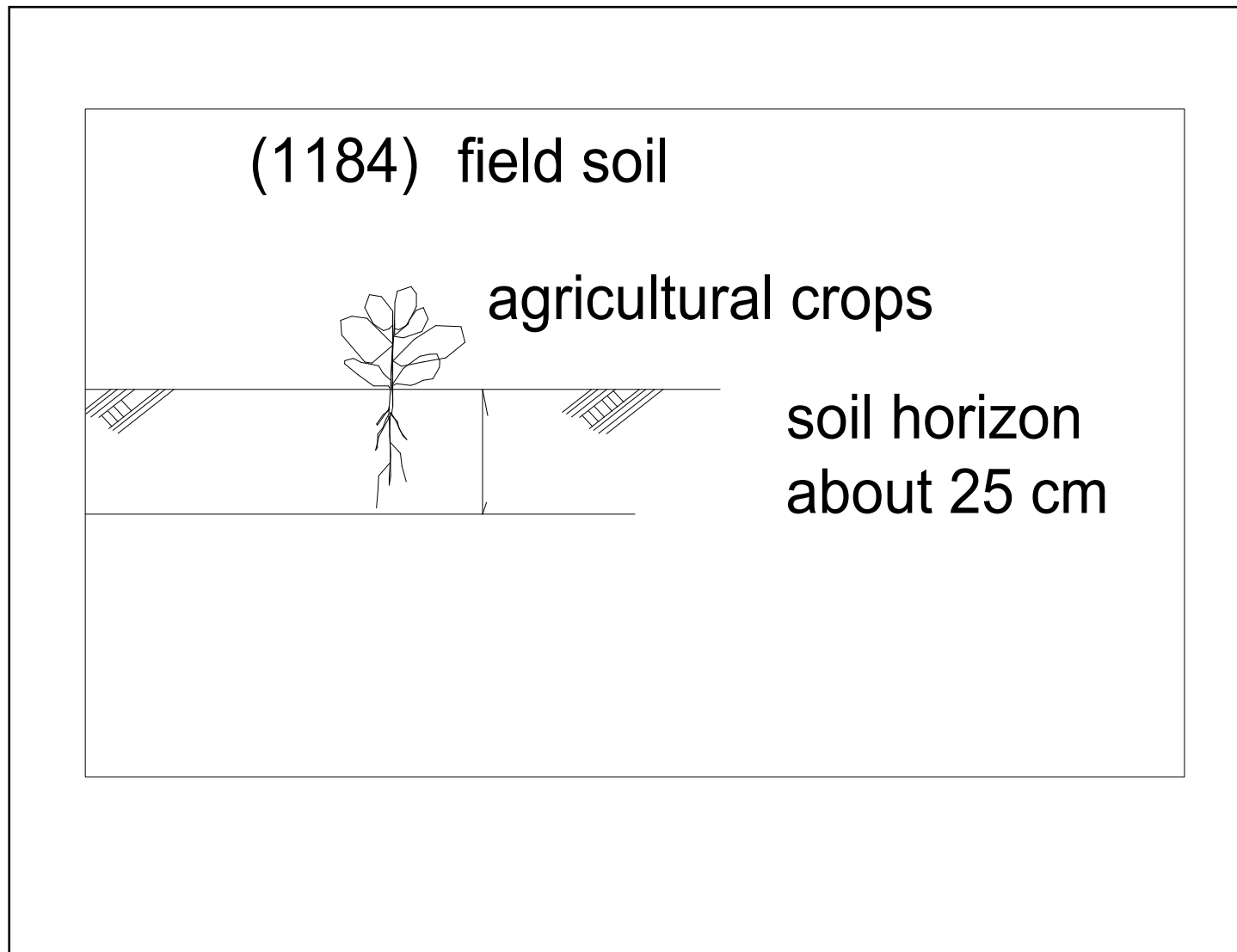
(1182) agricultural chemicals



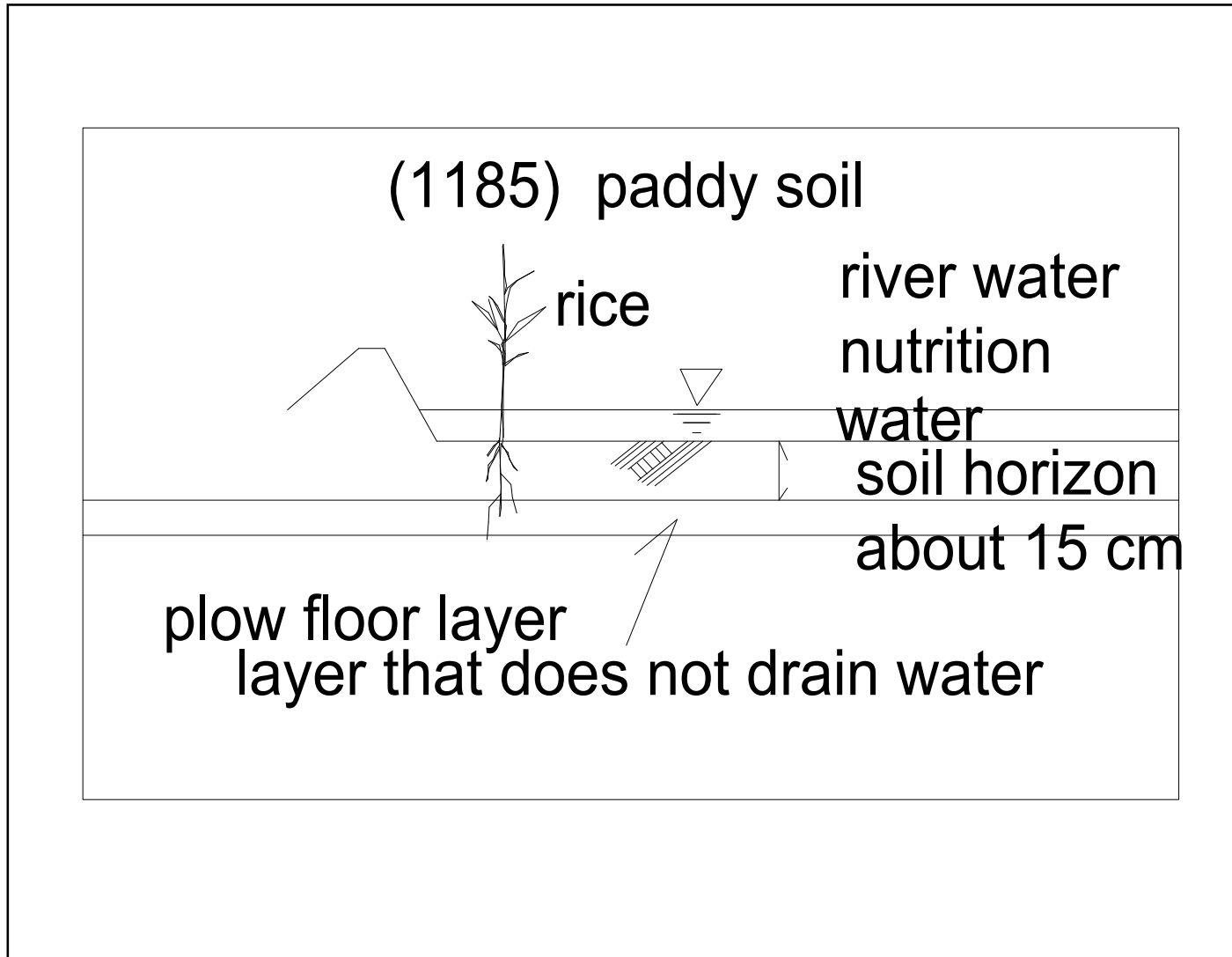
(1183) organic farming



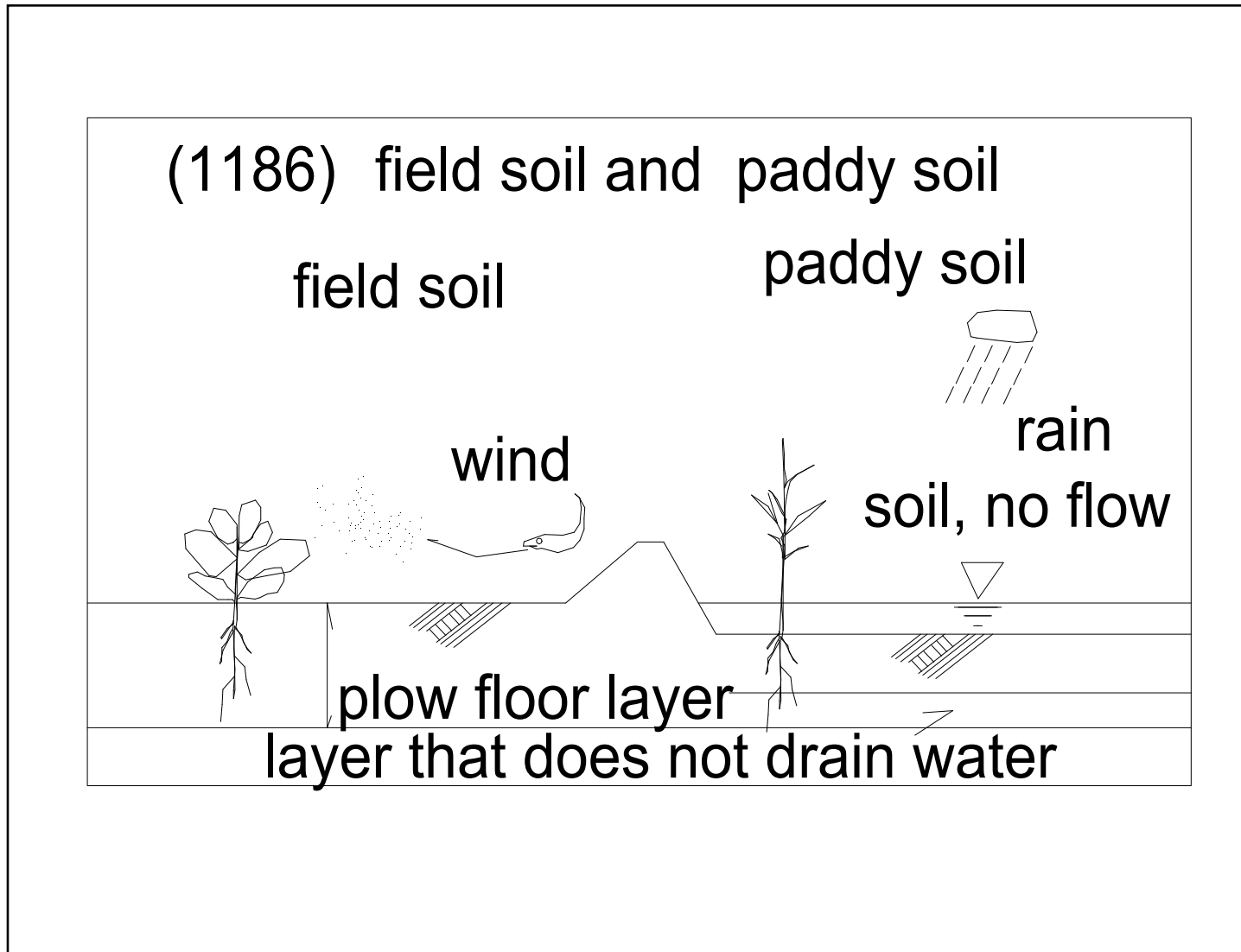
(1184) field soil



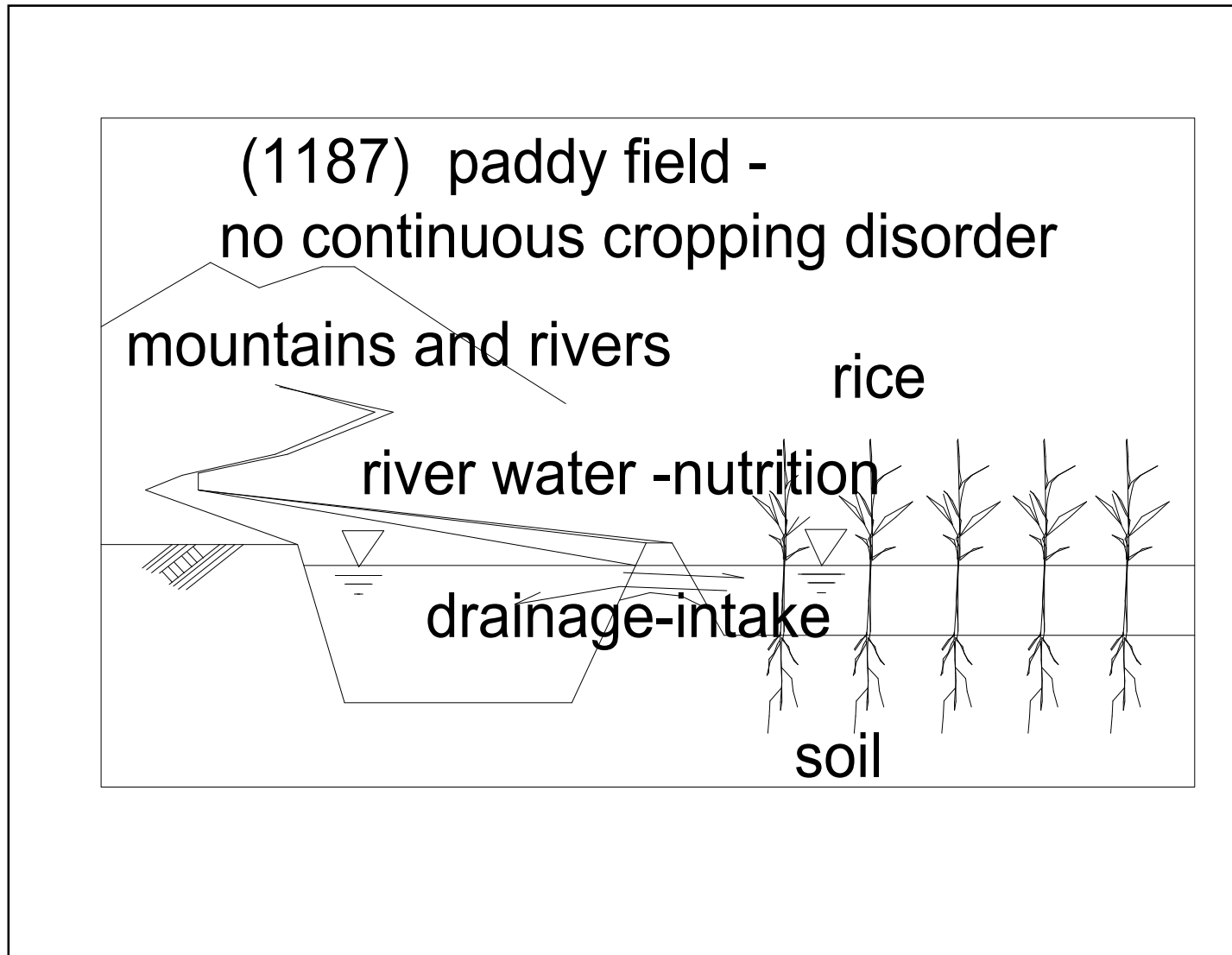
(1185) paddy soil



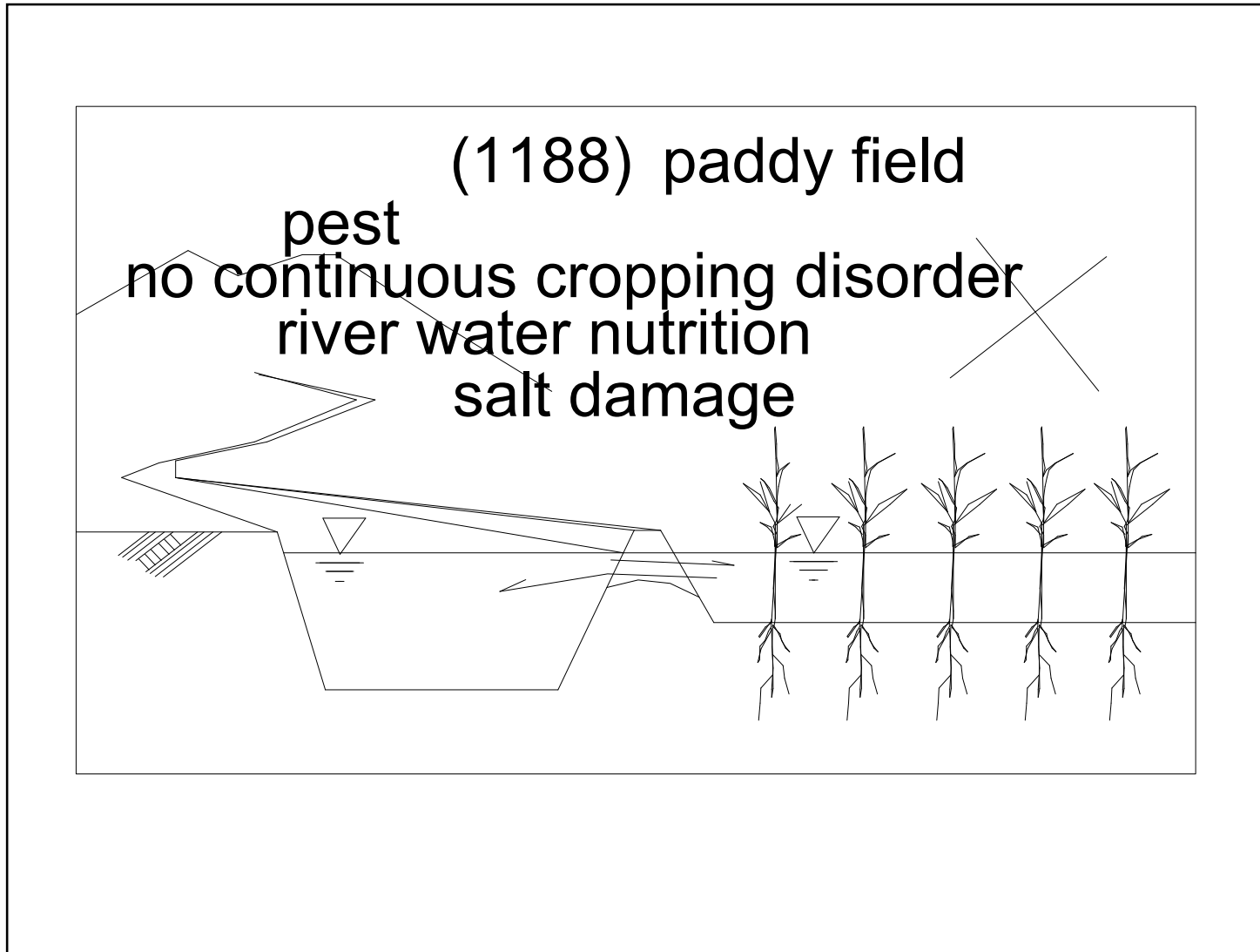
(1186) field soil and paddy soil



(1187) paddy field -no continuous cropping disorder

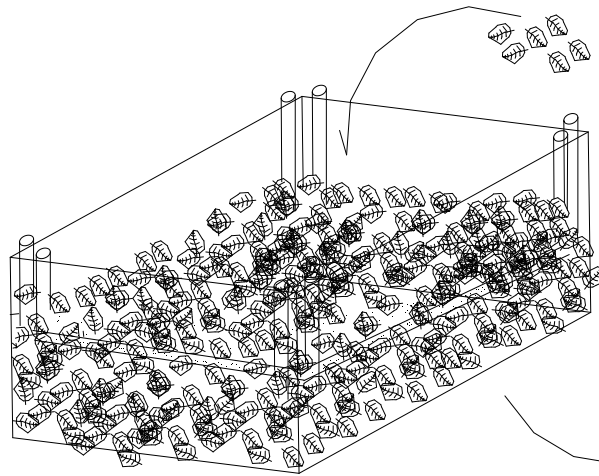


(1188) paddy field



(1189) organic fertilizer

(1189) organic fertilizer

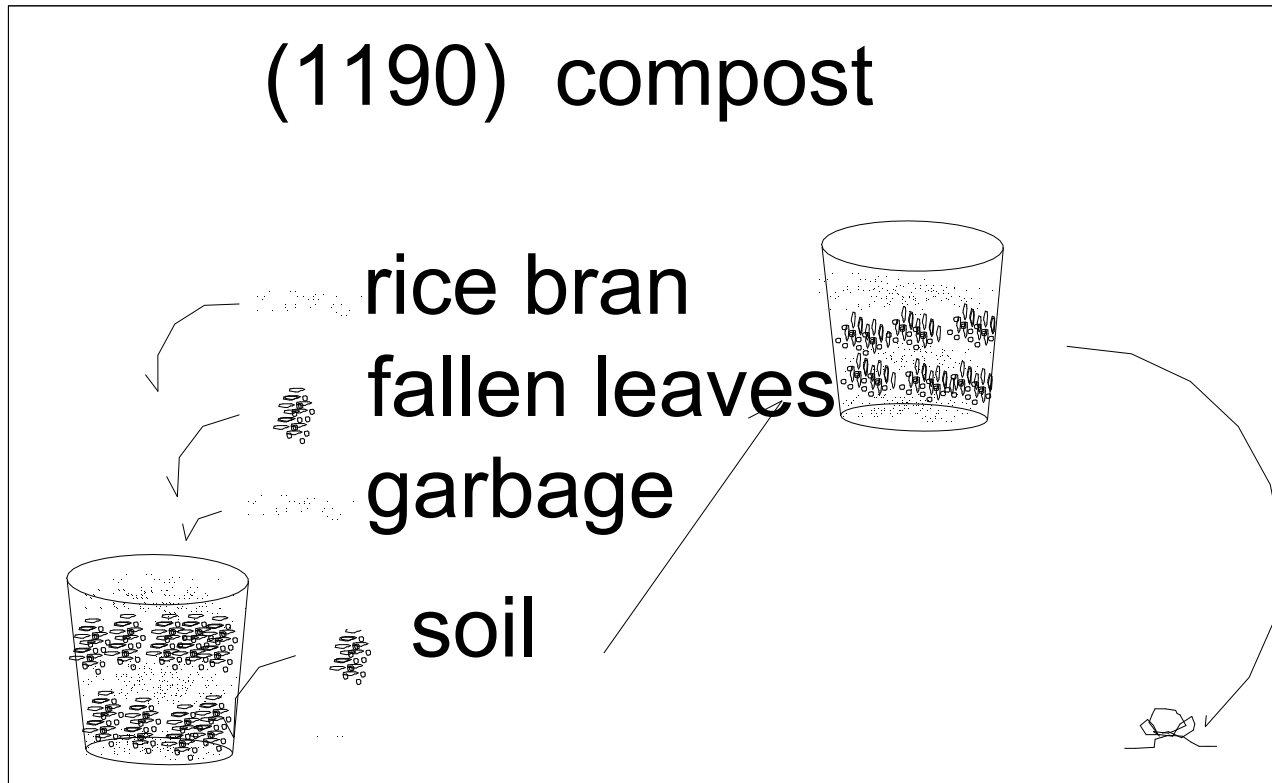


fallen leaves
animal manure
-droppings
rice bran

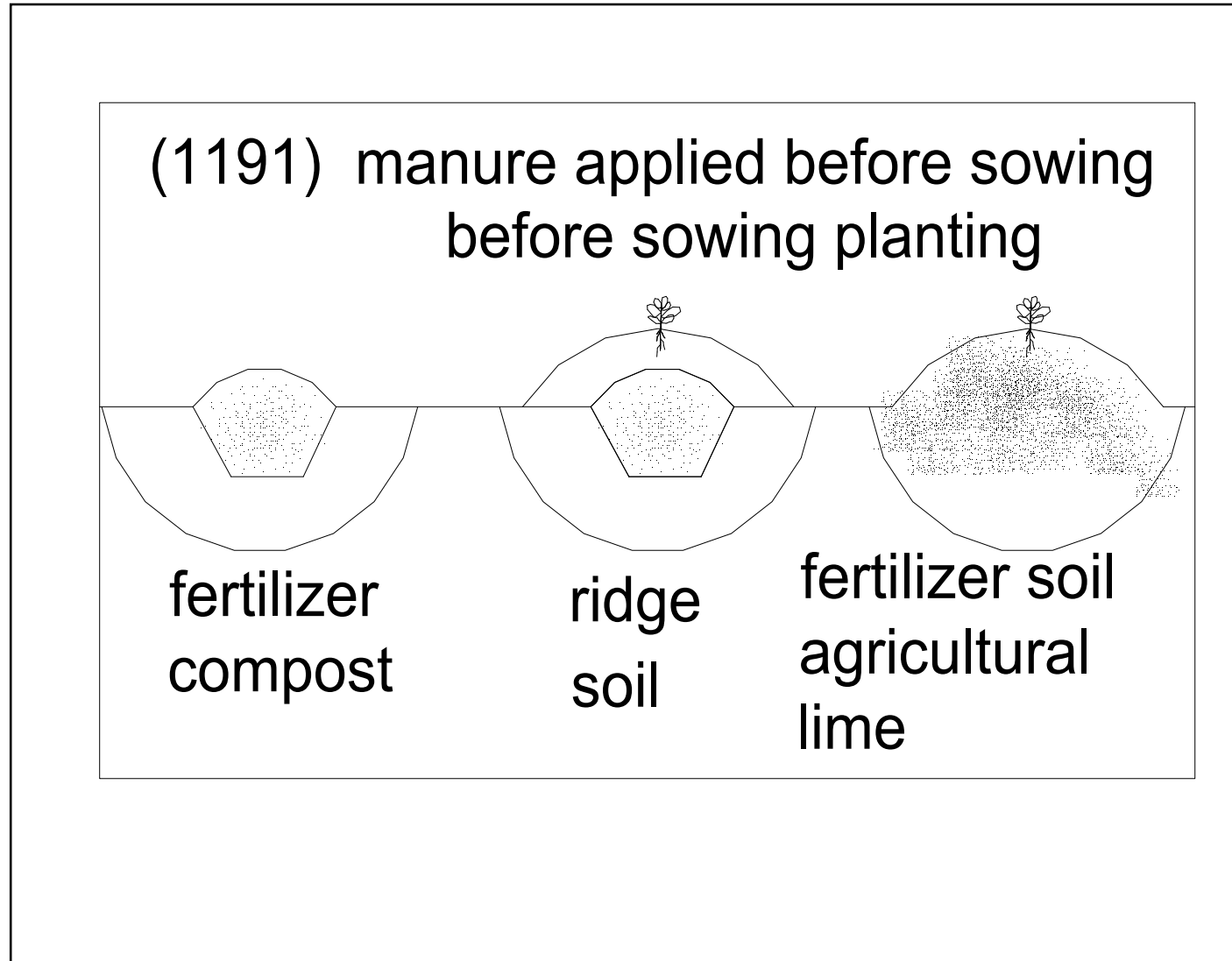
keeping soil in good condition

(1190) compost

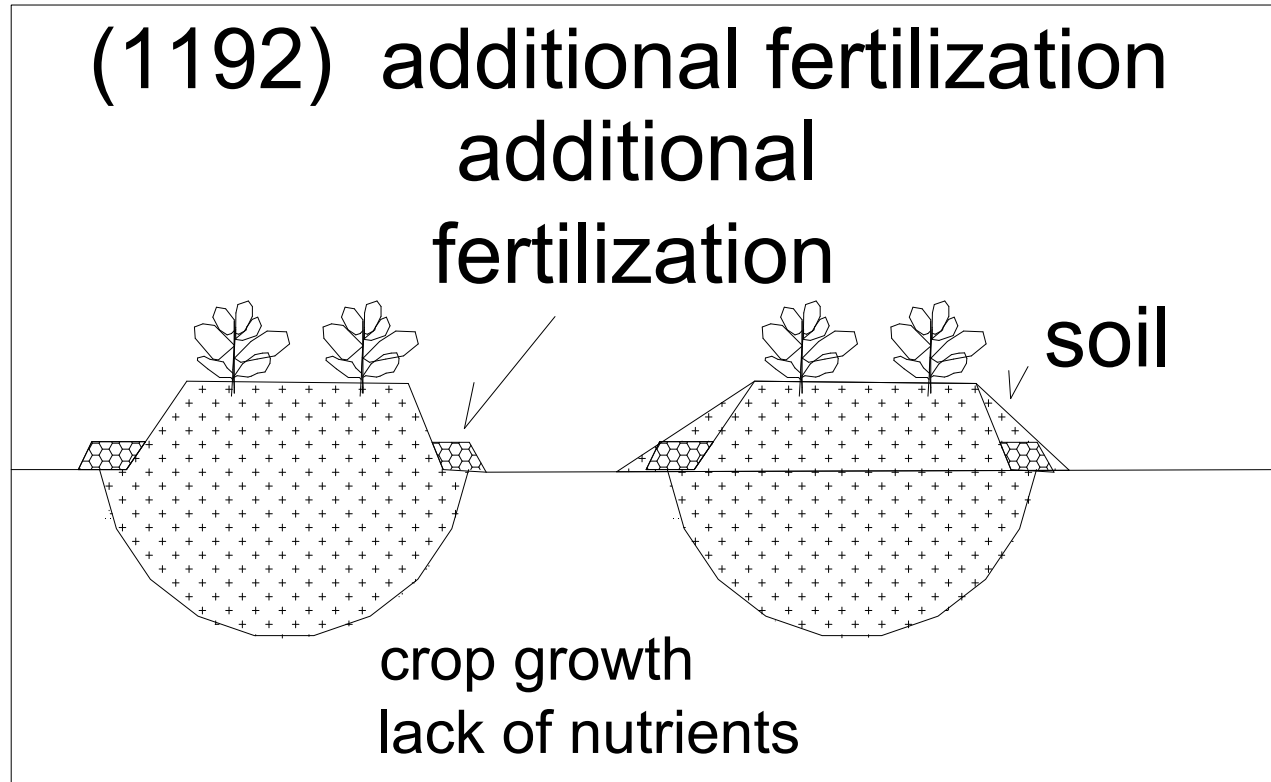
(1190) compost



(1191) manure applied before sowing before sowing planting

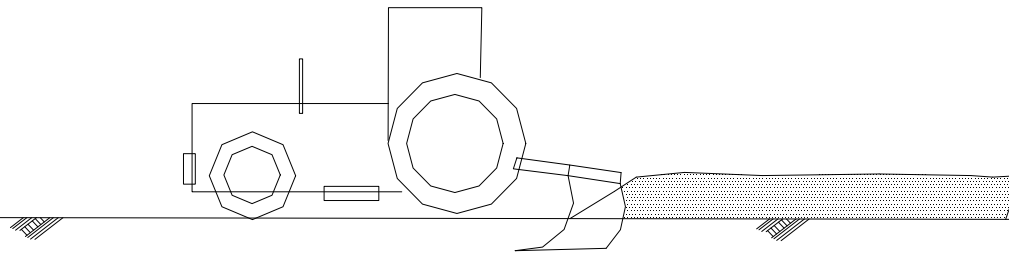


(1192) additional fertilization



(1193) plow a field or the soil

(1193) plow a field or the soil



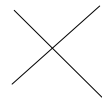
soil aeration

drainage

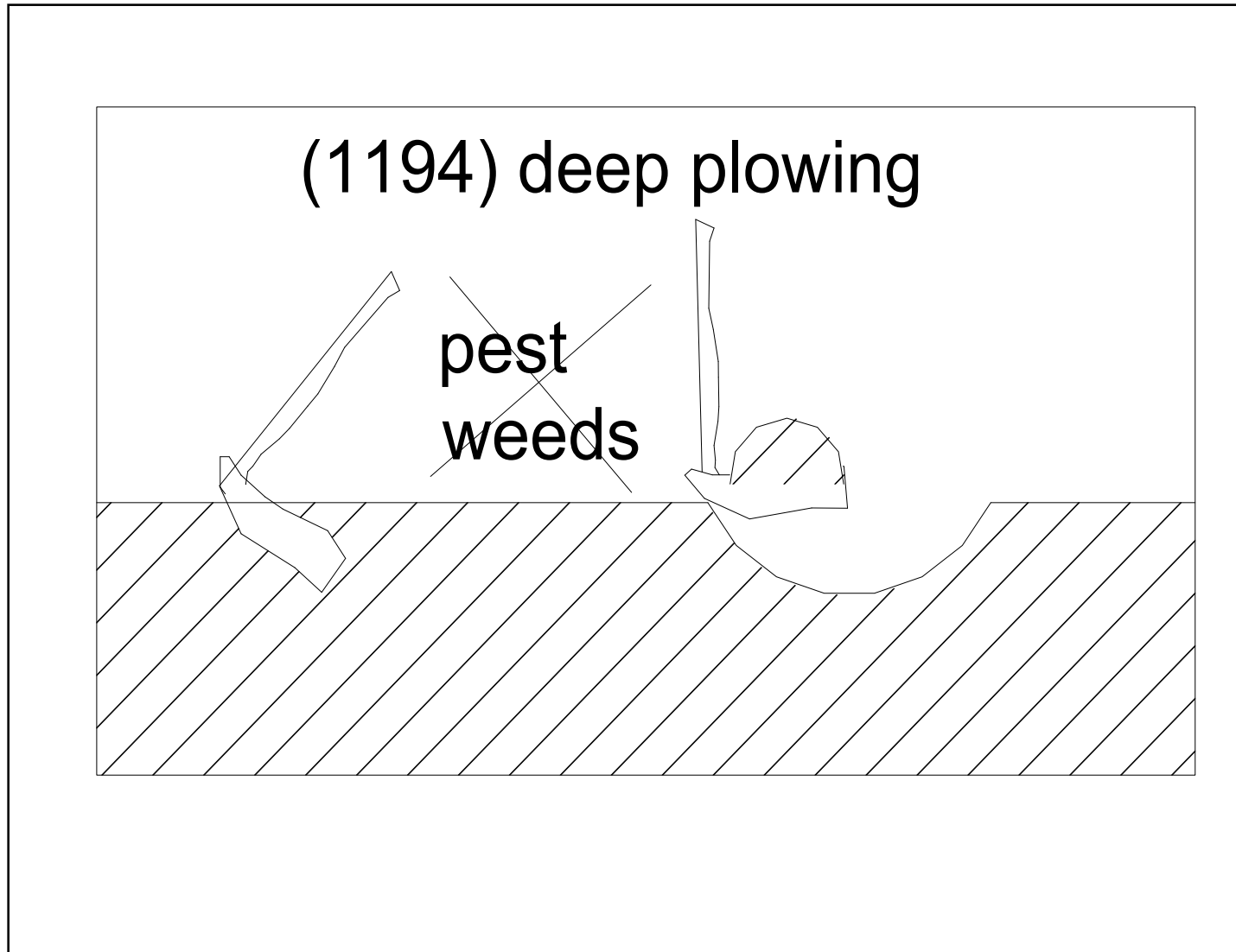
nutrition-deviation, inclination-improvement

pests weeds

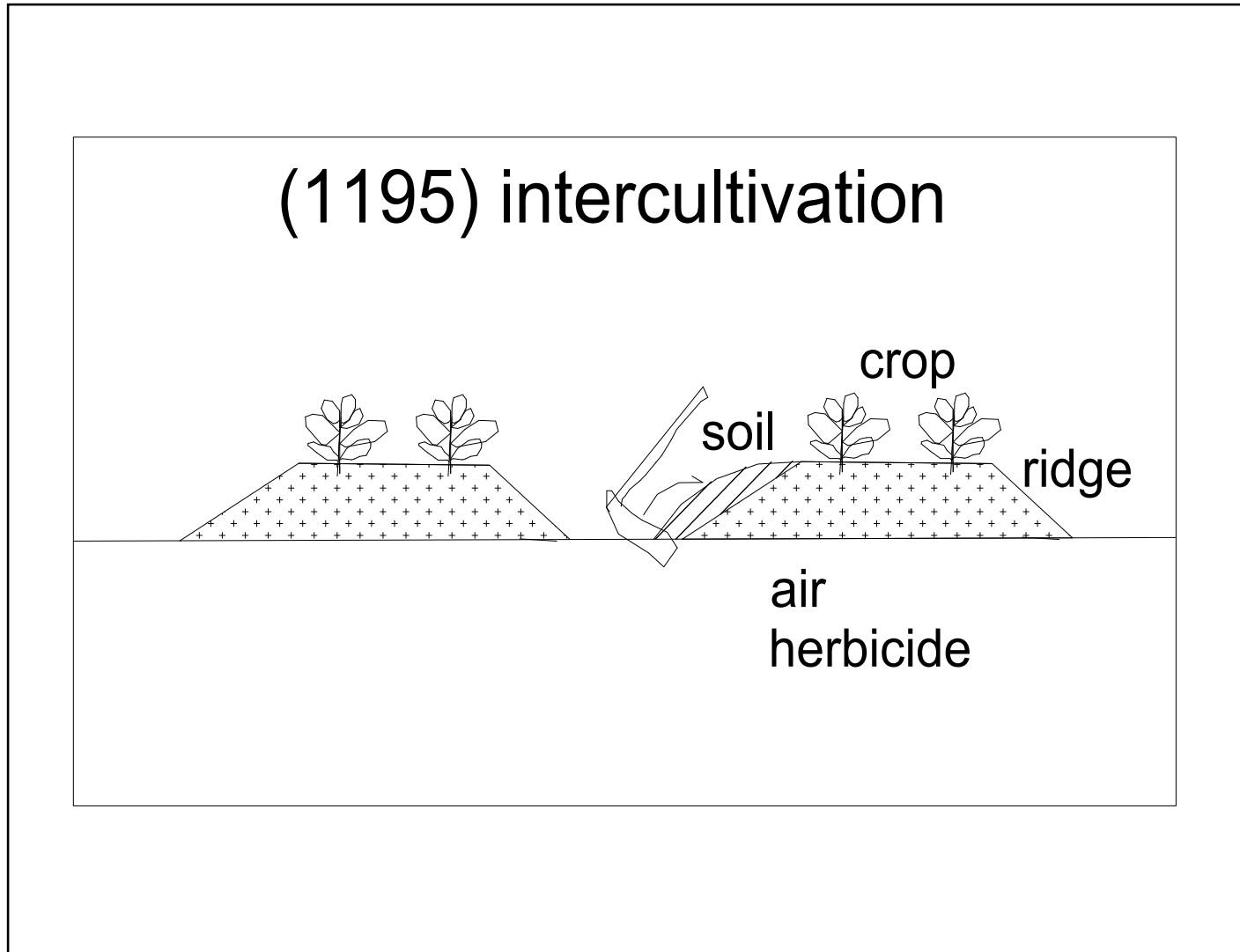
weed damage



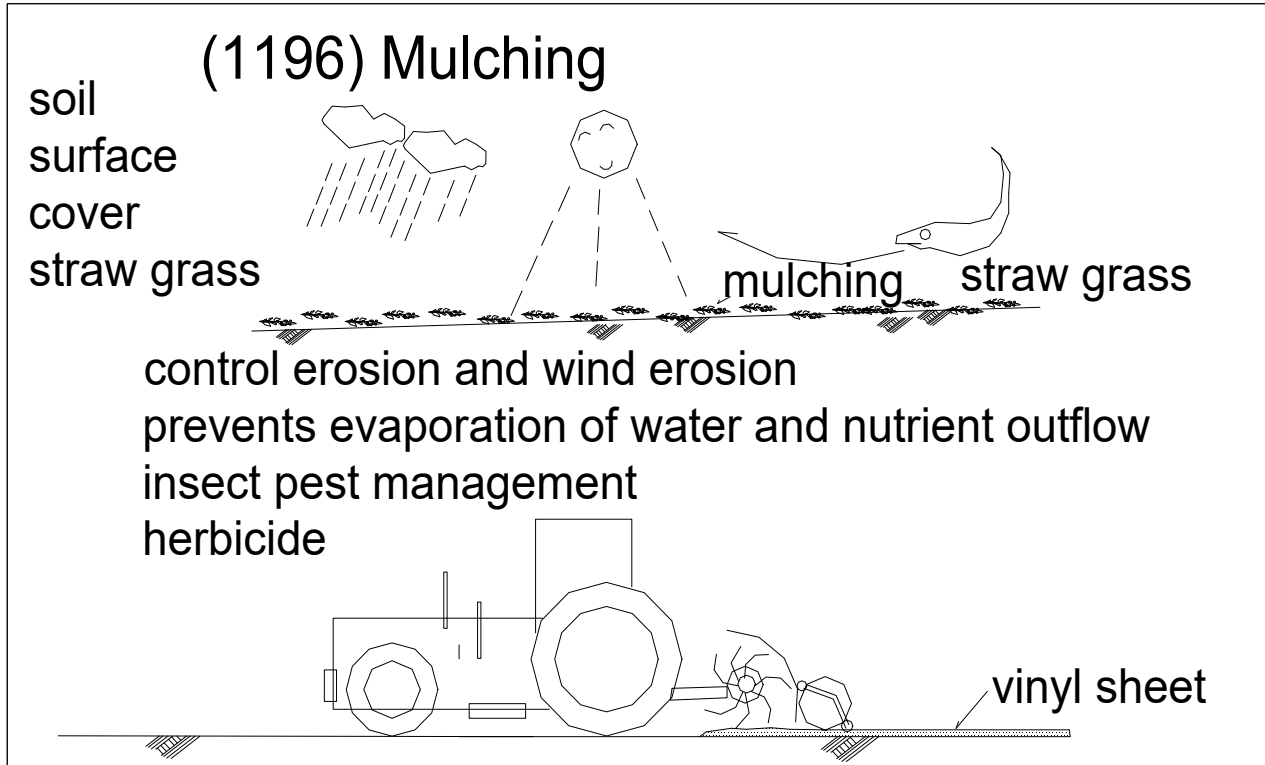
(1194) deep plowing



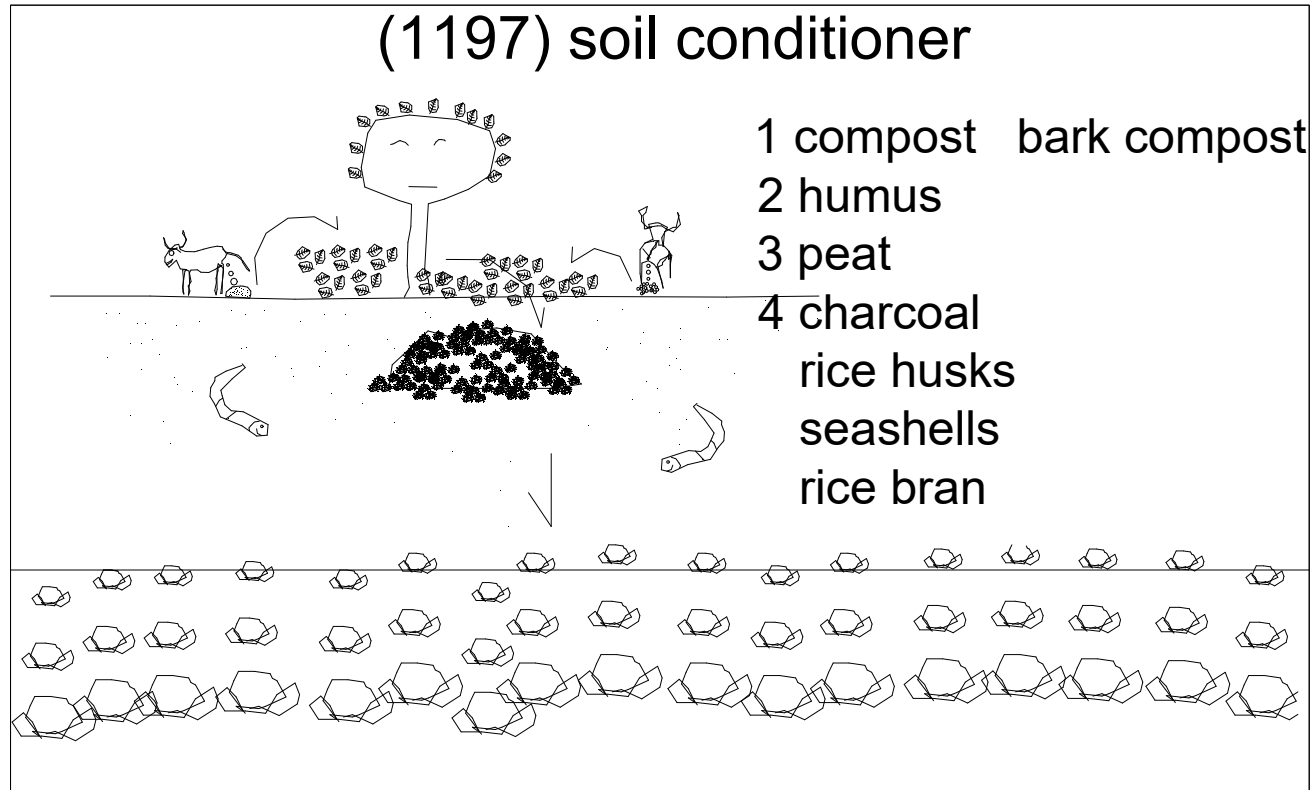
(1195) intercultivation



(1196) Mulching



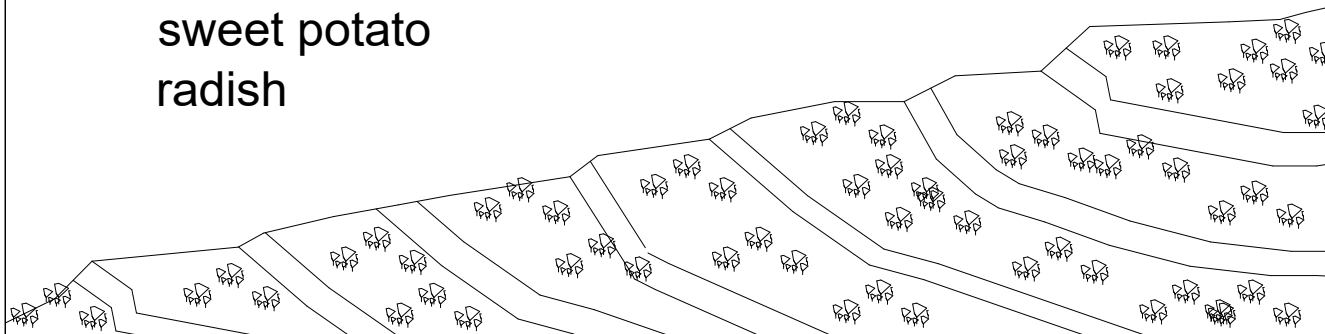
(1197) soil conditioner



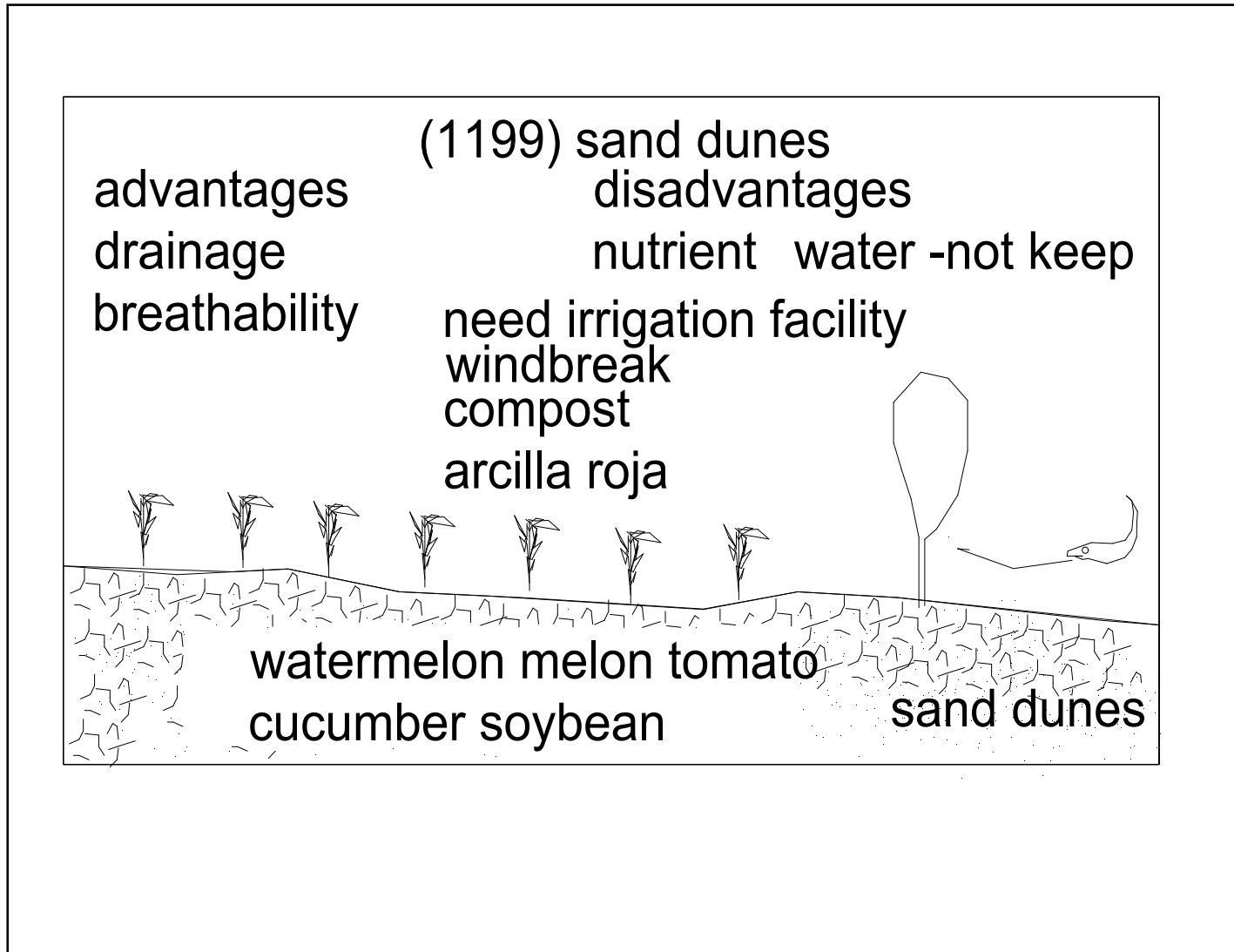
(1198) (volcanic ash+pumice stone+volcanic glass-sedimentary soil)plateau

(1198) (volcanic ash+pumice stone+
volcanic glass-sedimentary soil)plateau

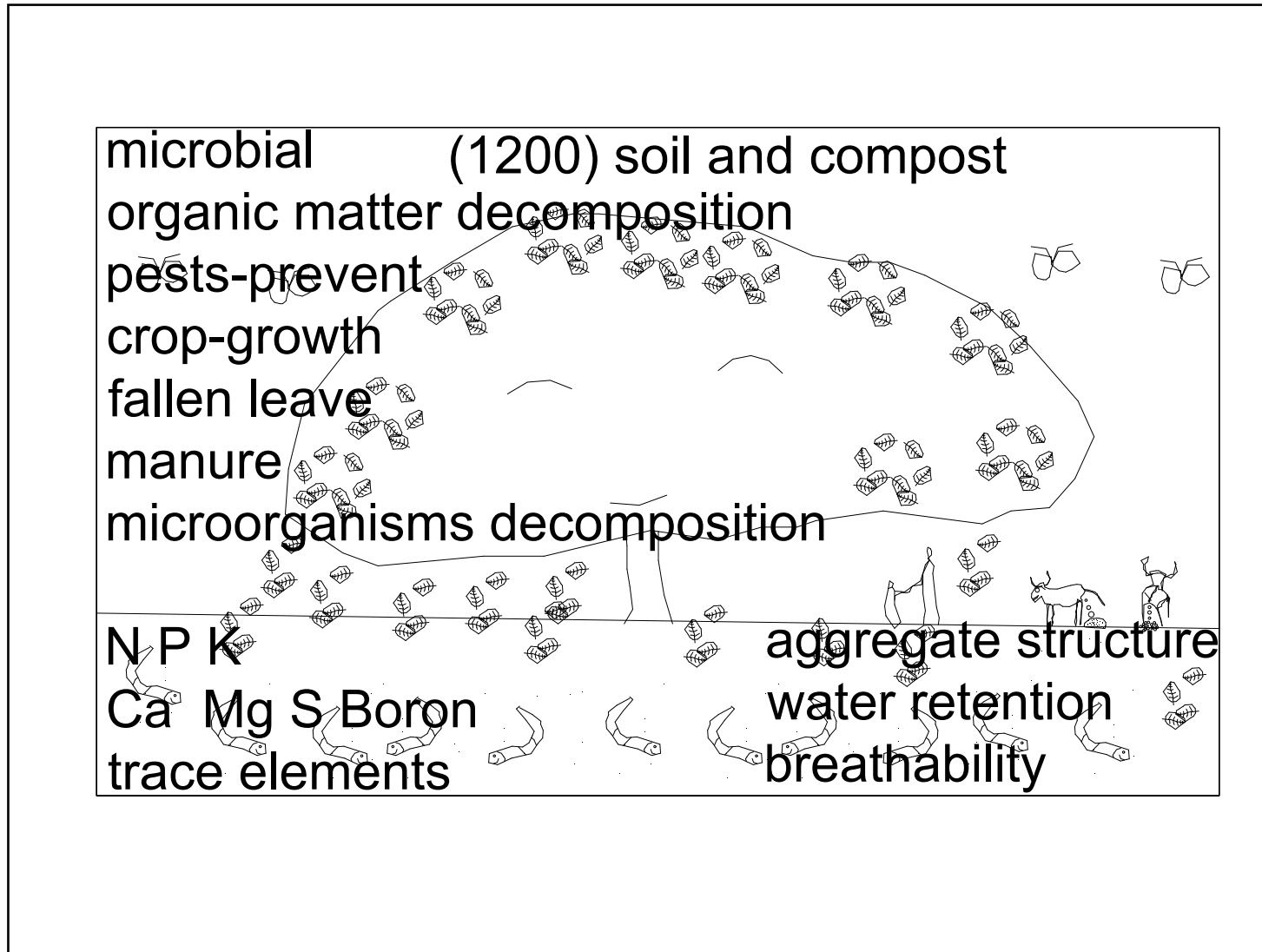
water spitting good
sweet potato
radish



(1199) sand dunes



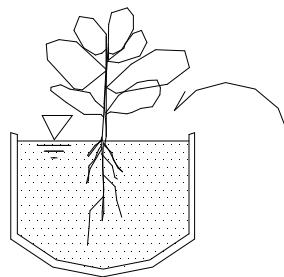
(1200) soil and compost



(1201) hydroponics

(1201) hydroponics
Hydroponic cultivation
not use soil

tomato



water
nutrition

(1202) hydroponics 2

Advantages

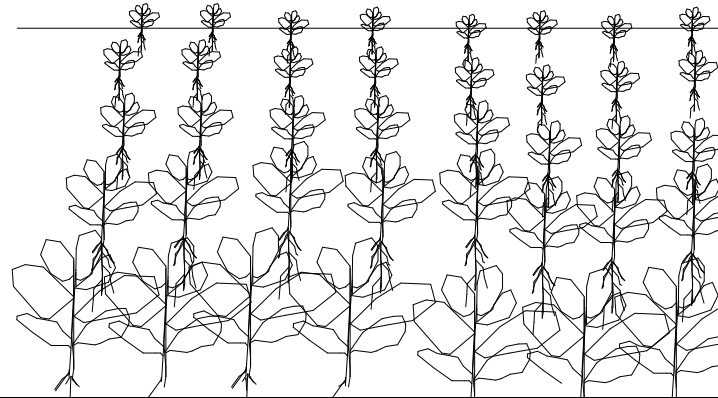
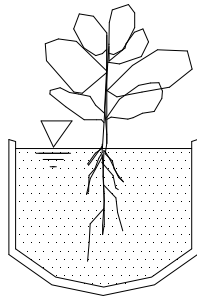
Indoor
weather-no effect
Constant yield

Disadvantages

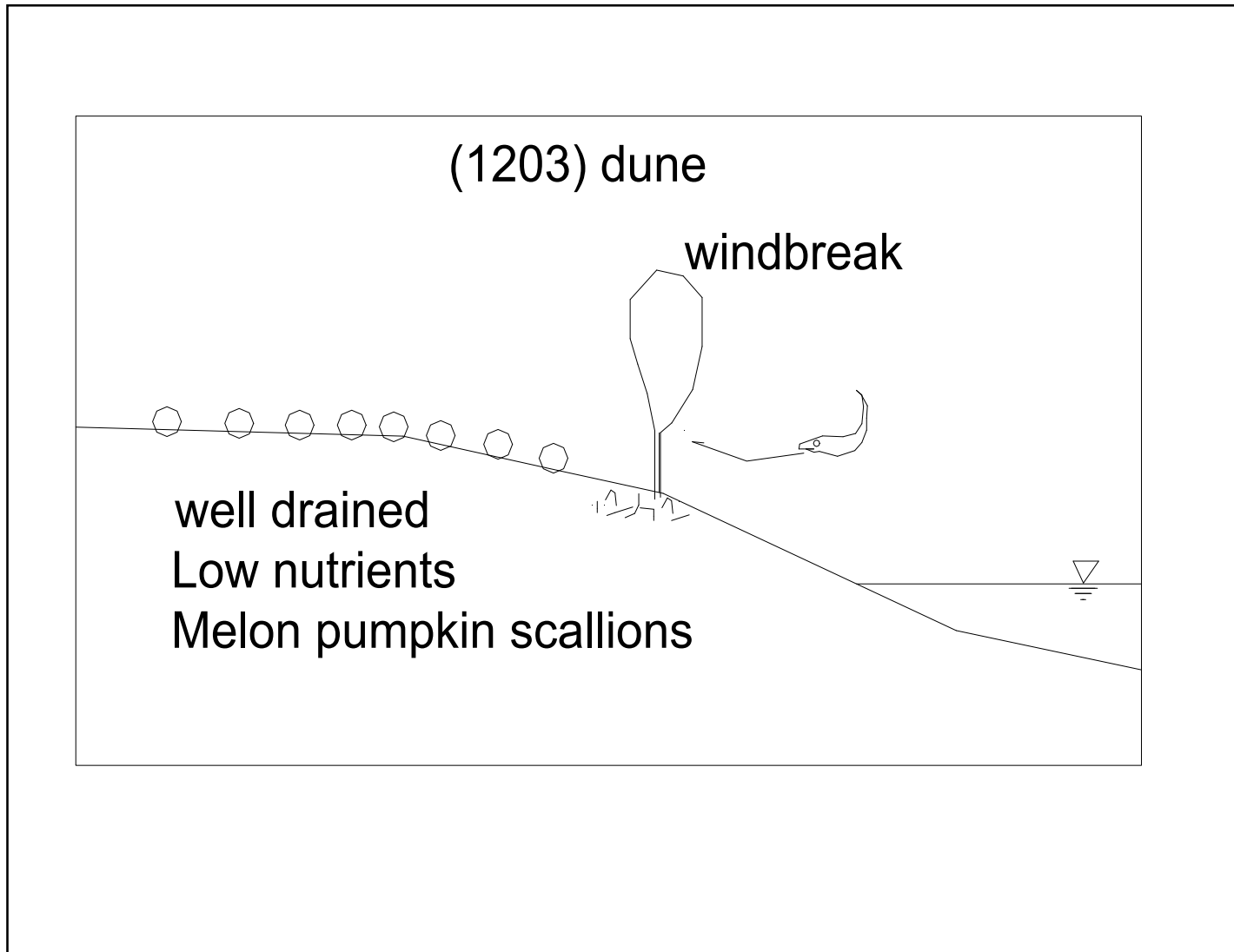
Large equipment
Culture medium
management

Natural environment

Air water soil
Natural landscape



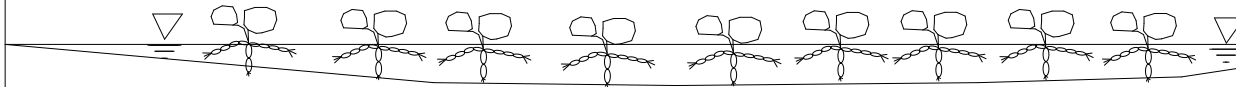
(1203) dune



(1204) Wetland

(1204) Wetland

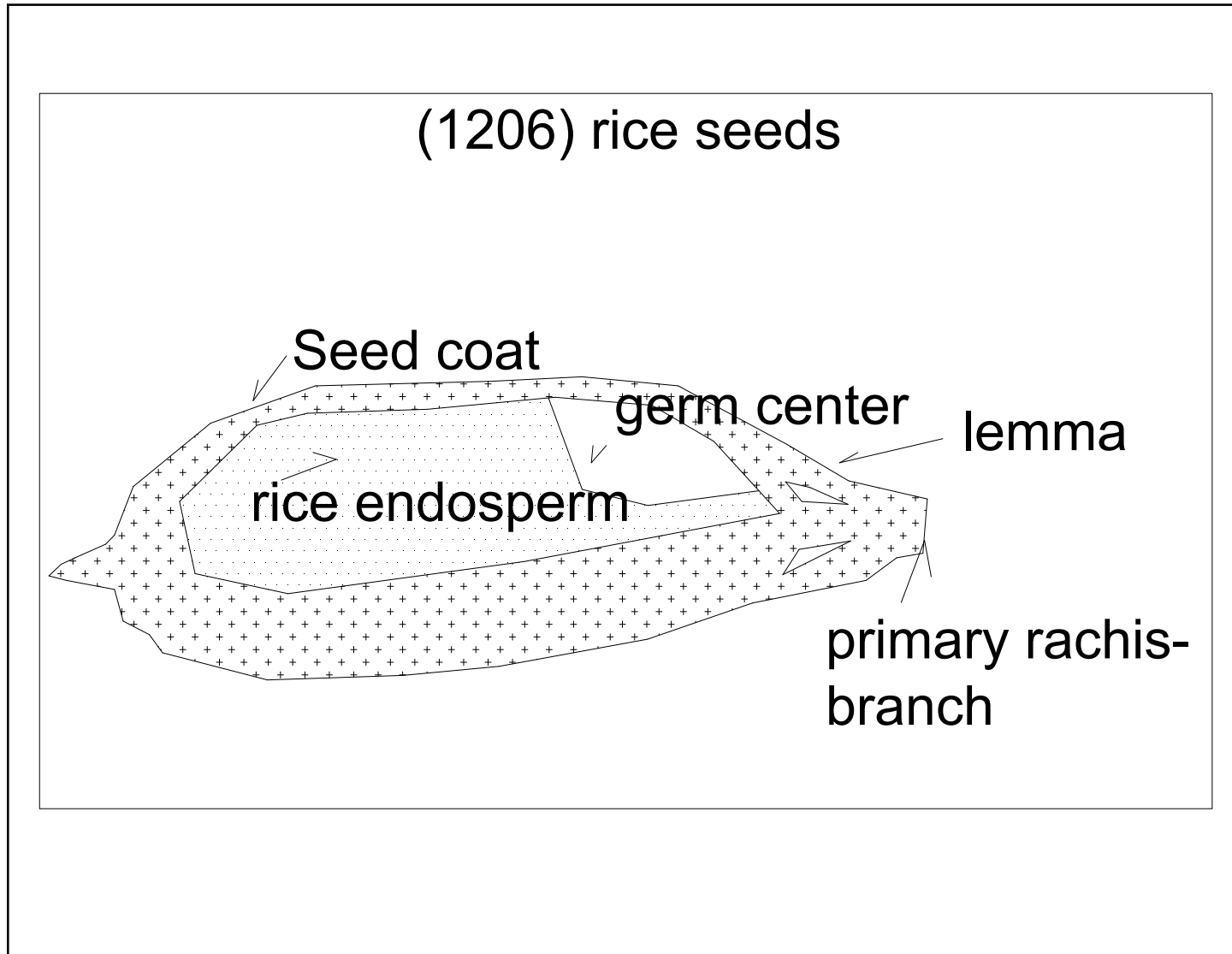
lotus root
cultivation



(1205) Rice growth

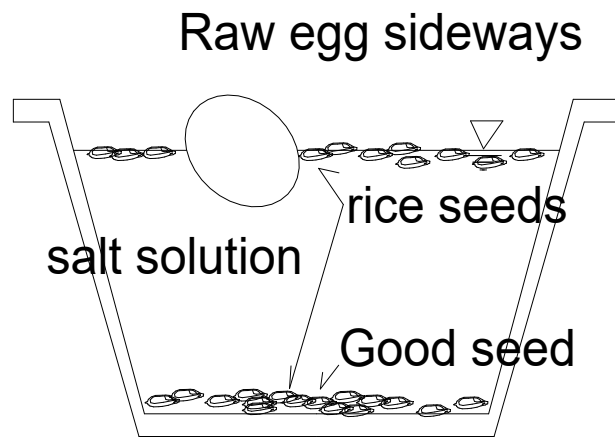
(1205) Rice growth	
growth	Rooting tiller germinating _____ Heading Flowering _____ pollinationRipening
	April May June July Aug Sep Oct
Agricultural work	6 water management 1 Good seed selection 2 germination _____ 7 Pest control 3 Seed sowing _____ Weed control _____ 8 Harvest Grow seedlings _____ 9 dry 4 rice paddy plowing ploughing 5 Rice planting

(1206) rice seeds



(1207) seed selection with salt solution

(1207) seed selection with salt solution



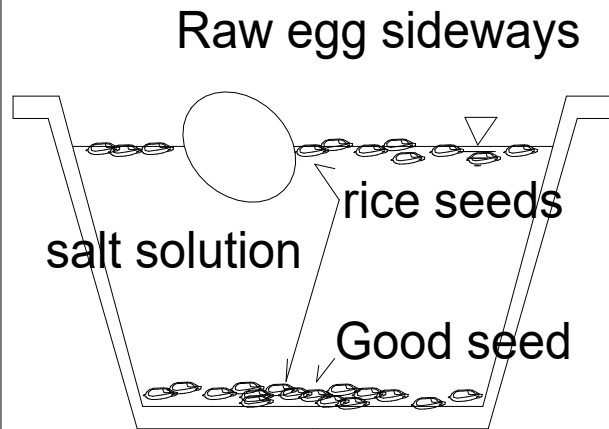
Good seed selection
Remove seeds that emerge

Specific density 1.13
18 Liter Water 4.8kg salt

Choose seeds that are sinking

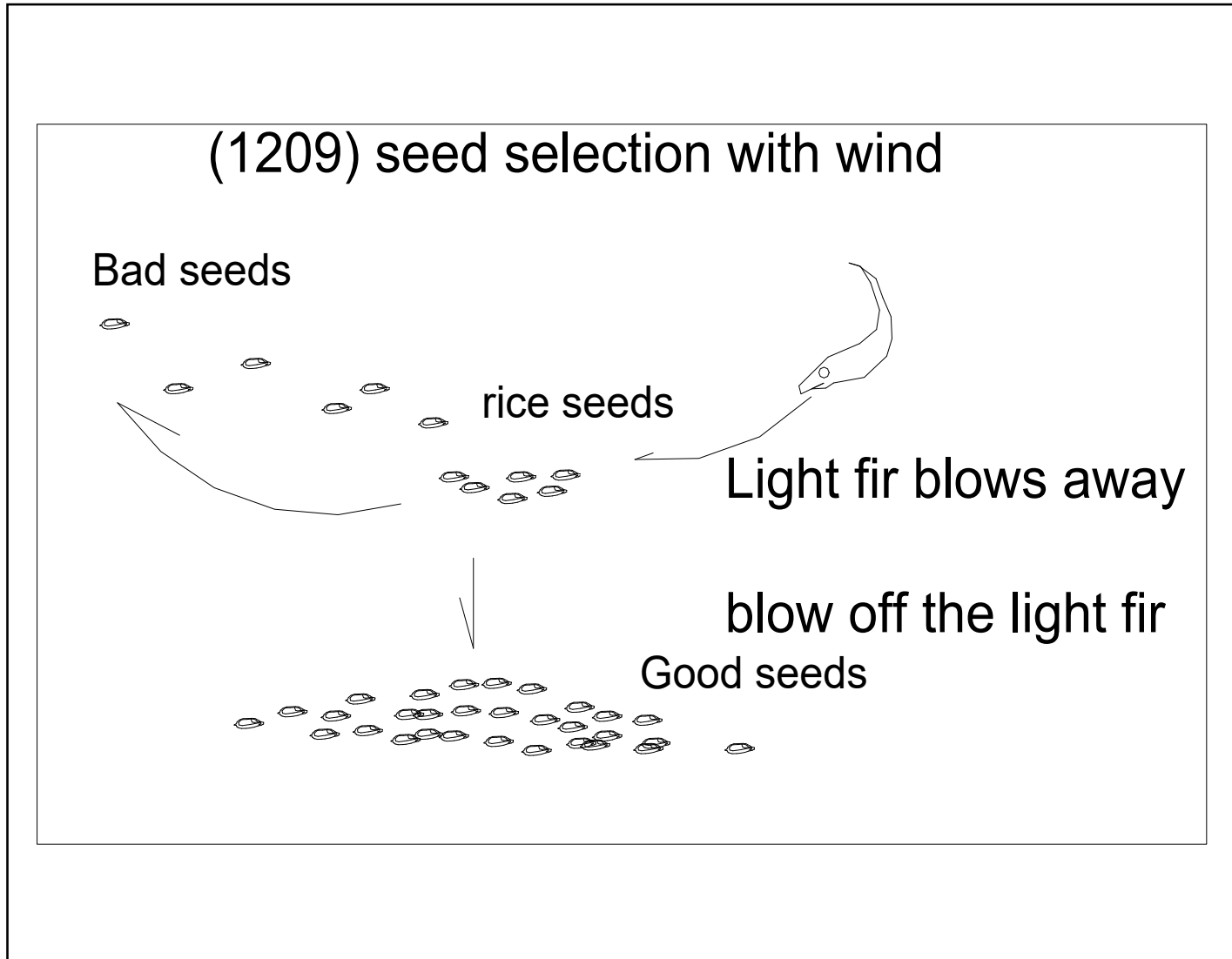
(1208) seed selection with salt solution

(1208) seed selection with salt solution

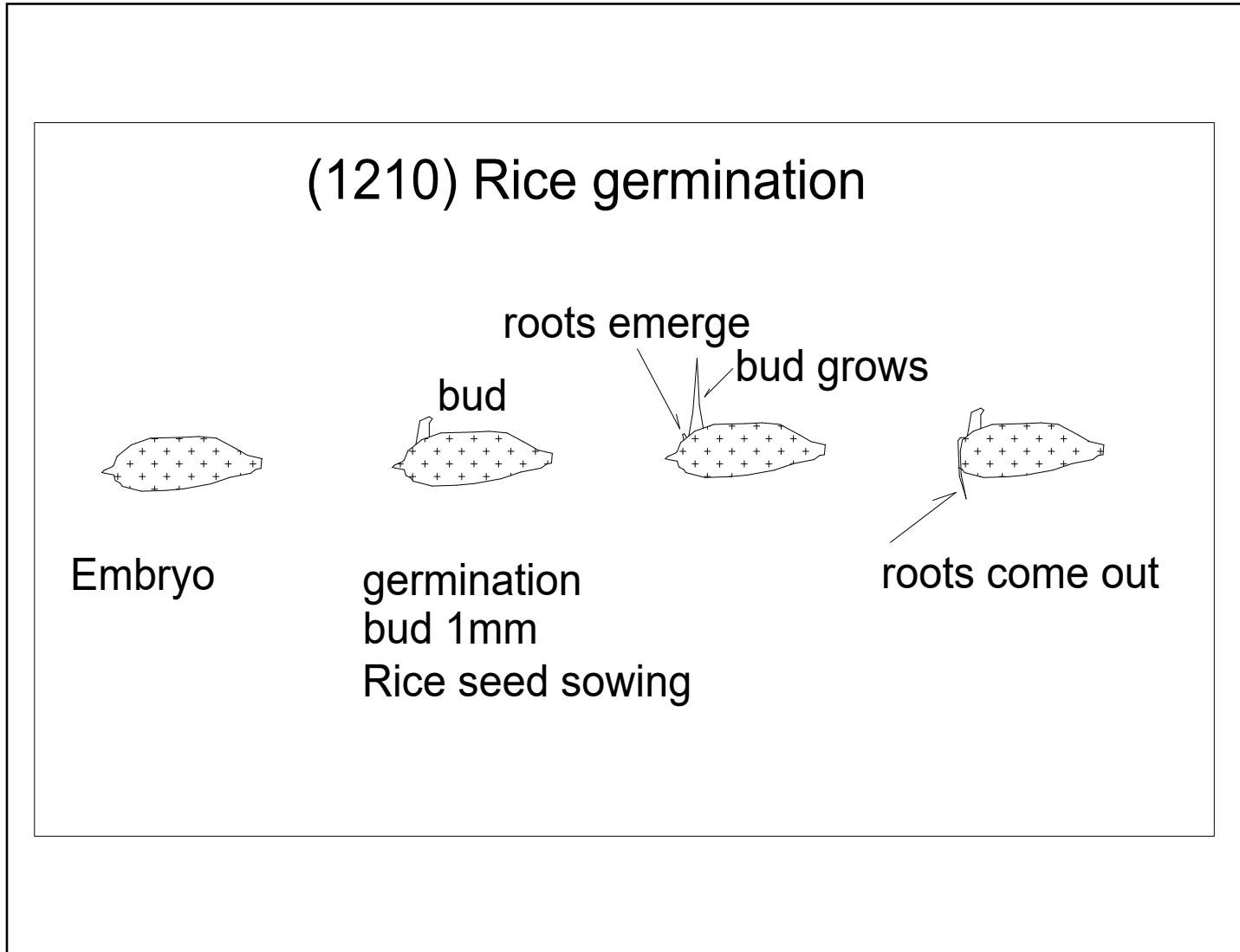


Wash off the salt
60 degrees,
soak in hot water
for 1 minute, disinfect

((1209) seed selection with wind

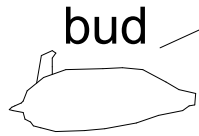


(1210) Rice germination



(1211) sprouting seedling

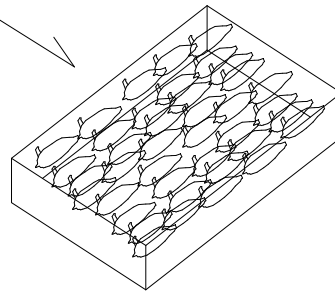
(1211) sprouting seedling



bud

germination

bud 1mm
Rice seed sowing



raising of seedling
bud break
Rice seed sowing
Seedling box for growing seedlings

(1212) Germination Rice seed

(1212) Germination Rice seed

Moisture

Constant temperature

Oxygen

Selected seed net

Soak in water for 7-10 days

Cumulative water temperature 100 degrees

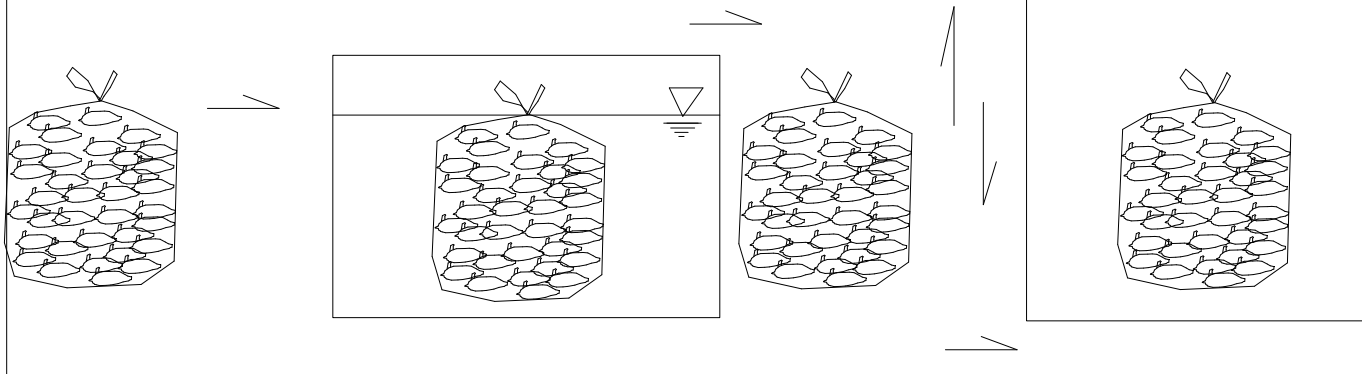
Seed bag

shakes up and down

Sucked seeds

30-32 degrees Place 1 day

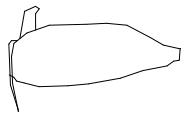
Bud length 1 mm



(1213) mature seedling

(1213) mature seedling

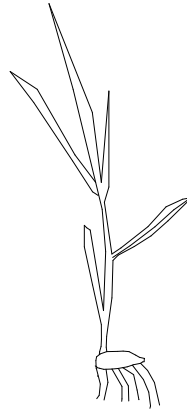
seminal root



young
seedling



middle
seedling



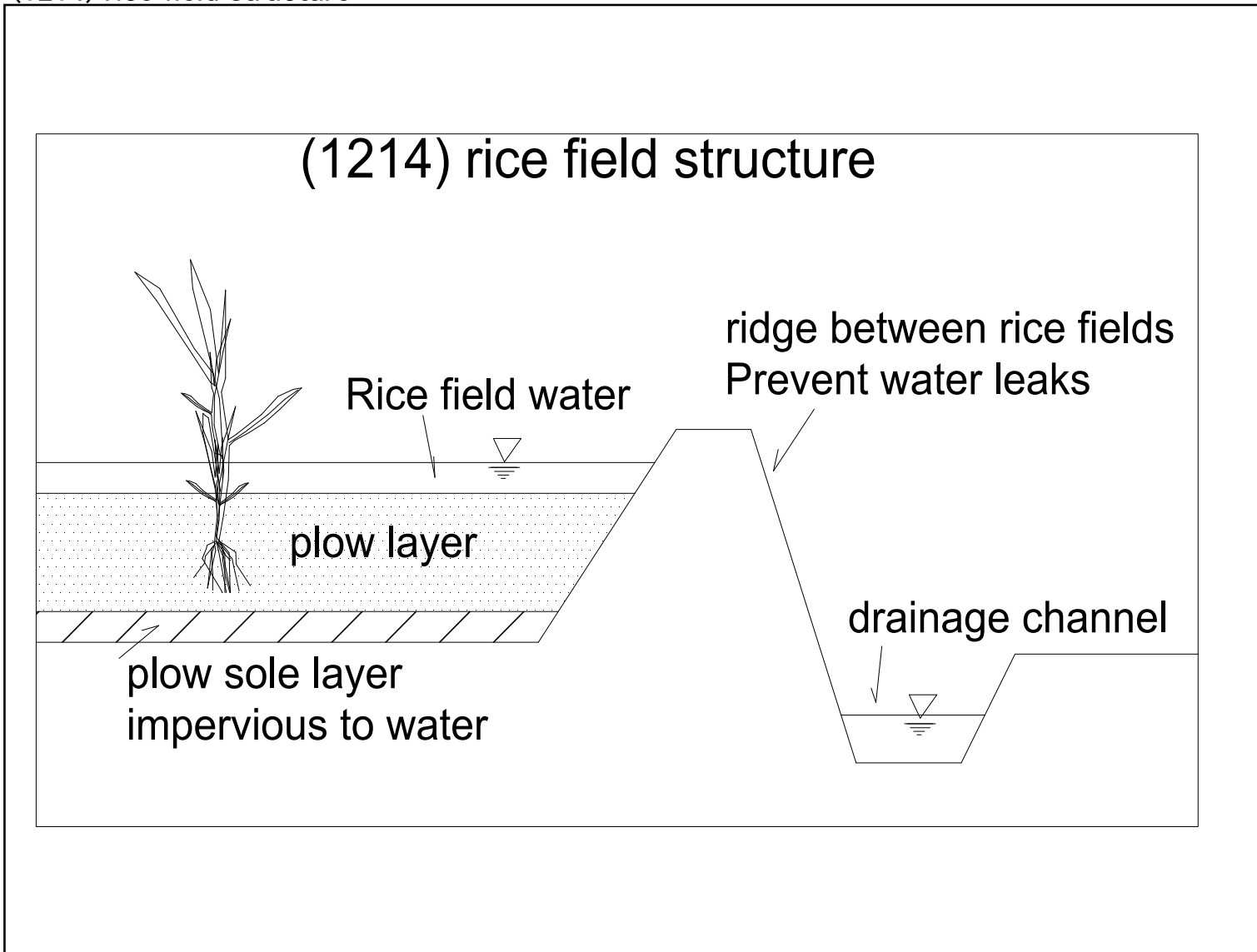
mature seedling



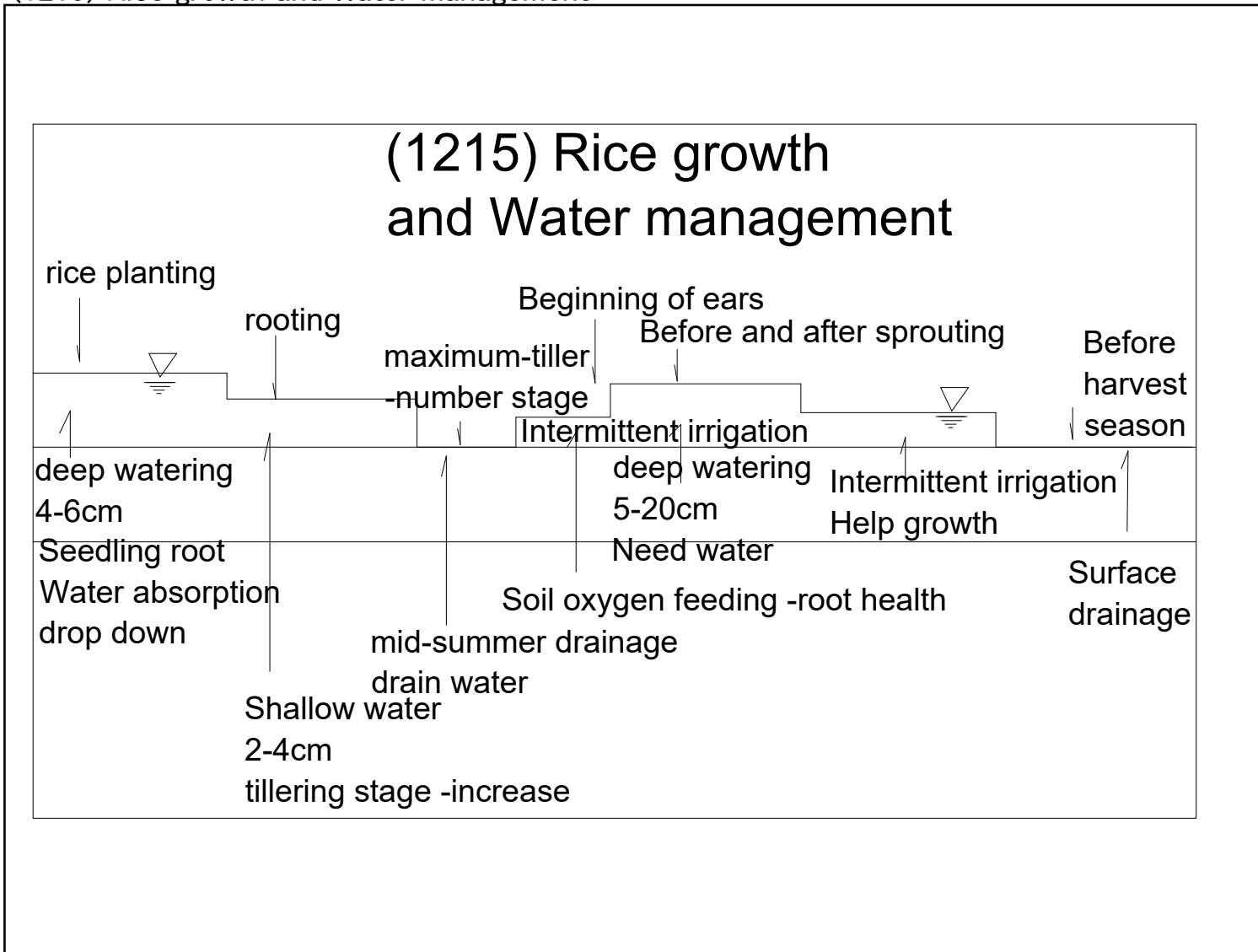
rice planting
machine

rice planting
by hand

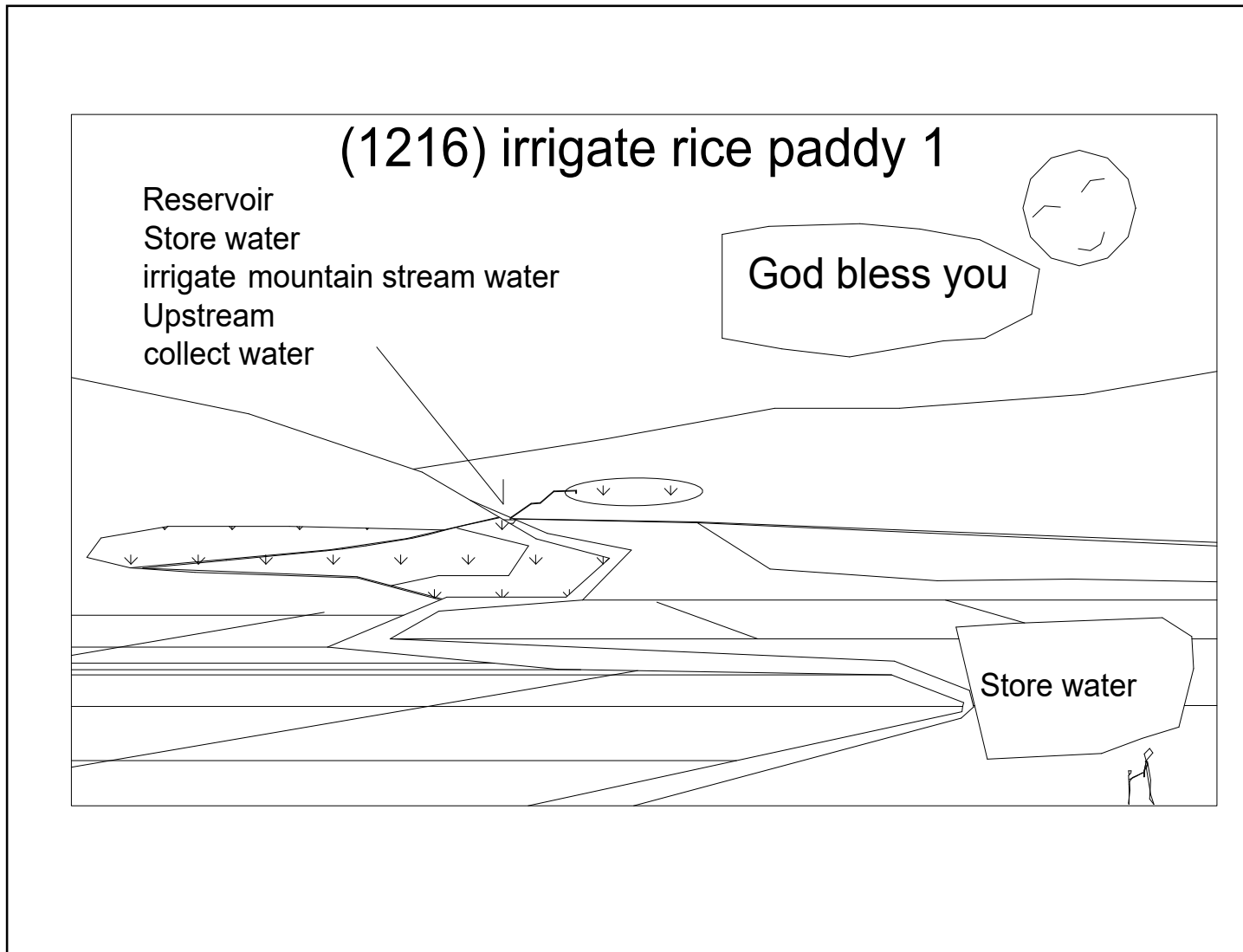
(1214) rice field structure



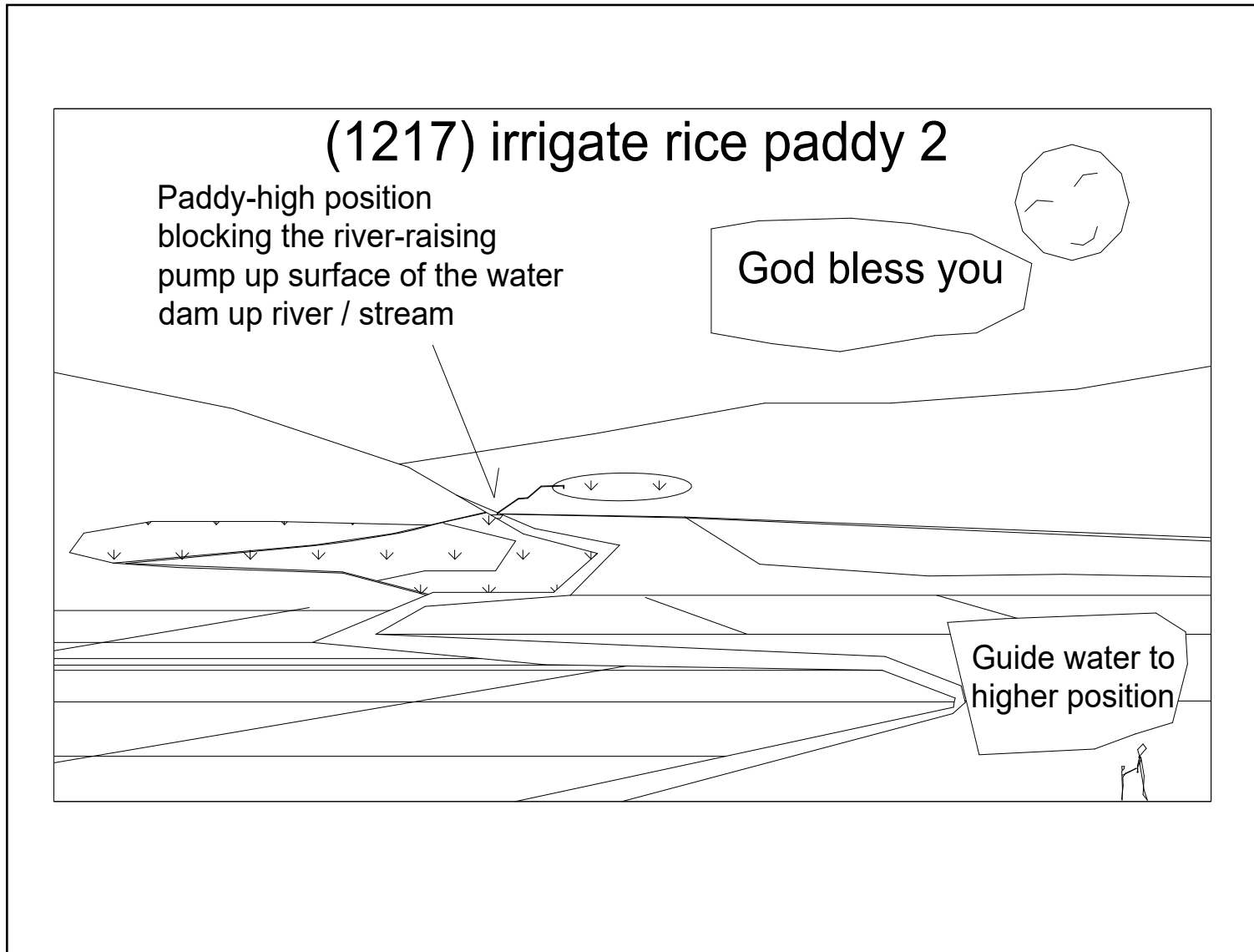
(1215) Rice growth and Water management



(1216) irrigate rice paddy 1



(1217) irrigate rice paddy 2

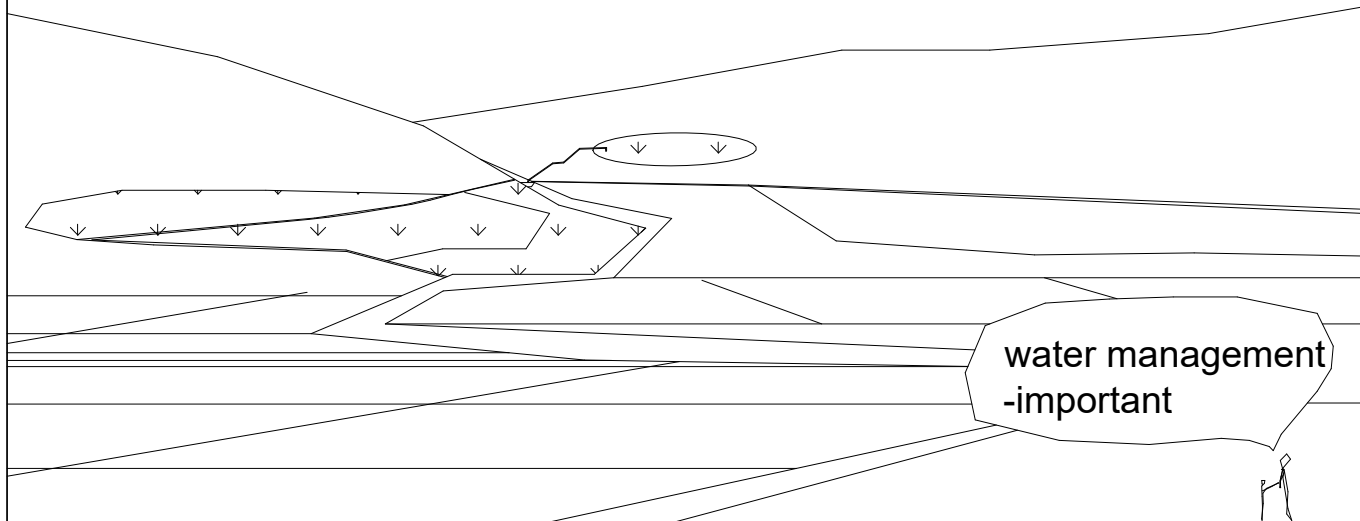


(1218) irrigate rice paddy 3

(1218) irrigate rice paddy 3

each farmer
agricultural water
Irrigation Association
co-management

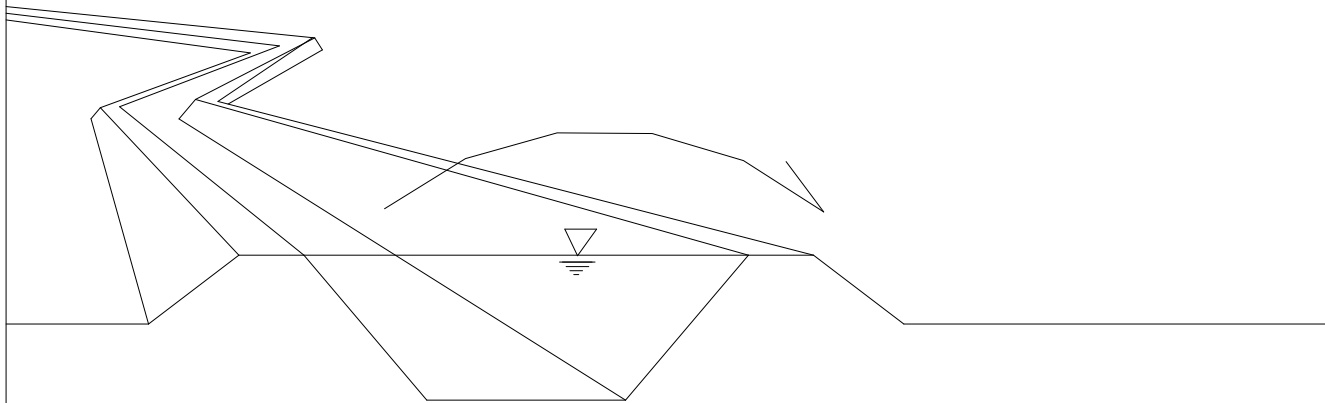
God bless you



water management
-important

(1219) Protect rice fields from flood damage

(1219) Protect rice fields from flood damage



Protect from heavy rains and floods

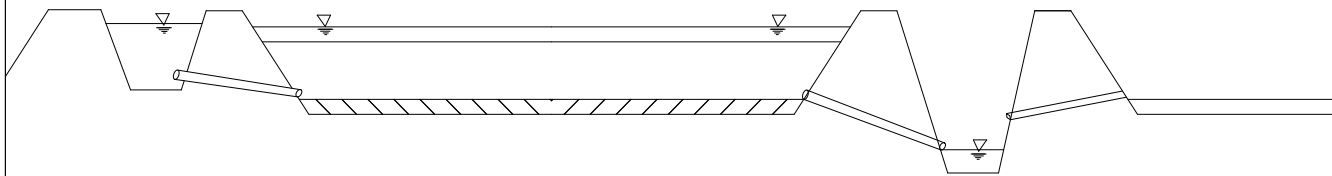
Hydraulic control work Protecting from flooding of fields

(1220) Improve drainage

(1220) Improve drainage

Aqueduct Drainage canal
irrigate a rice paddy

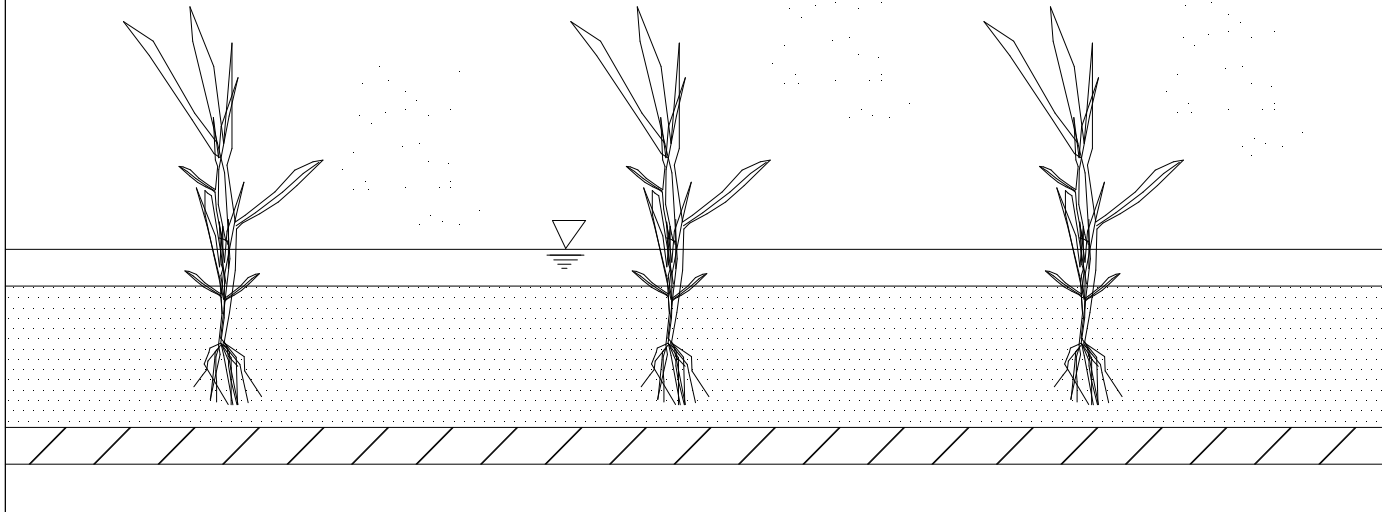
drainage
drain the water
Returning the wet field
to the dry field crop conversion
rice field– Paddy field
under drainage



(1221) Organic rice cultivation

(1221) Organic rice cultivation

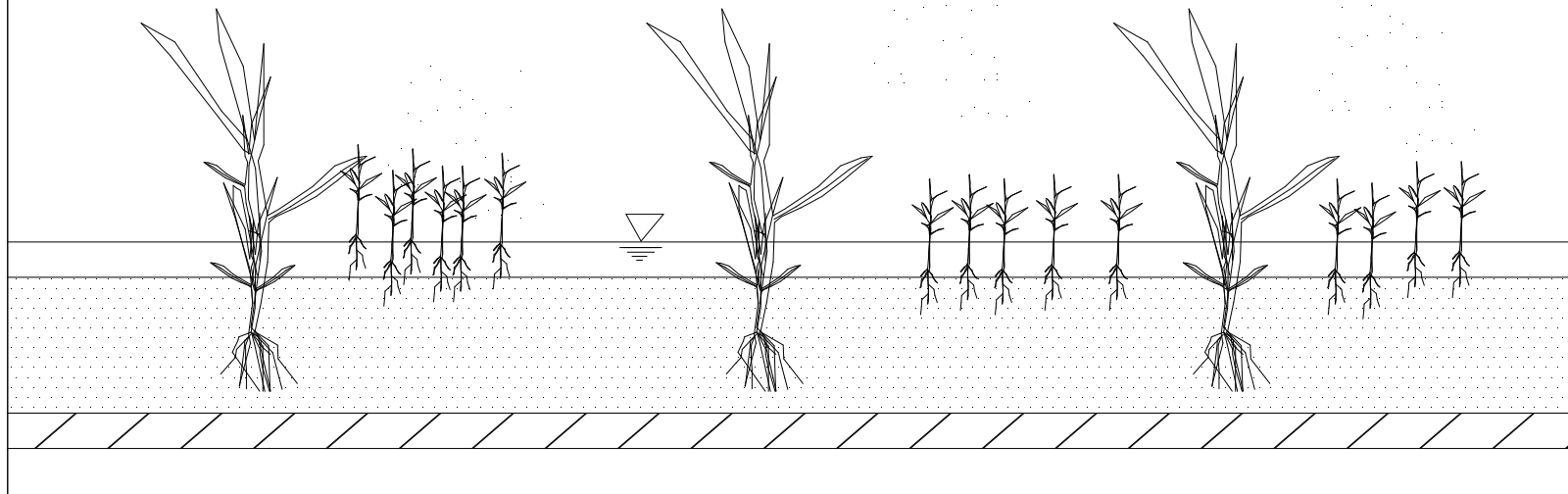
Chemical fertilizer and pesticides-Lots of harvest
-environmental influences human body and nature
Do not use chemical fertilizer and pesticides



(1222) Organic rice cultivation

(1222) Organic rice cultivation
Mowing weeds

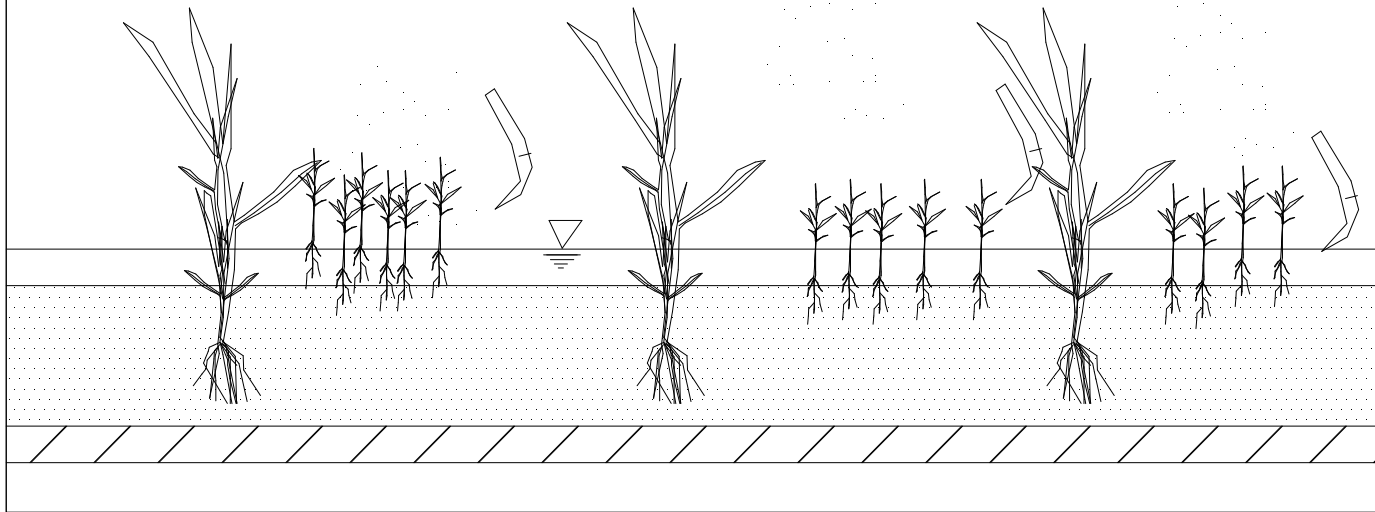
Mowing weeds



(1223) Pest control

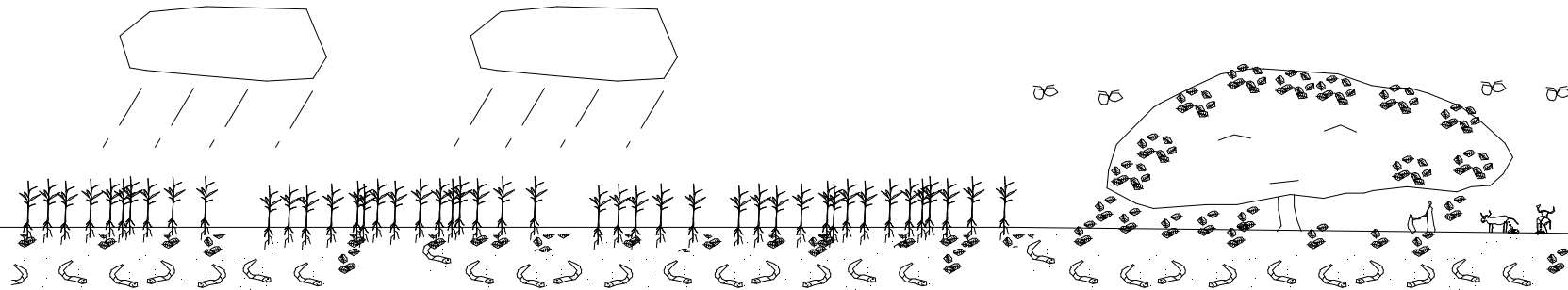
(1223) Pest control

Mowing weeds



(1224) Soil Protect Global environment

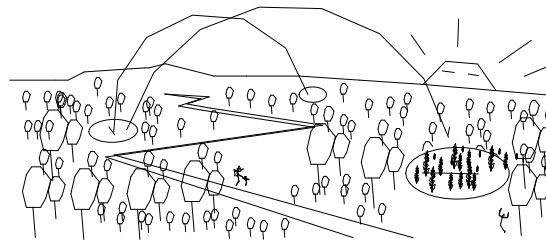
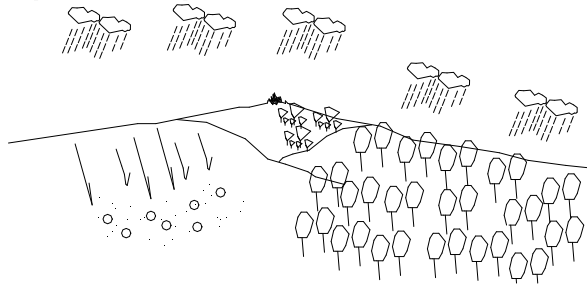
(1224) Soil Protect Global environment



- 1 Plant leaves weaken the power of rain
- 2 Prevent the soil from flowing
- 3 Hazardous substances-decomposition by microorganisms
- 4 Nutrient-absorption
- 5 Soil clean air
- 6 Soil clean water
- 7 Water storage
- 8 Groundwater
- 9 Soft soil
- 10 Increase the number of creatures
- 11 Water-evaporation
- 12 Temperature-lower
- 13 Absorbs carbon dioxide to make oxygen

(1225) Soil flows when the forest disappears

(1225) Soil flows when the forest disappears



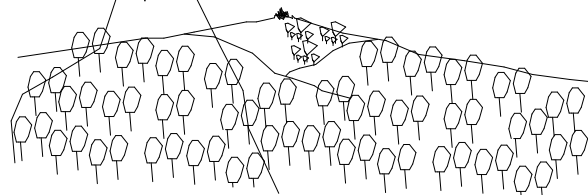
- 1 burnt farming slash-and-burn agriculture
- 2 Cut tree
- 3 the traditional "slash and burn" method of clearing land
- 4 dry-land rice for 1 year
- 5 leave land fallow for 10 years
- 6 Soil erosion-does not occur

- 7 Thailand Southeast Asia
- 8 dry-land rice
- 9 Sowing seeds
- 10 Moat stick
- 11 Seeding hole
- 12 Do not break the surface of the soil
- 13 Ash and organic matter become nutrients

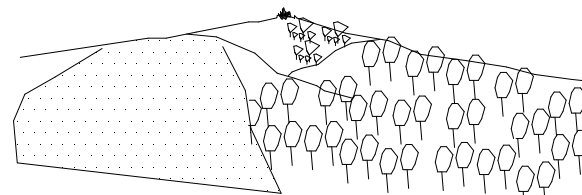
(1226) burnt farming slash-and-burn agriculture

(1226) Burnt farming slash-and-burn agriculture

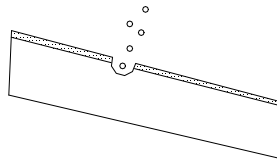
Burnt farming slash-and-burn agriculture
the traditional "slash and burn"
method of clearing land



dry-land rice for 1 year
leave land fallow for 10 years

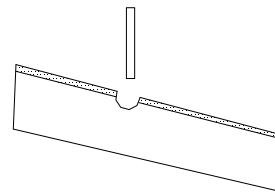


dry-land rice
Sowing seeds

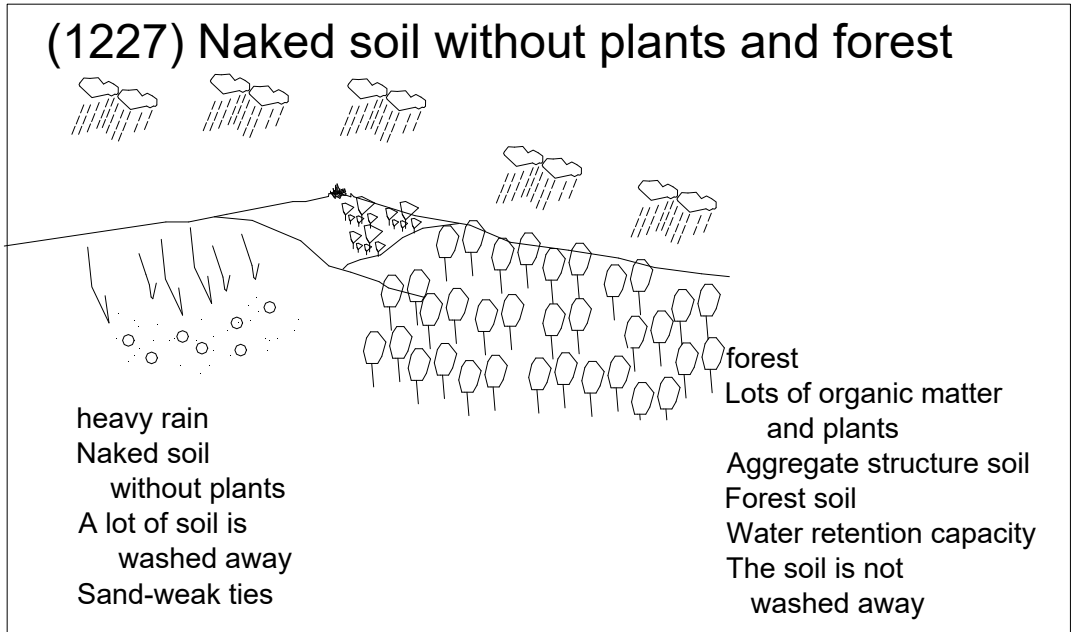


Ash and organic matter
become nutrients

Moat stick
Seeding hole

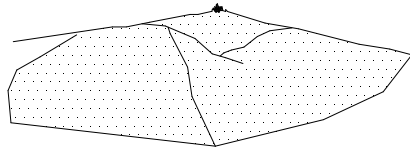


(1227) Naked soil without plants and forest

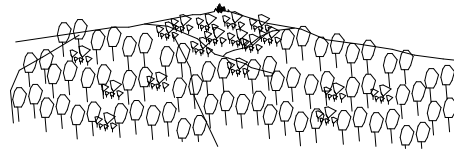


(1228) Forest is created, soil is also created

(1228) Forest is created, soil is also created

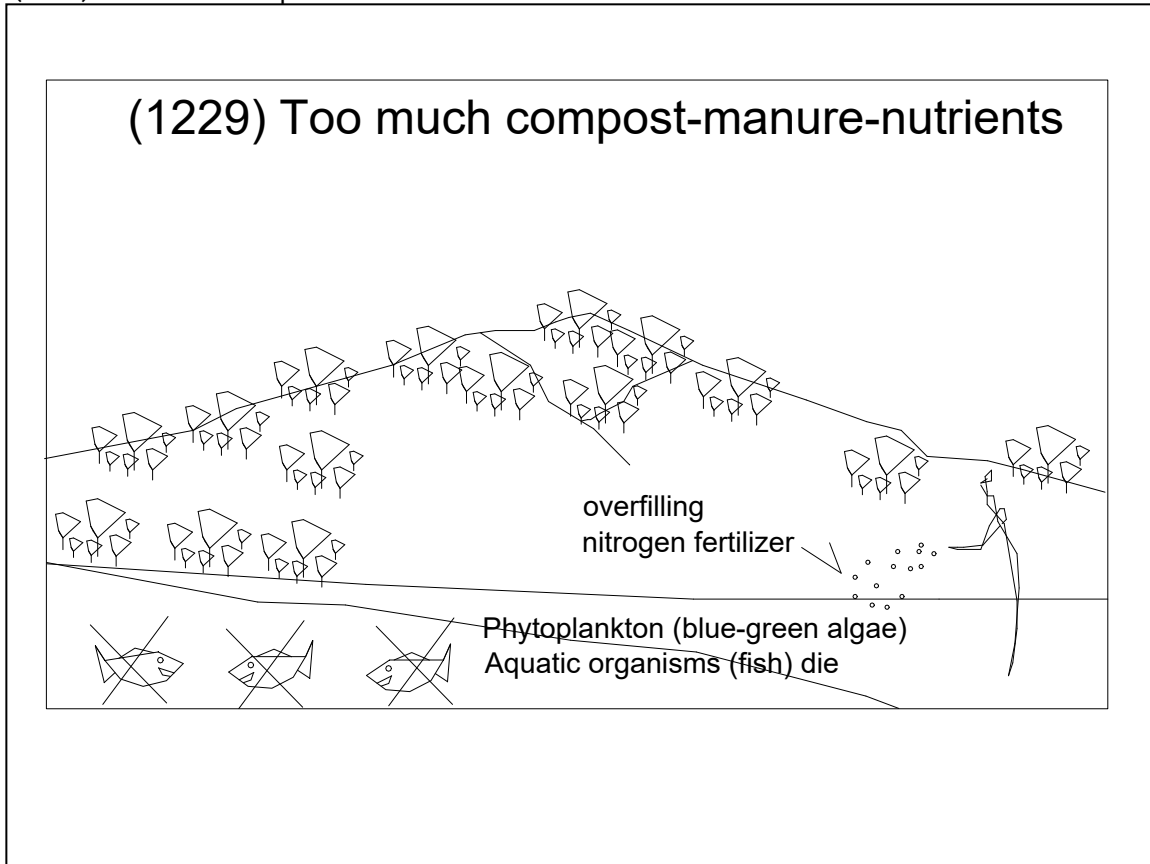


cut trees-the forest
is gone
bare hill -soil runoff

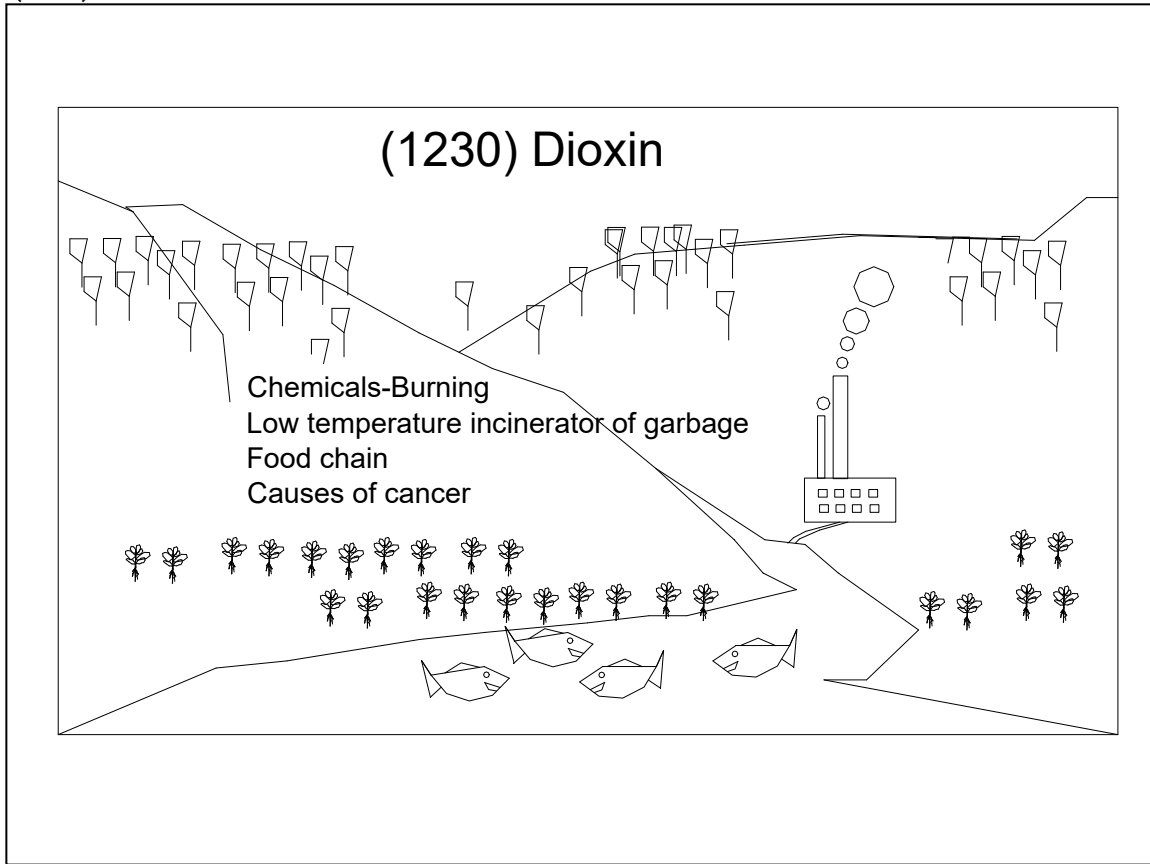


tree planting
forest soil

(1229) Too much compost-manure-nutrients



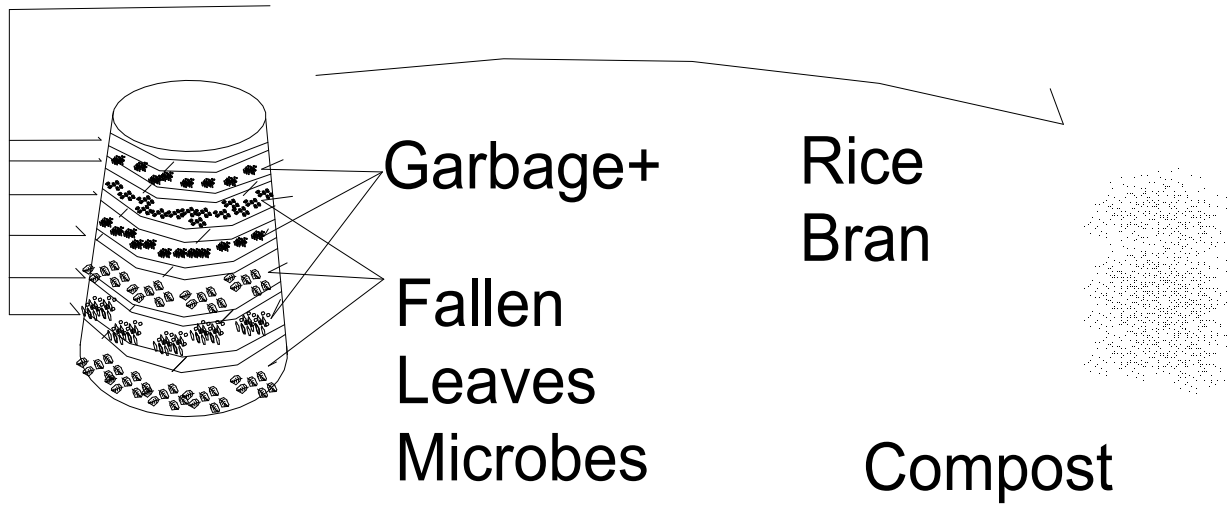
(1230) Dioxin



(1231) Compost kitchen waste turn garbage into compost

(1231)Compost kitchen waste
turn garbage into compost

Soil

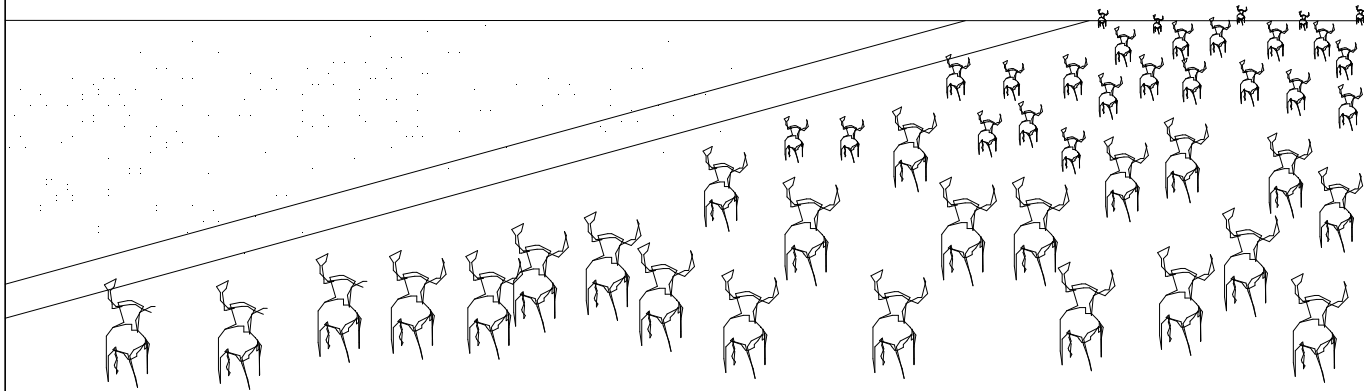


(1232) Desertisation

(1232) Desertisation

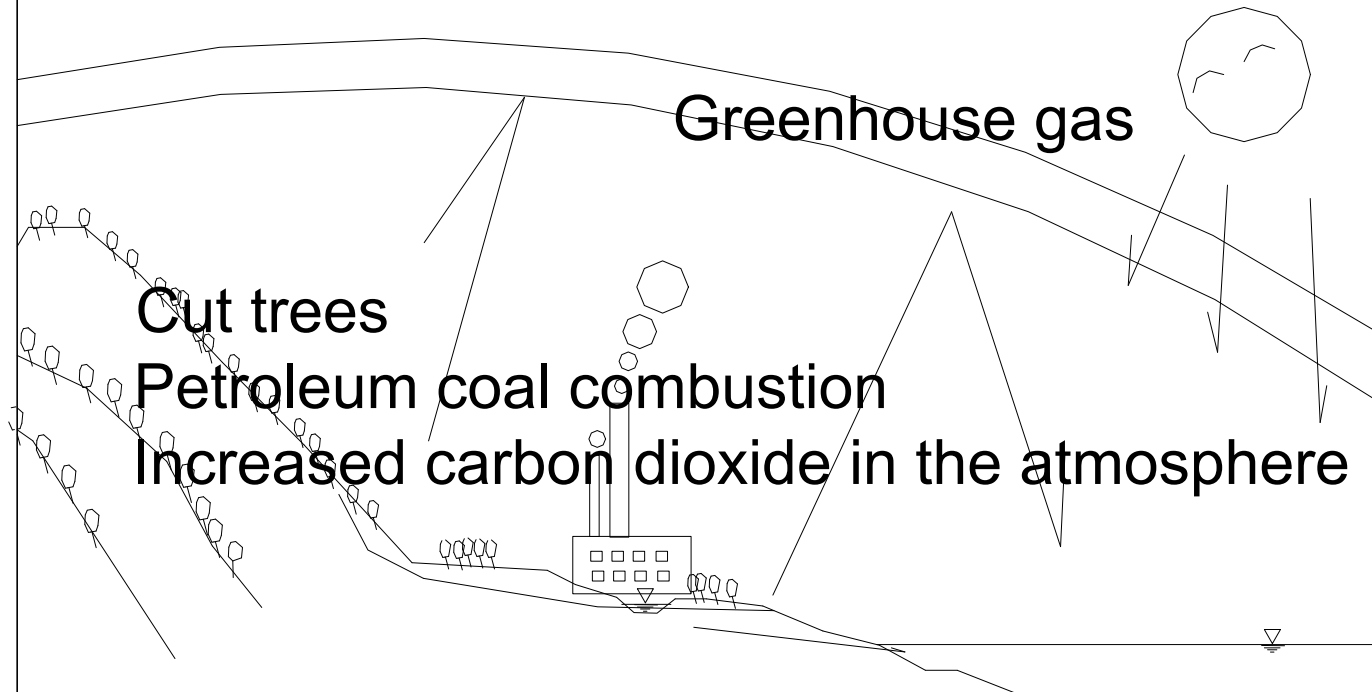
Cut down trees

Keep livestock



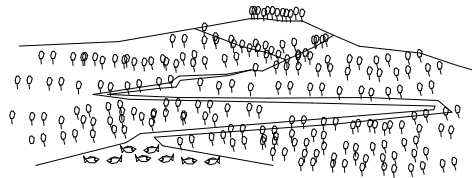
(1233) Global warming

(1233) Global warming

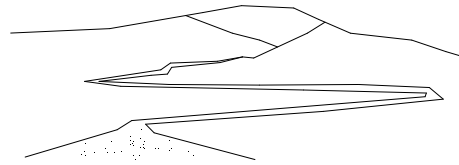


(1234) Cut down trees-The river becomes muddy

(1234) Cut down trees-
The river becomes muddy



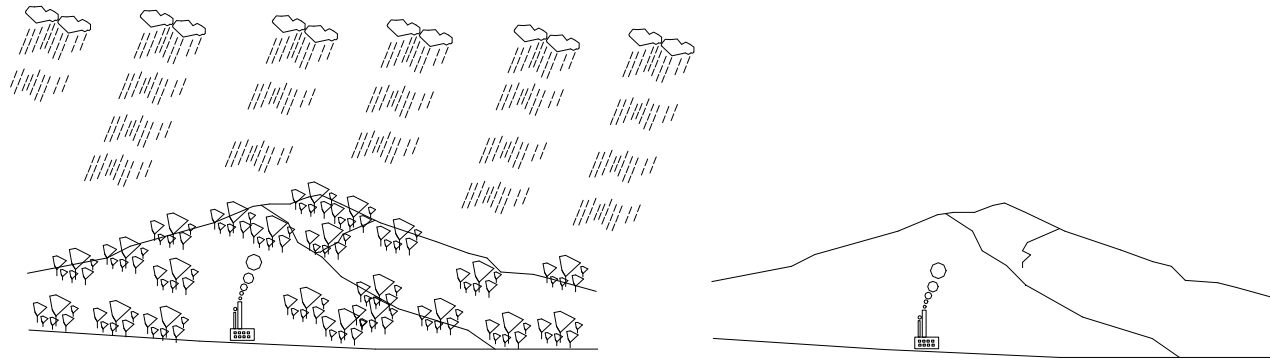
Beautiful river



Muddy river

(1235) Acid rain

(1235) Acid rain



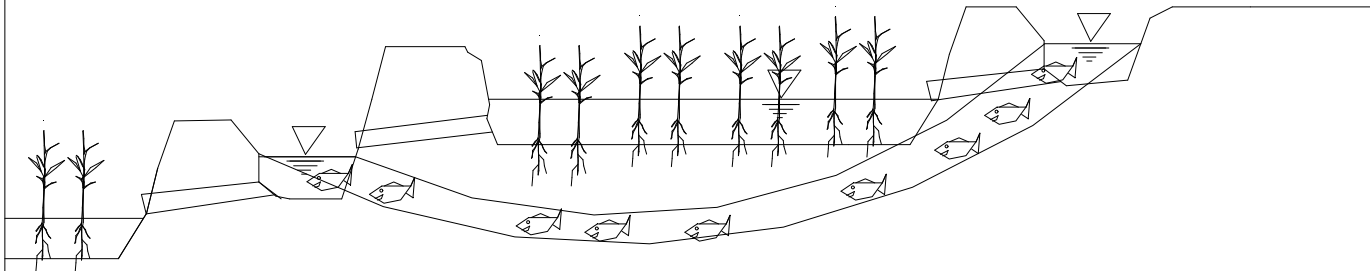
Nitrogen oxide-Nitric acid
Sulfur oxides-Sulfuric acid

(1236) Old paddy field

(1236) Old paddy field

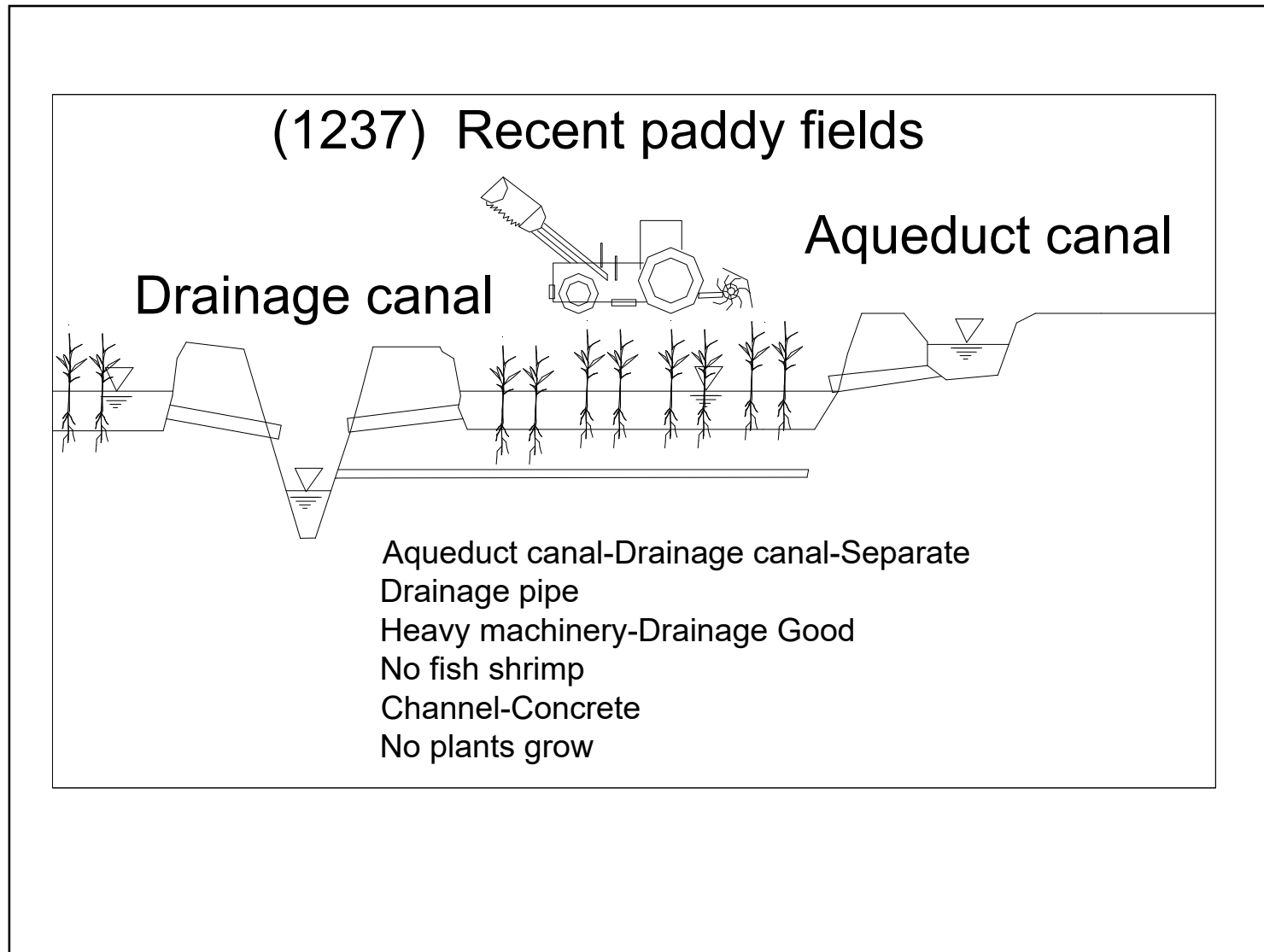
Aqueduct channel
Drainage channel

Aqueduct channel
Drainage channel



Add water and return to the same channel
Fish
Aquatic plants

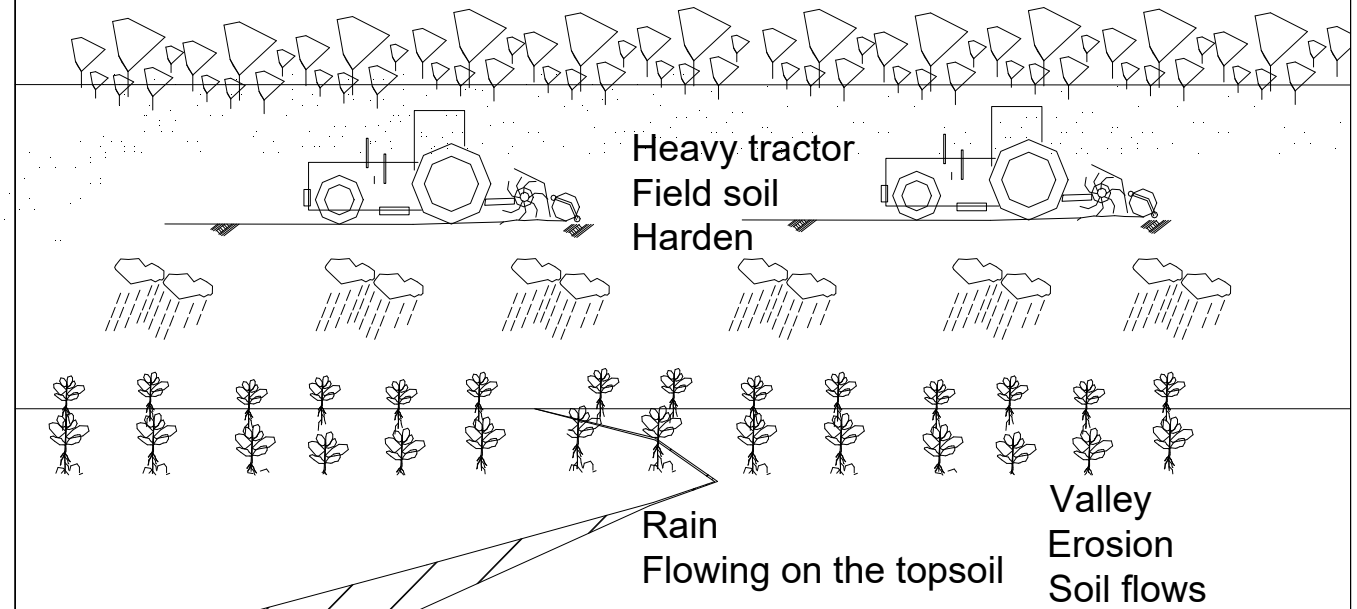
(1237) Recent paddy fields



(1238) Large agricultural machine and the earth

(1238) Large agricultural machine and the earth

Old American land
Grasslands / forests

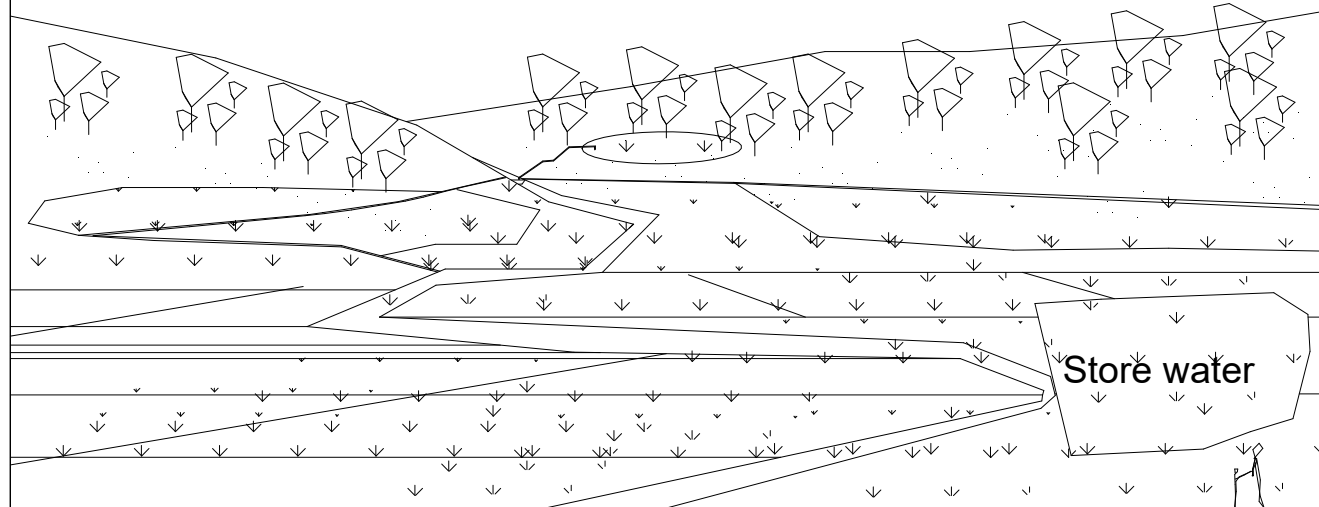


(1239) Agriculture protects the environment

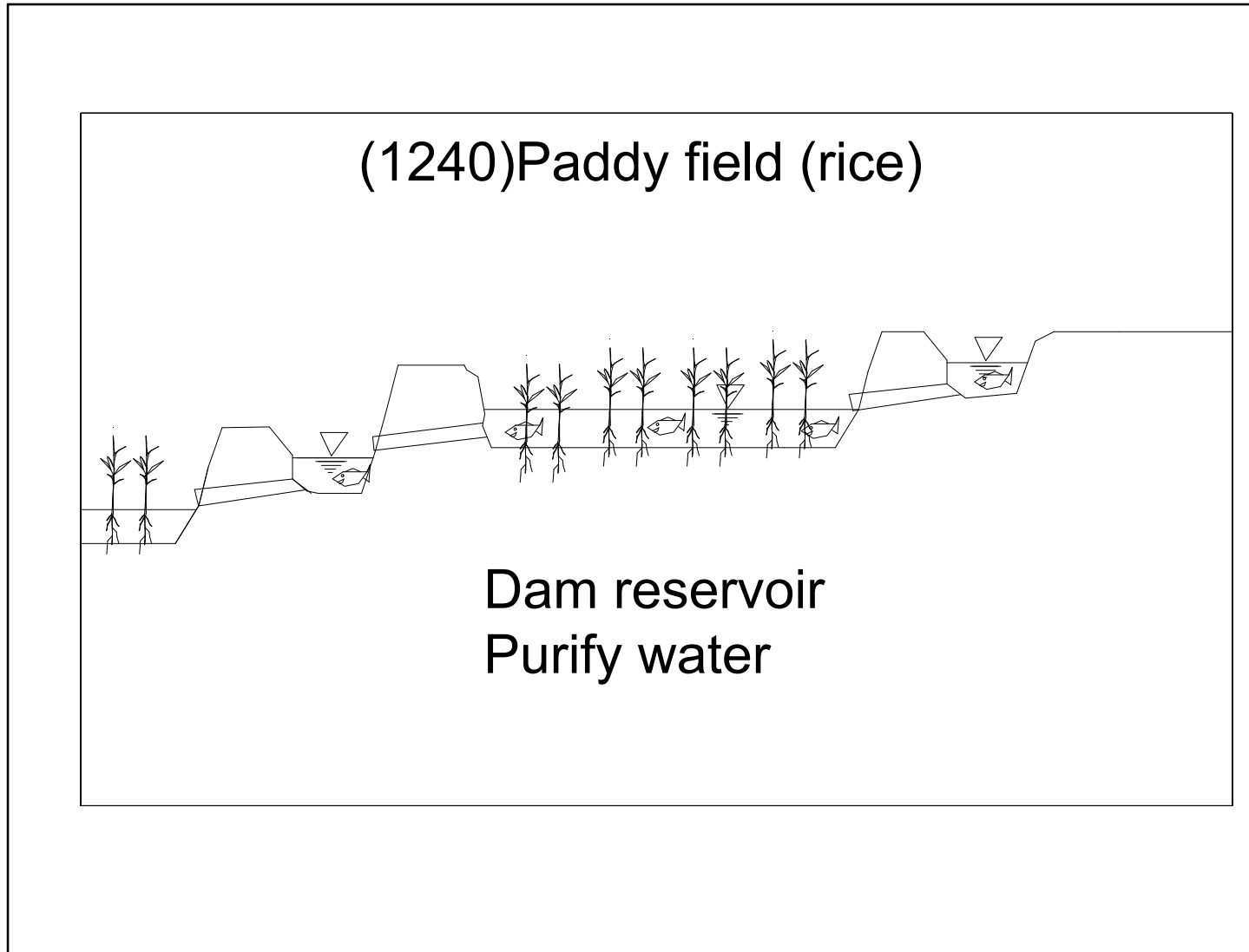
(1239) Agriculture protects the environment

Rice paddy— Store water
Heavy rain—no flood

God bless you



(1240) Paddy field (rice)

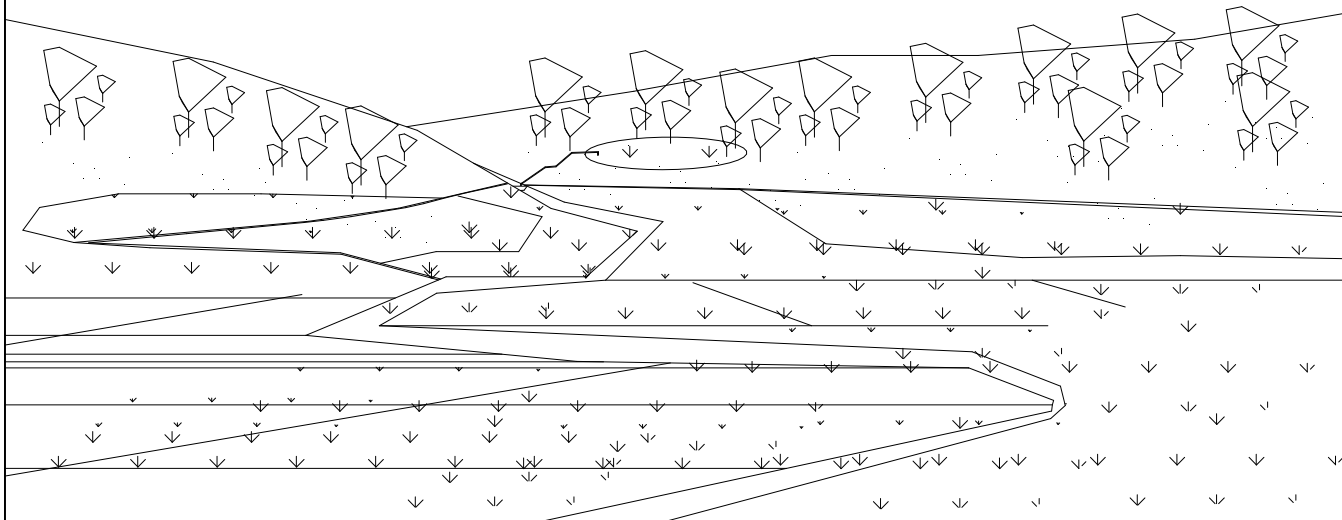


(1241) Agriculture and forestry

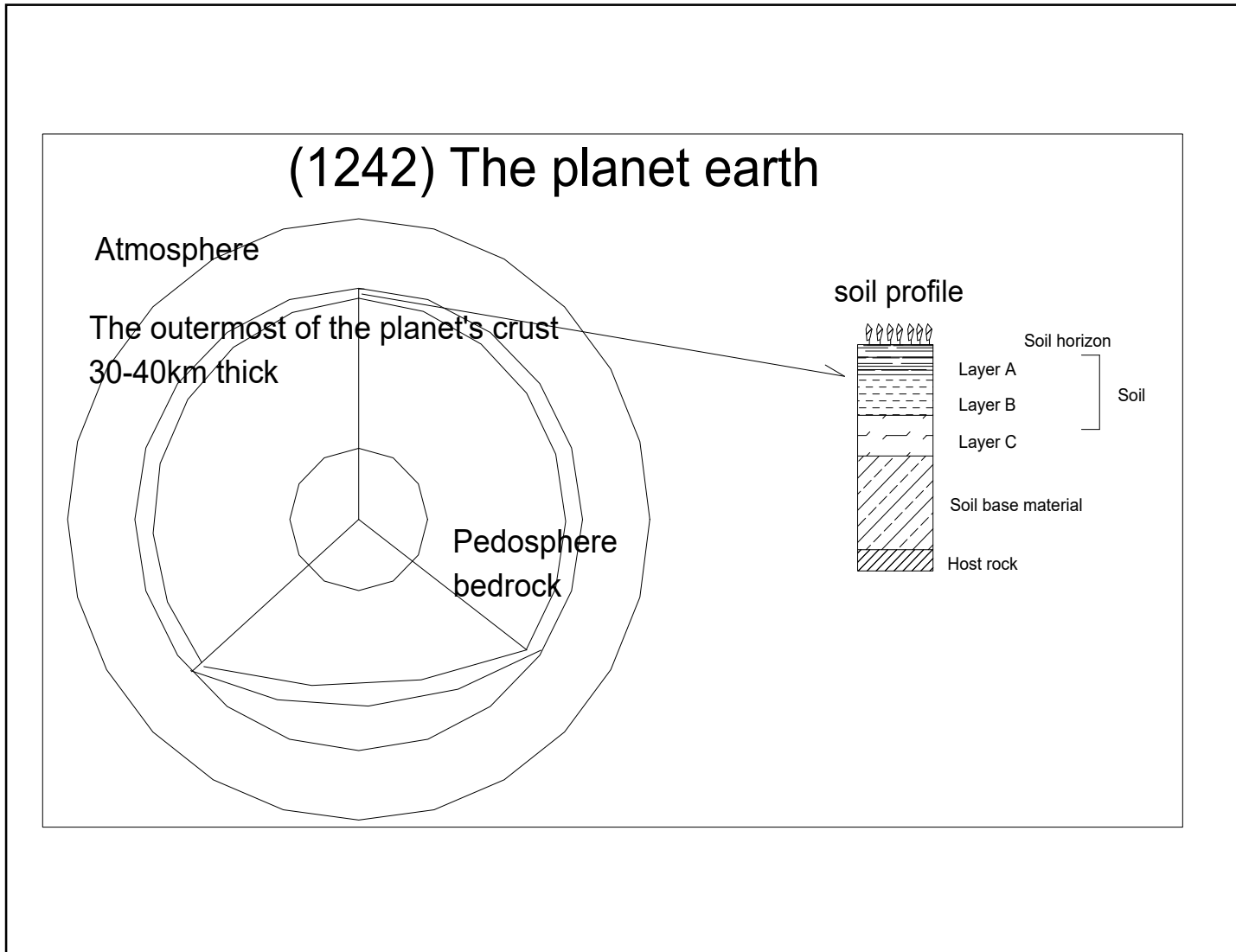
(1241) Agriculture and forestry

Prevent floods
Water source
Purification

Soil erosion prevention
Prevent landslides
Recreation



(1242) The planet earth



(1243) World Soil Map

(1243) World Soil Map

Environmental problems of soil

Soil deterioration

Rainfall erosion -Heavy rain

Wind erosion- Strong wind

Chemical deterioration-Salt accumulation

Physical deterioration -The soil hardens

Excessive [undue] environmental degradation

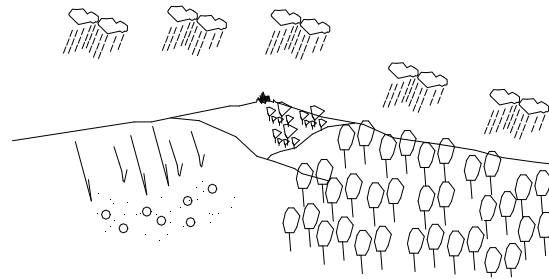
-Unused wasteland

the area of water

(1244) Environmental problems of soil 1

(1244) Environmental problems of soil 1

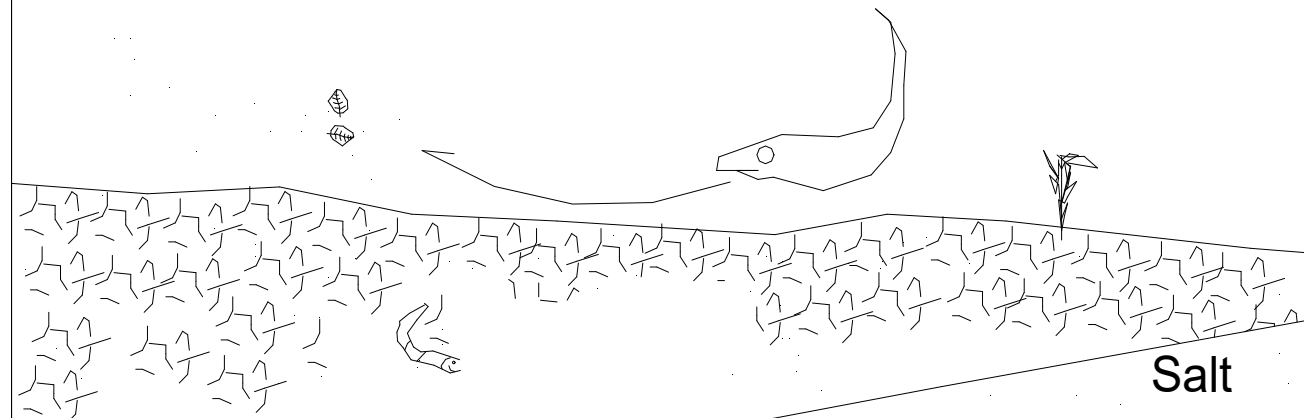
Rainfall erosion -Heavy rain



(1245) Environmental problems of soil 2

(1245) Environmental problems of soil 2

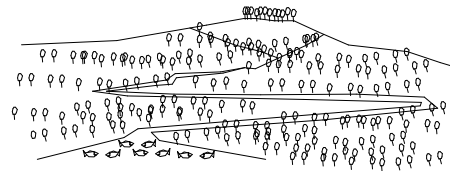
Wind erosion- Strong wind



(1246) A lot of plants

(1246) A lot of plants

- 1 The soil does not flow
due to rain
- 2 In the soil-microorganisms
- 3 Root breathing
- 4 Good drainage
- 5 Good air passage
- 6 Roots absorb nutrients
- 7 Incorporating carbon dioxide
and producing oxygen Photosynthesis
- 8 Plant-corrosion



(1247) No plants

(1247) No plants

Heavy rain

1 Soil flows due to rain

2 The soil becomes hard and is
blown away by the wind

3 roots can't breathe

4 Poor drainage

5 Poor air passage

6 Nutrient absorption

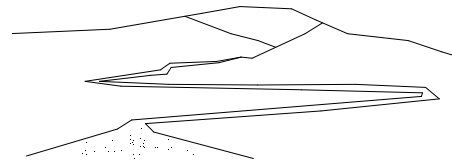
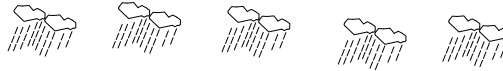
7 Water evaporates The soil is dry

8 Increase in carbon dioxide and increase in temperature

9 Overuse of chemical fertilizer

10 Salts -Accumulate on the surface of the earth

11 Crop does not grow



(1248) Factors for yield

(1248) Factors for yield

1 How to water

4 Variety of Seed

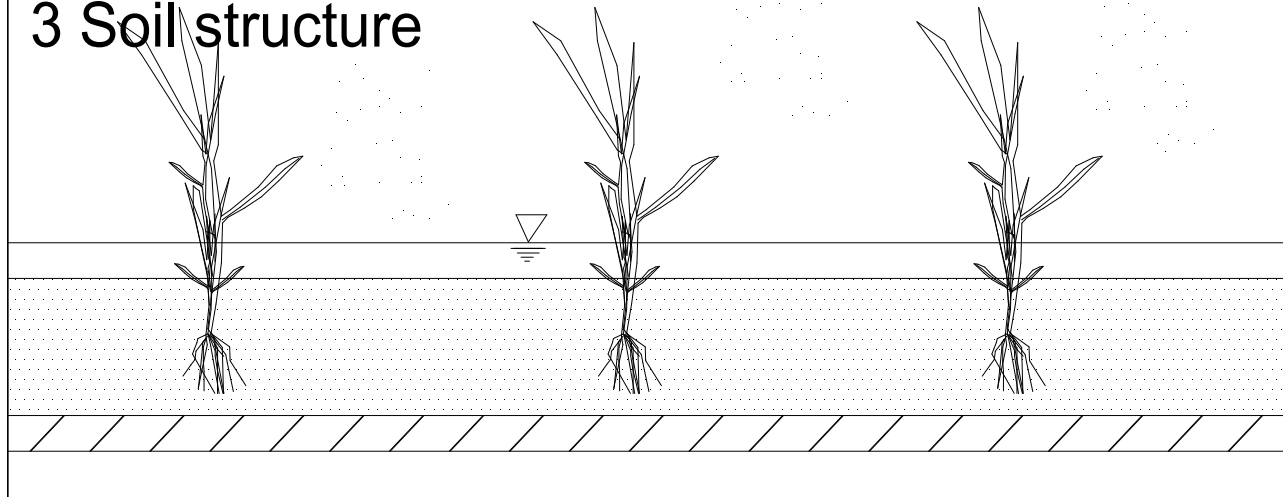
2 How to make a field

5 Weeds

Surrounding environment

6 Pests

3 Soil structure



(1249) Fertilizer

(1249) Fertilizer

1 Compost Fallen leaves

Straw livestock droppings

2 Organic fertilizer Soybean fish built-in

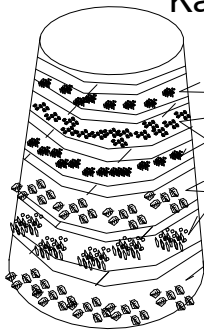
Animal and plant waste Dried powder

3 Chemical fertilizer : three main macronutrients

dipotassium phosphate

Nitrogens phosphorus -

Kalium chemical manufacture



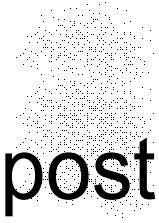
Garbage+ Rice

Fallen

Leaves

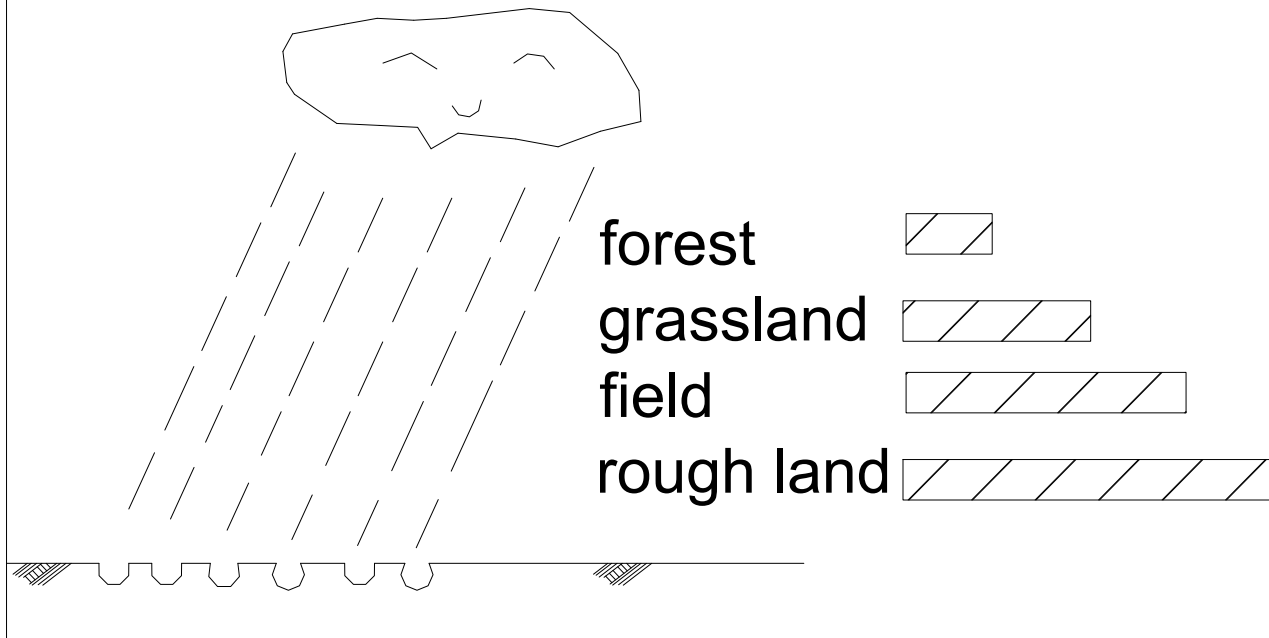
Bran

Compost



(1250) The amount of soil that decreases due to rain

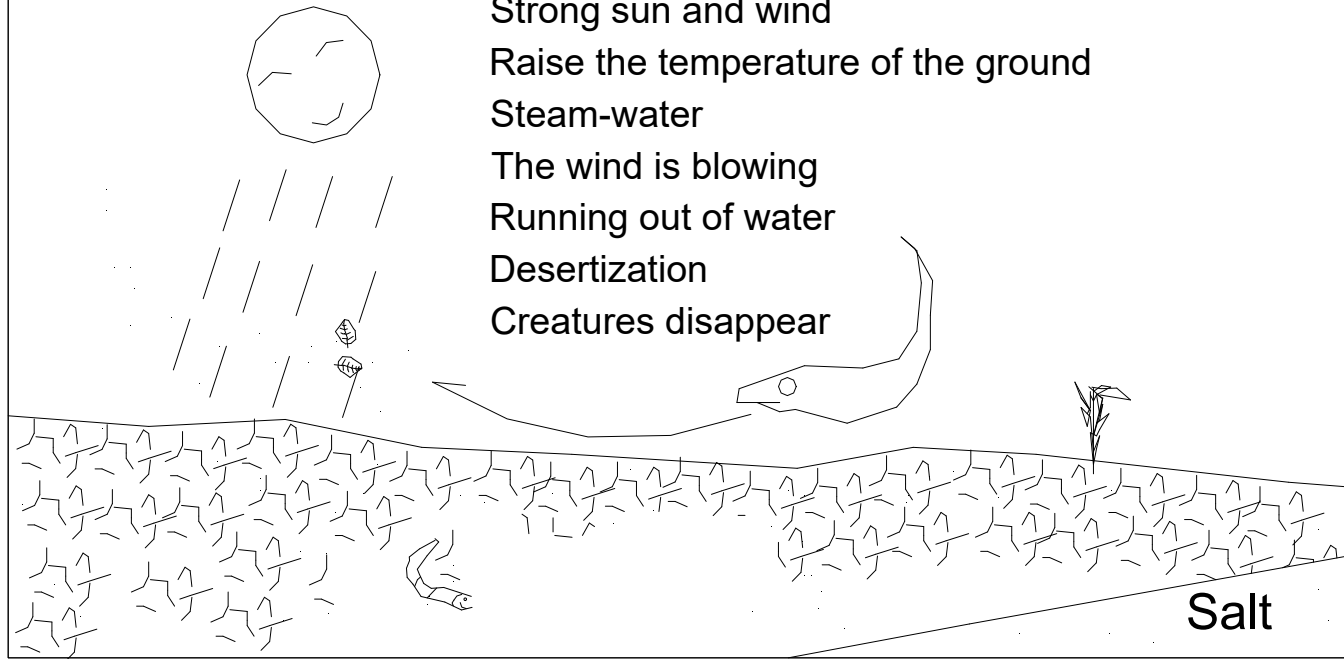
(1250) The amount of soil
that decreases due to rain



(1251) The Earth break down 1

(1251) The Earth break down 1

The wind that blows across the earth
Strong sun and wind
Raise the temperature of the ground
Steam-water
The wind is blowing
Running out of water
Desertization
Creatures disappear

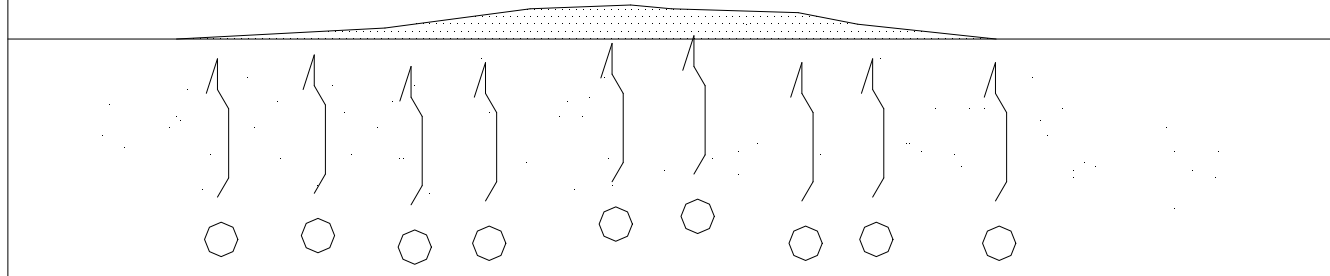


(1252) The Earth break down 2

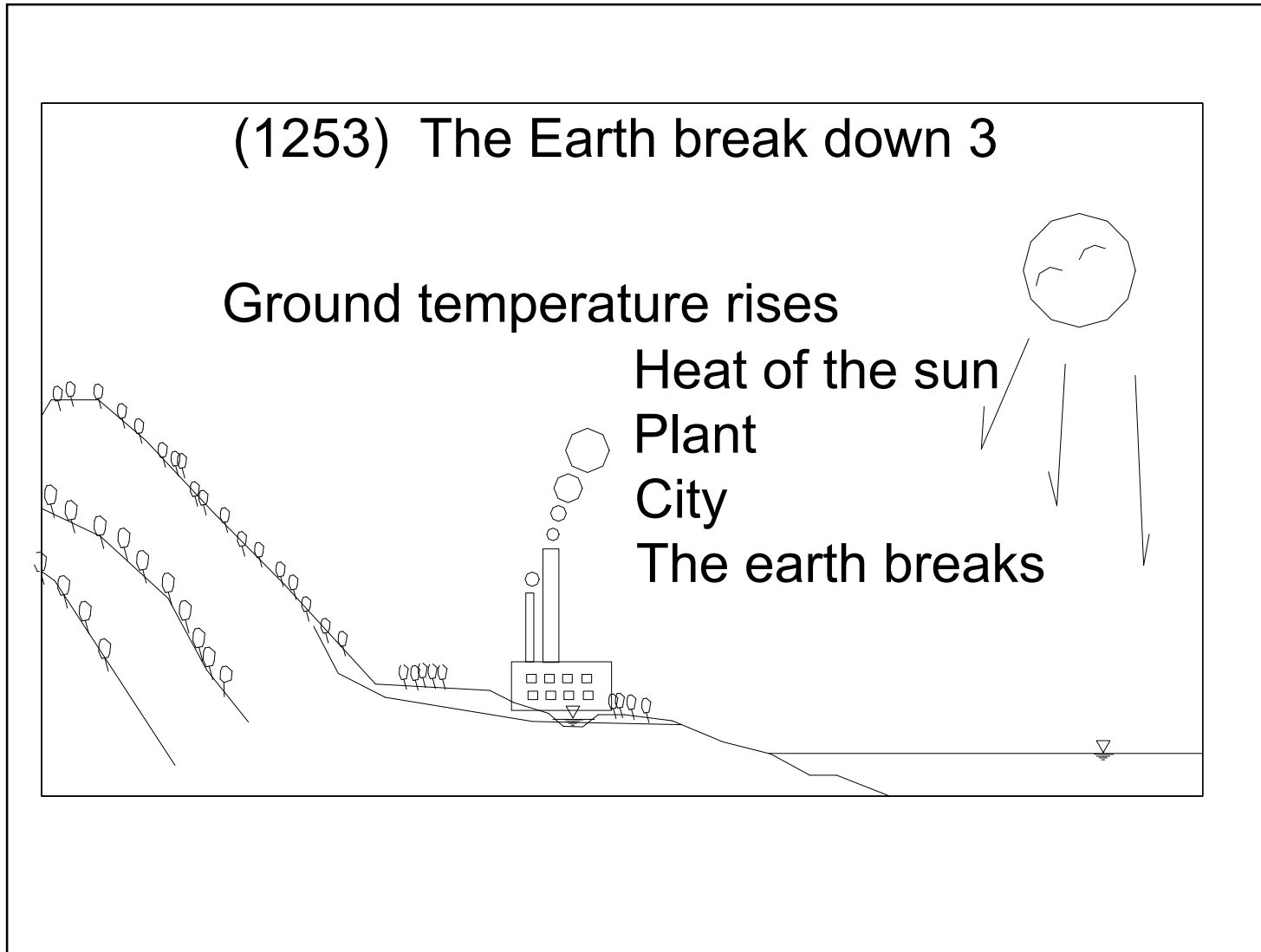
(1252) The Earth break down 2



Salt damage
Salt under the ground
Salt accumulates

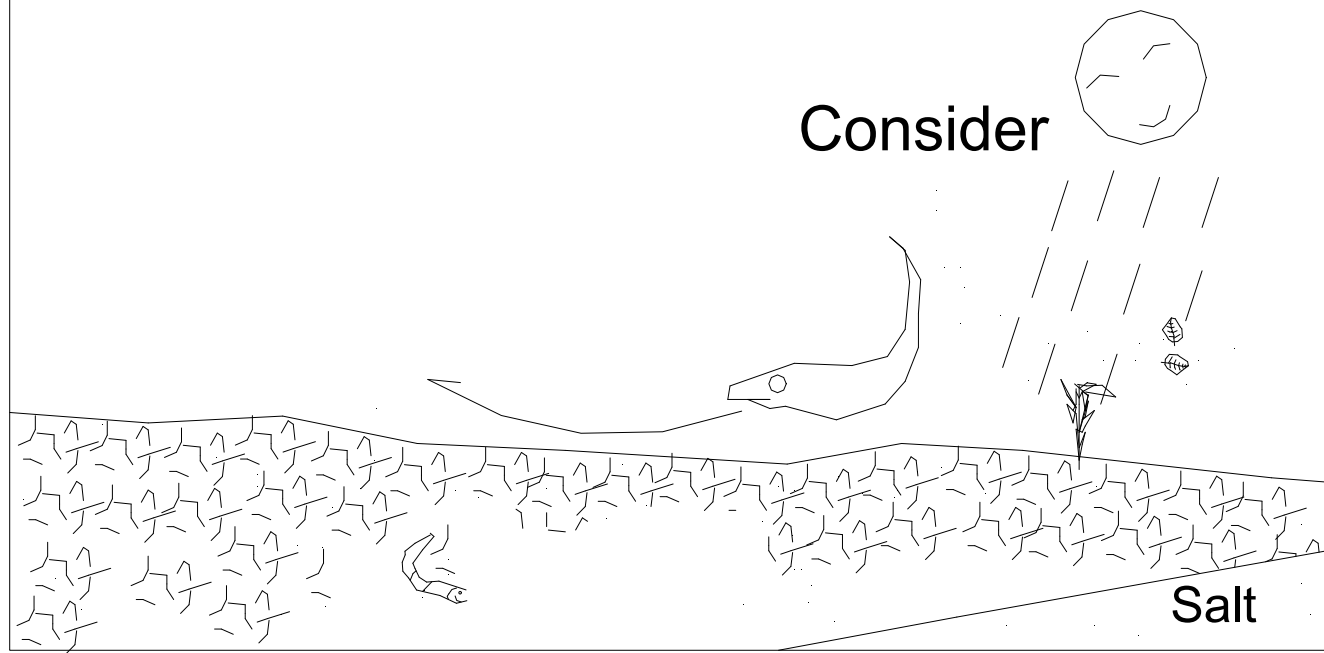


(1253) The Earth break down 3

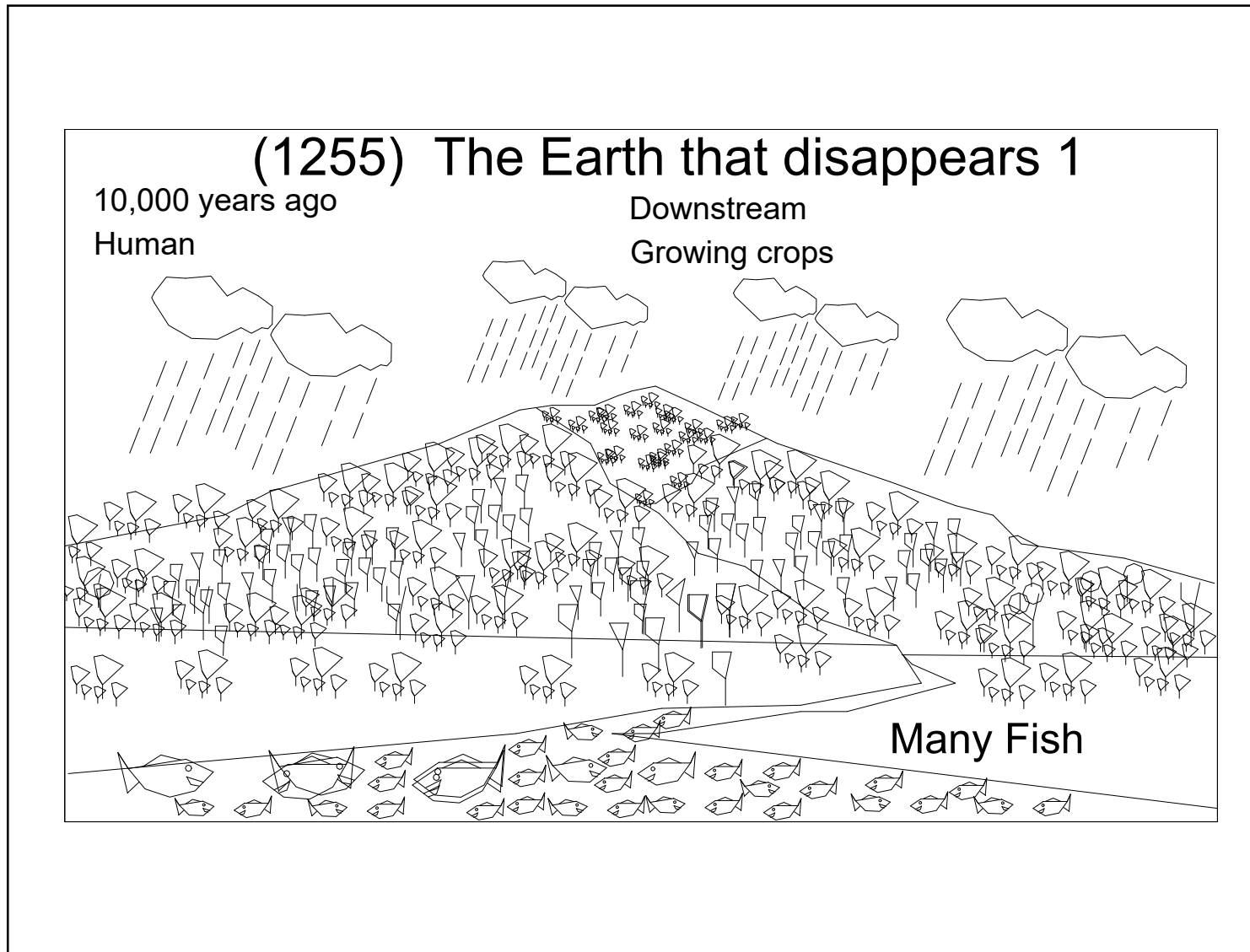


(1254) How to prevent heat and wind

(1254) How to prevent heat and wind

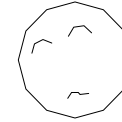


(1255) The Earth that disappears 1



(1256) The Earth that disappears 2

(1256) The Earth that disappears 2



1st century

Increase in number of humans

Forest trees - cut

Field - increase

Keep cows and sheep

Cultivation - thriving



(1257) The Earth that disappears 3

(1257) The Earth that disappears 3



Nineteenth century

The land is rough

Harvest - Decrease

Find another good place

Fertilizers Medicines - Microorganisms-die

Farmland hardens

Drainage and water retention - worsening

(1258) The Earth that disappears 4

(1258) The Earth that disappears 4

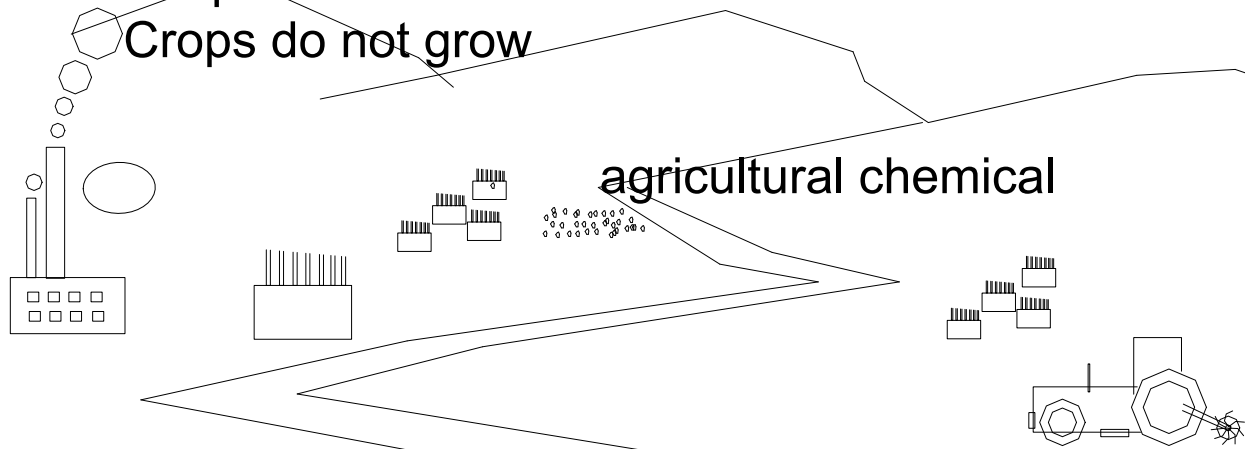
20th century

Road/Building/Mechanization

The amount of farmland in the world is decreasing

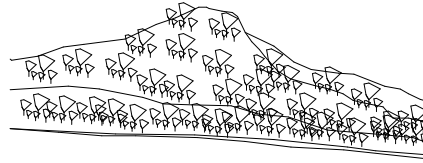
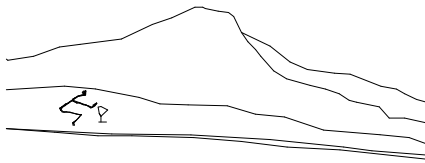
Municipal waste

Crops do not grow



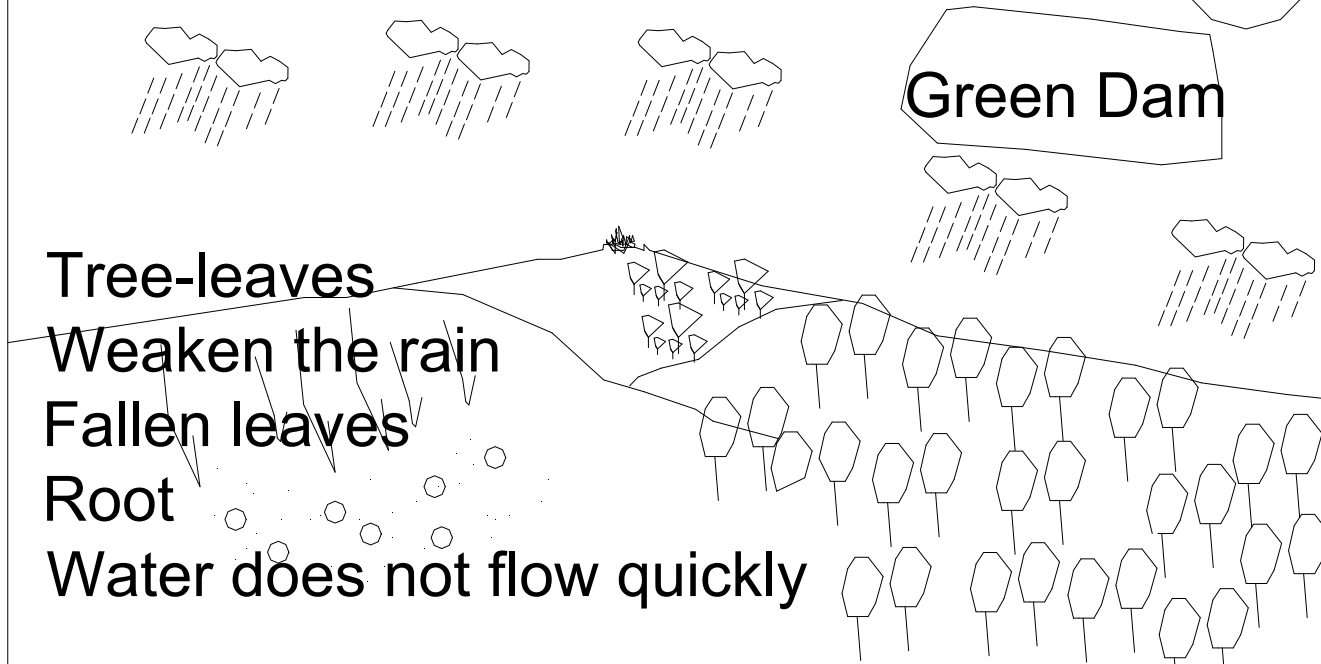
(1259) Protect The Earth-Operation Green 1

(1259) Protect The Earth-Operation Green 1



Sediment runoff prevention
Plant a tree
Create woods and forests

(1260) Protect The Earth-Operation Green 2



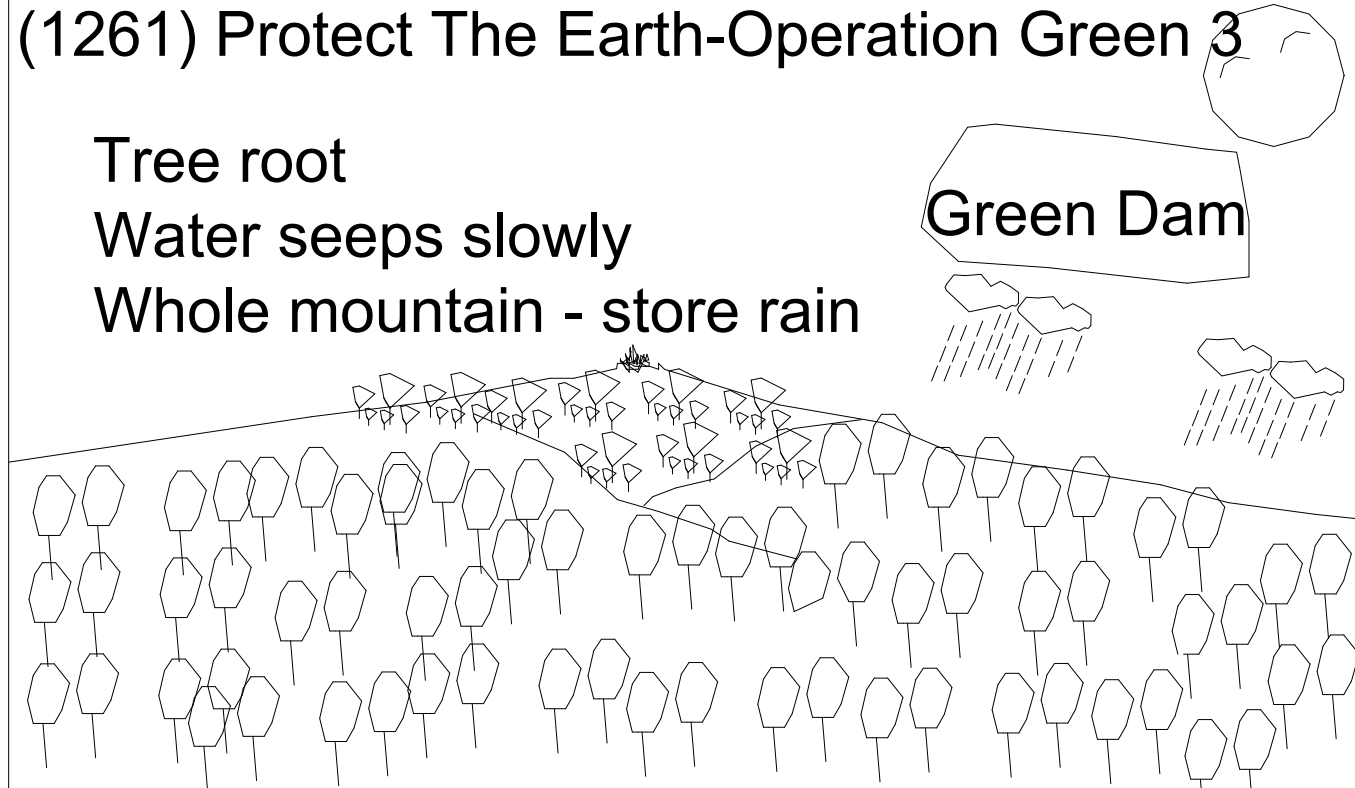
(1261) Protect The Earth-Operation Green 3

Tree root

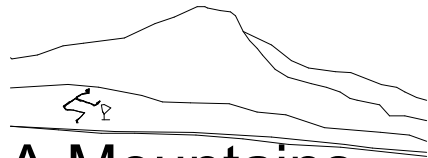
Water seeps slowly

Whole mountain - store rain

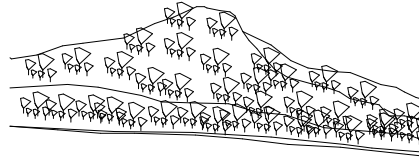
Green Dam



(1262) Protect The Earth-Operation Green 4

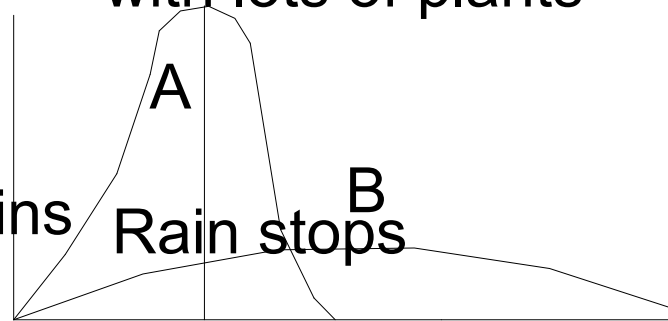


A Mountains
with few plants



B Mountains
with lots of plants

Amount of water
flowing out of mountains



(1263) Protect The Earth-Operation Green 5

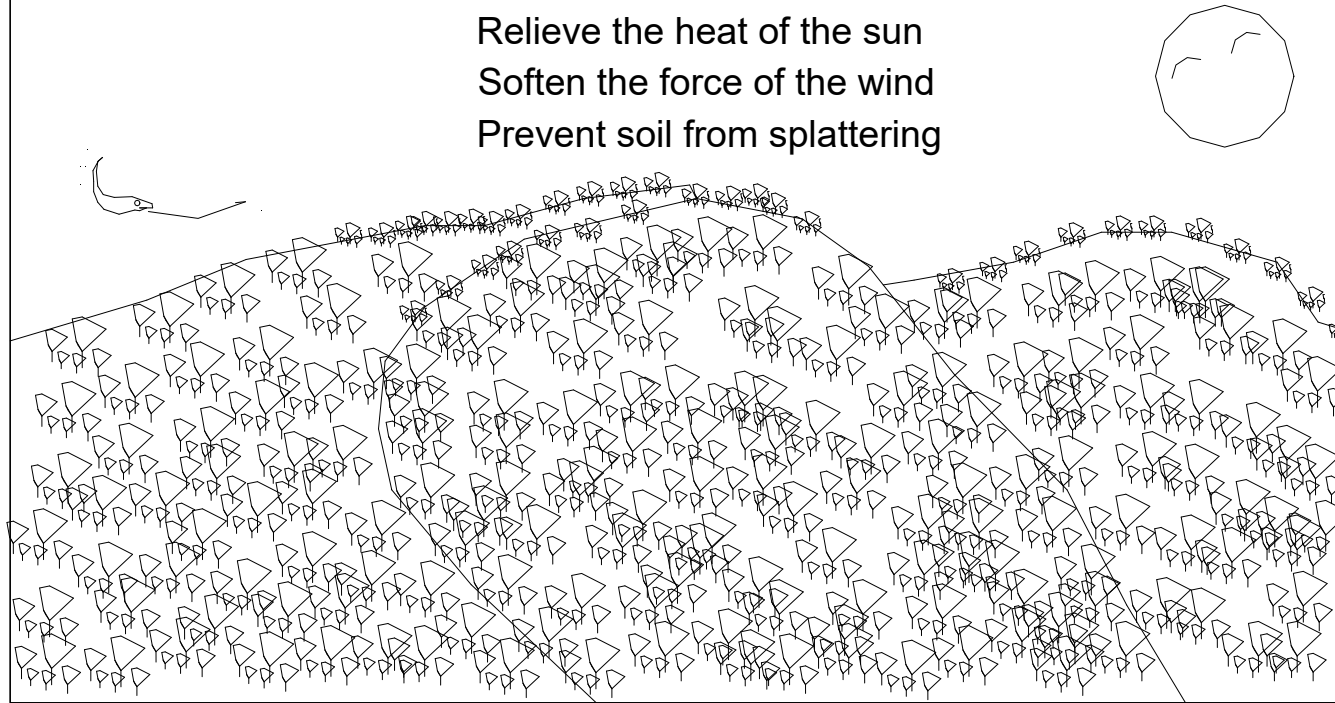
(1263) Protect The Earth-Operation Green 5

Leaves and Grass

Relieve the heat of the sun

Soften the force of the wind

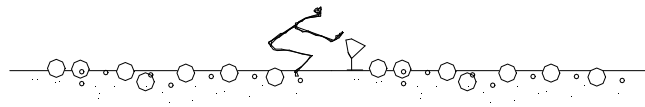
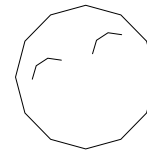
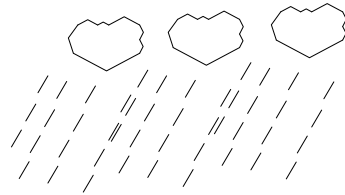
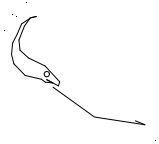
Prevent soil from splattering



(1264) Protect The Earth-Operation Green 6

(1264) Protect The Earth-Operation Green 6

Plant - Decay
Green increase
Rain, Heat, Wind
Prevent soil loss

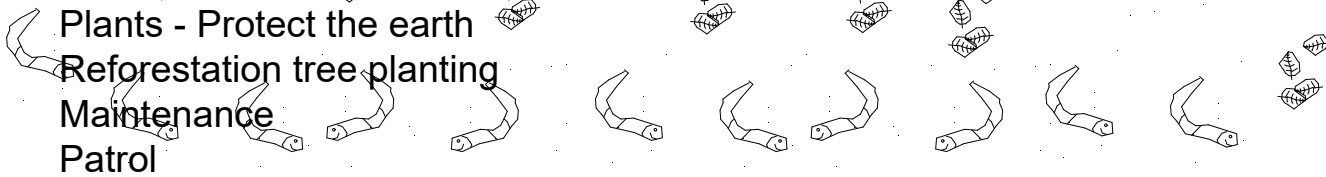


(1265) Protect The Earth-Operation Green 7

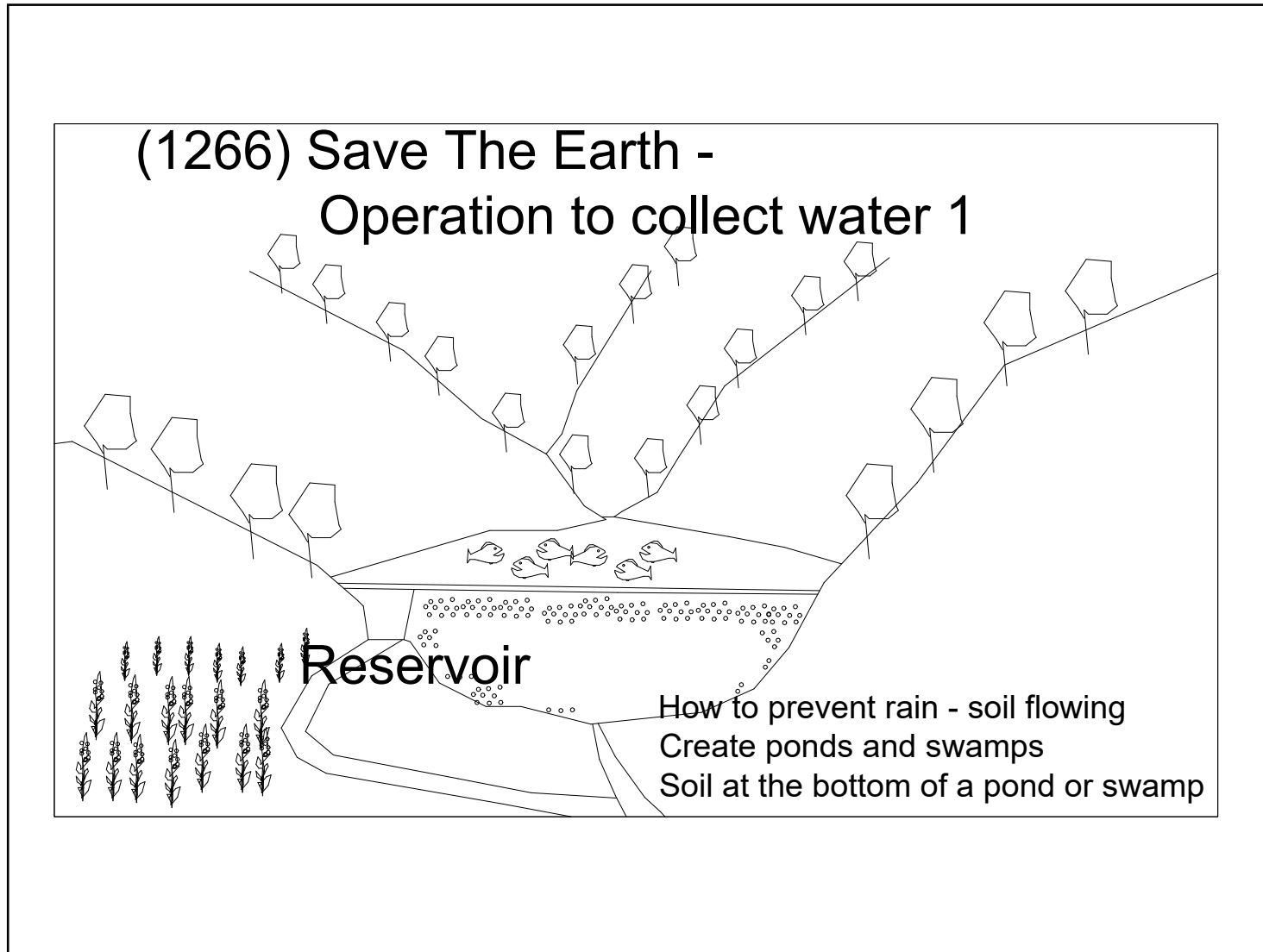
(1265) Protect The Earth-Operation Green 7



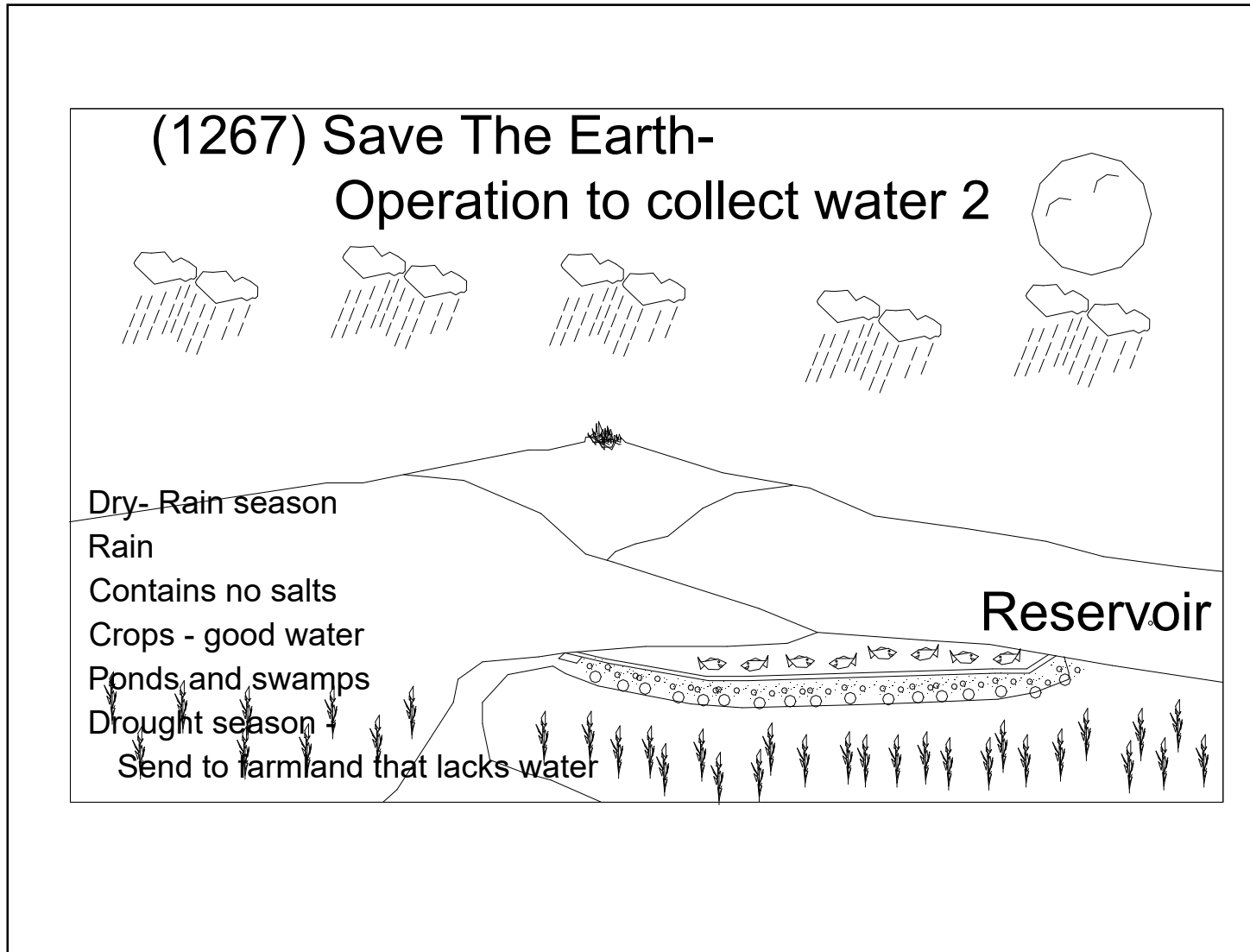
Plants - Protect the earth
Reforestation tree planting
Maintenance
Patrol



(1266) Save The Earth-Operation to collect water 1



(1267) Save The Earth-Operation to collect water 2



(1268) Save The Earth-Operation to collect water 3

(1268) Save The Earth- Operation to collect water 3

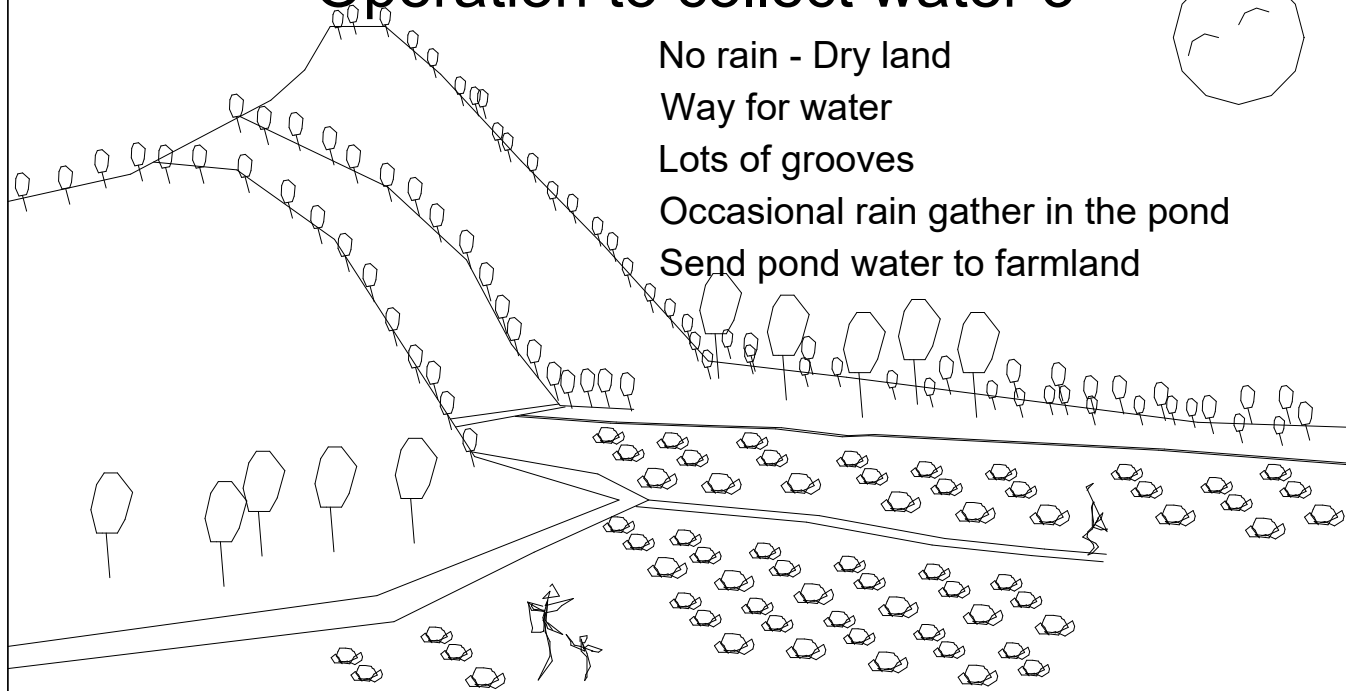
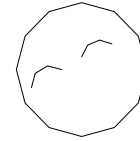
No rain - Dry land

Way for water

Lots of grooves

Occasional rain gather in the pond

Send pond water to farmland



(1269) Save The Earth-Operation to collect water 4

(1269) Save The Earth- Operation to collect water 4



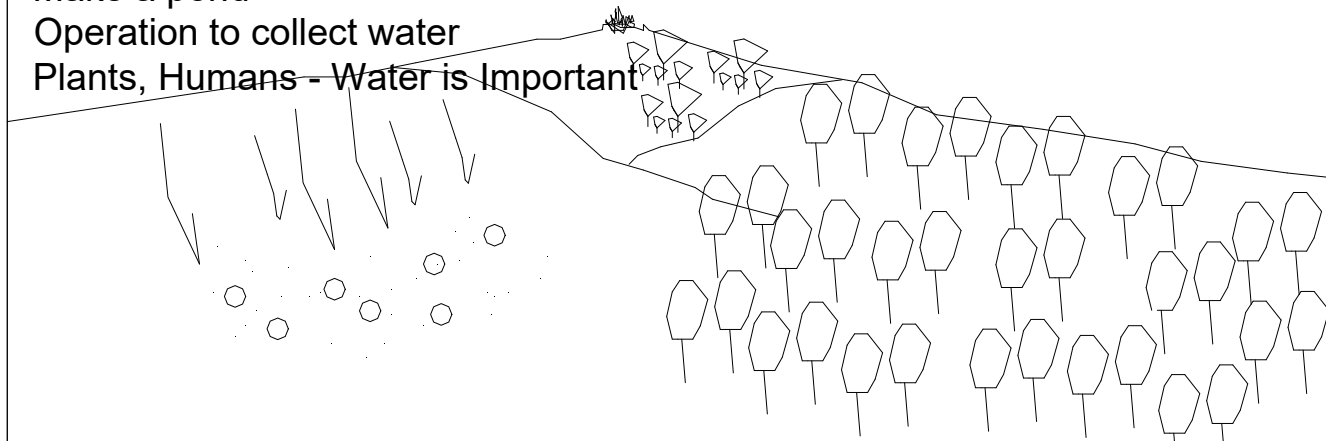
Where there is a lot of rain - do not wash away the soil

Where there is little rain - not wash away the rain

Make a pond

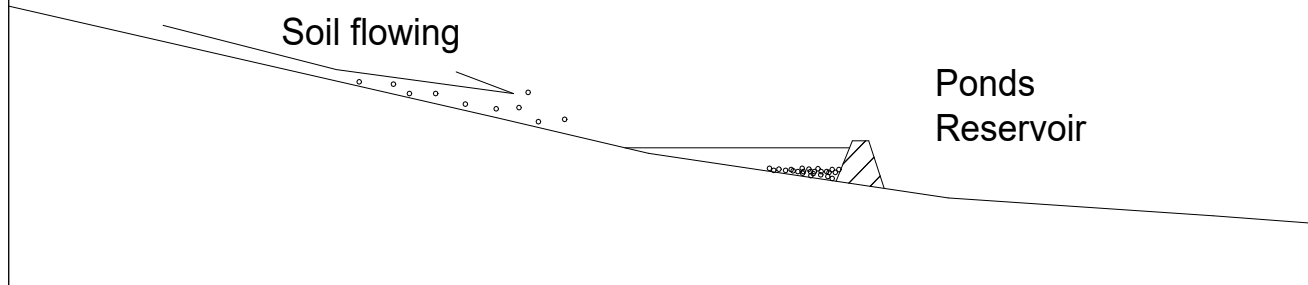
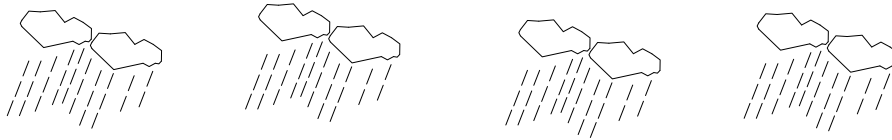
Operation to collect water

Plants, Humans - Water is Important



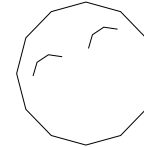
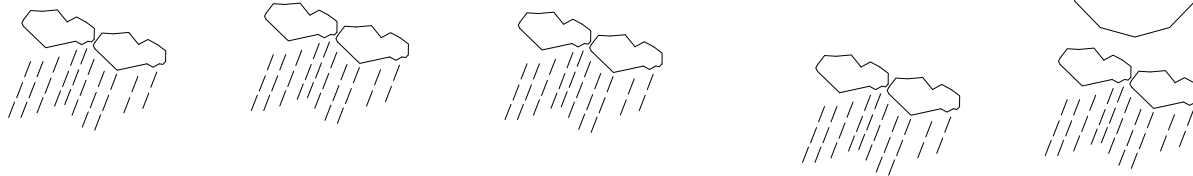
(1270) Save The Earth-Operation to collect water 5

(1270) Save The Earth- Operation to collect water 5



(1271) Save The Earth-Operation to collect water 6

(1271) Save The Earth- Operation to collect water 6



Contains no salts

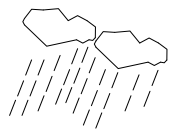
Drought season -
Send to farmland that lacks water

Reservoir Ponds and swamps



(1272) Save The Earth-Operation to collect water 7

(1272) Save The Earth- Operation to collect water 7



Dry land

Lots of channel

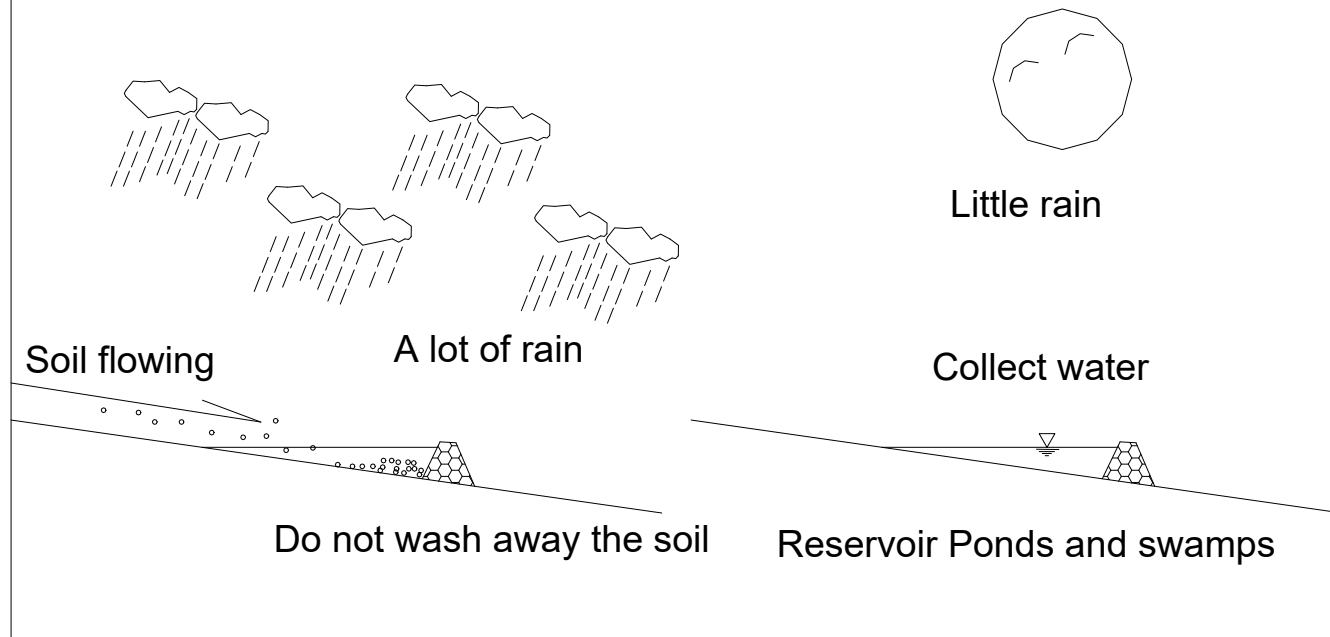
Occasional rain gather in the pond

Send pond water to farmland

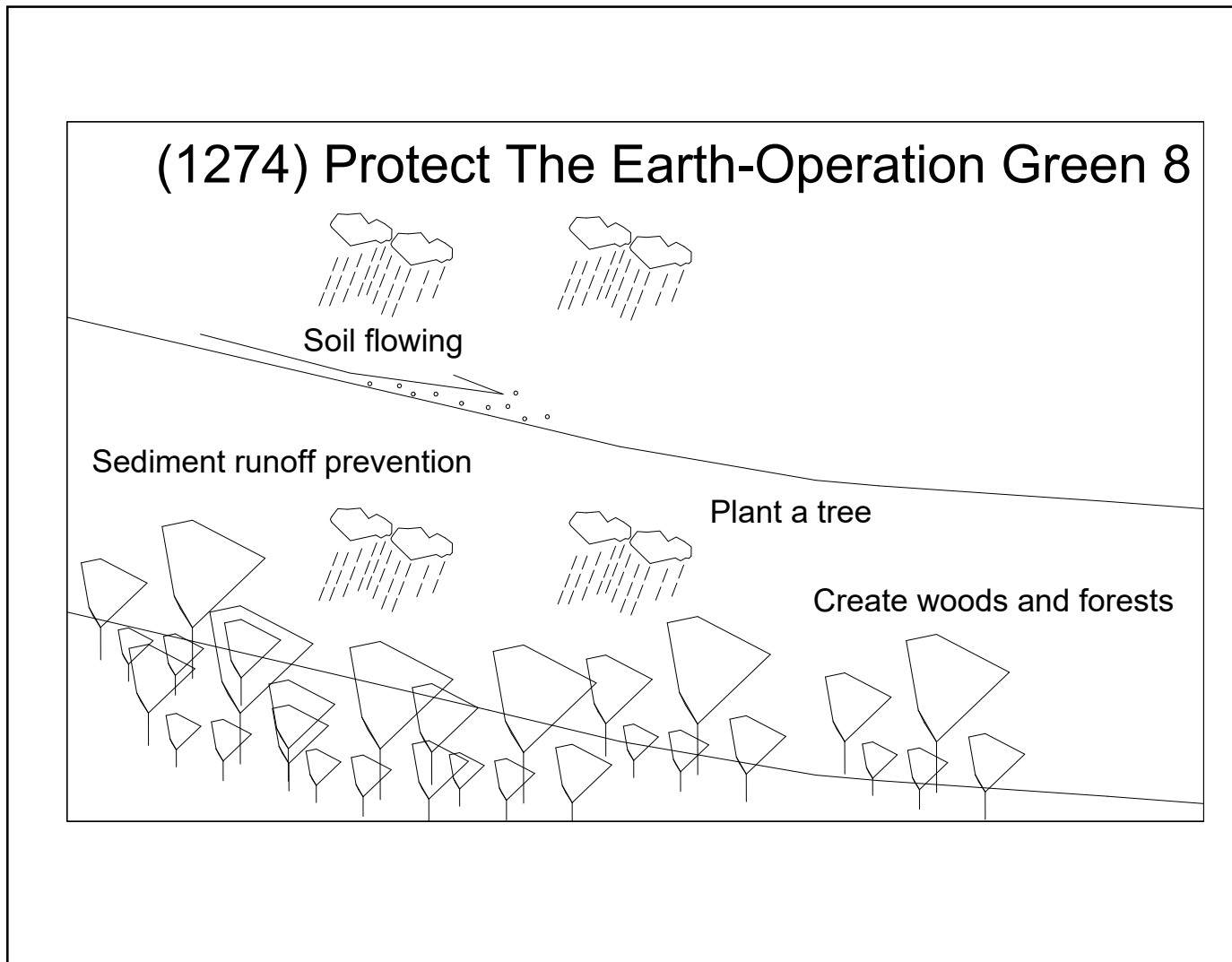


(1273) Save The Earth-Operation to collect water 8

(1273) Save The Earth- Operation to collect water 8

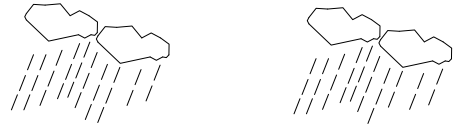


(1274) Protect The Earth-Operation Green 8

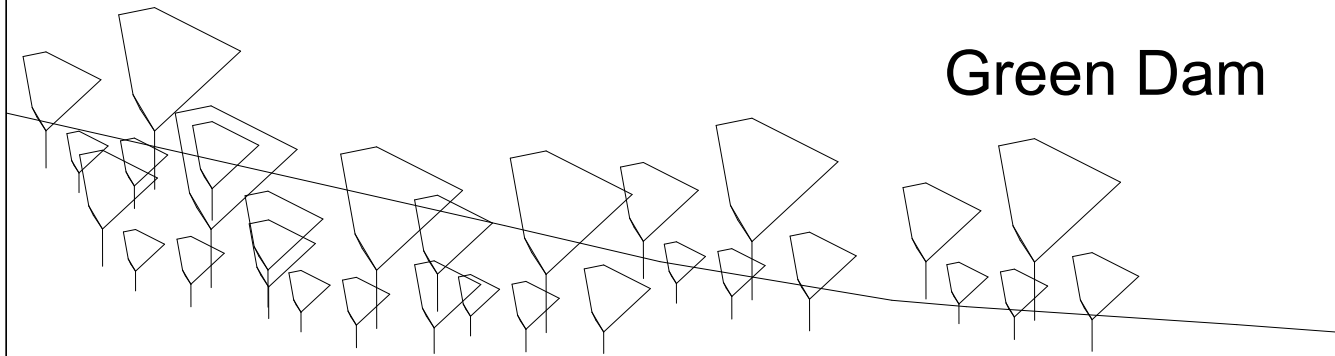


(1275) Protect The Earth-Operation Green 9

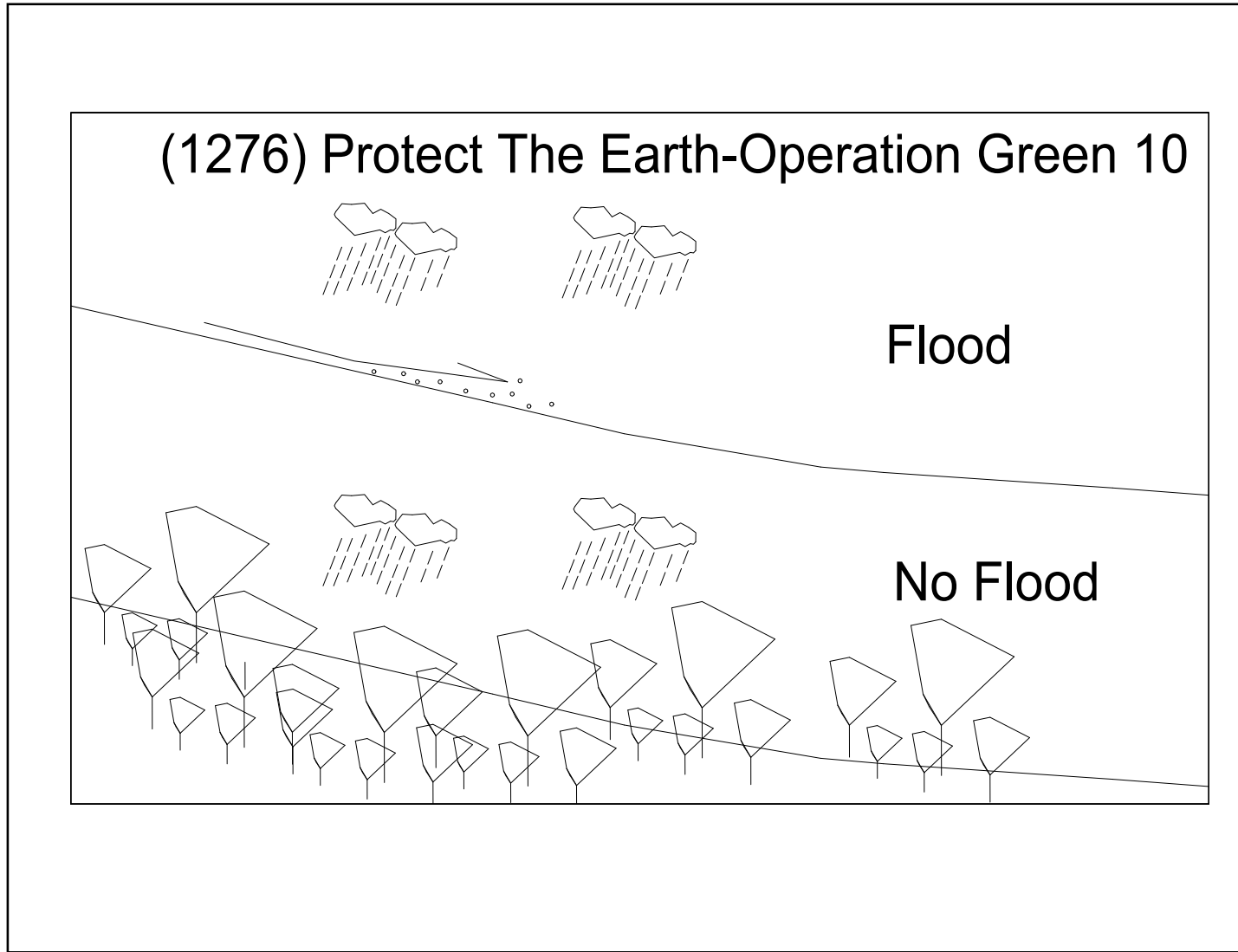
(1275) Protect The Earth-Operation Green 9



Green Dam

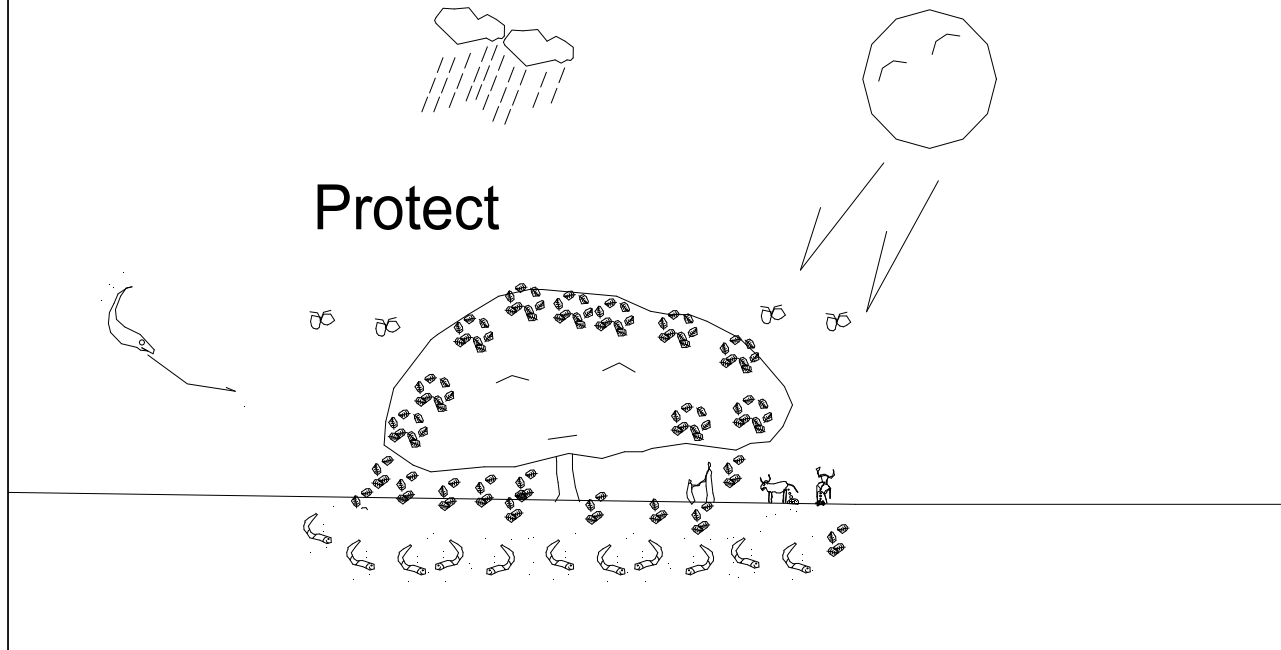


(1276) Protect The Earth-Operation Green 10



(1277) Protect The Earth-Operation Green 11

(1277) Protect The Earth-Operation Green 11



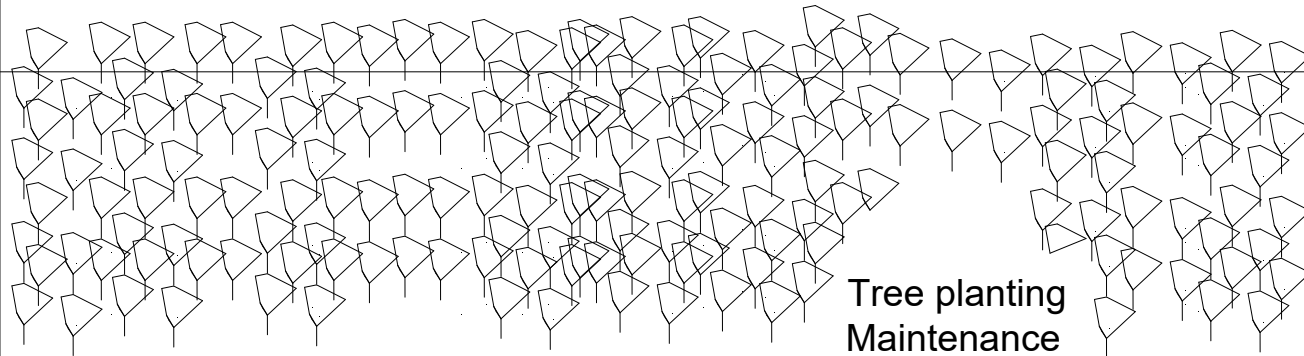
(1278) Protect The Earth-Operation Green 12

(1278) Protect The Earth-Operation Green 12

Nothing

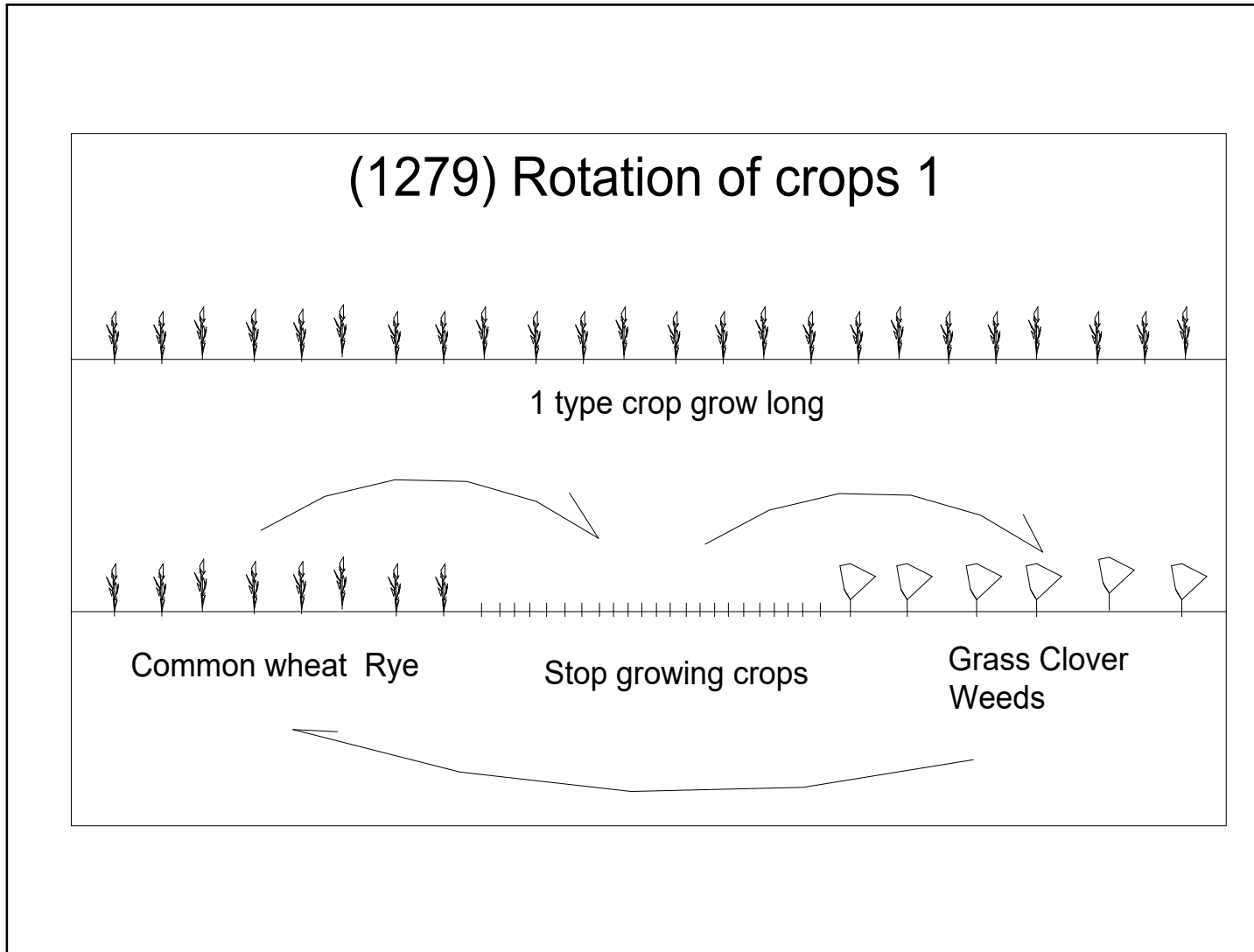


Happiness

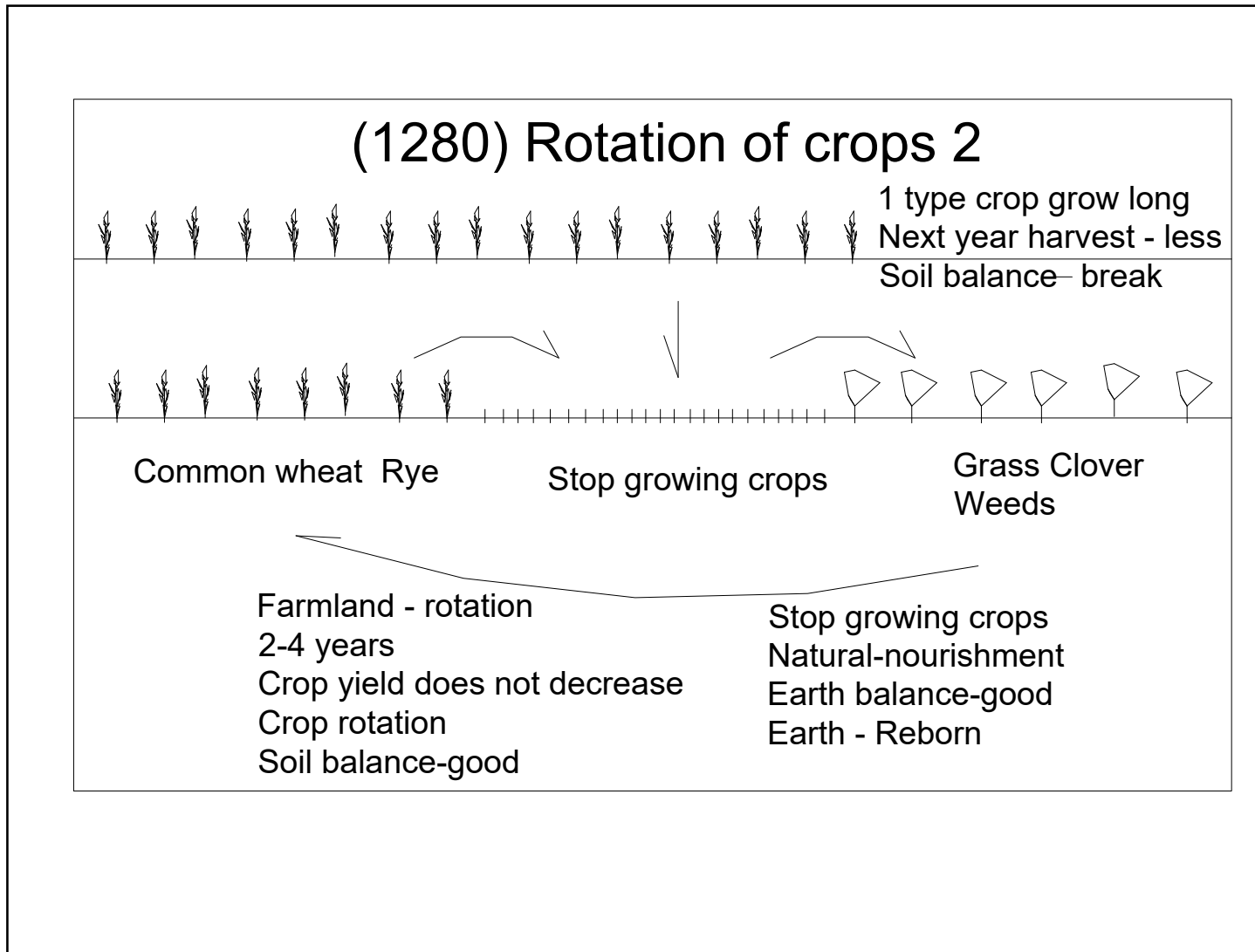


Tree planting
Maintenance

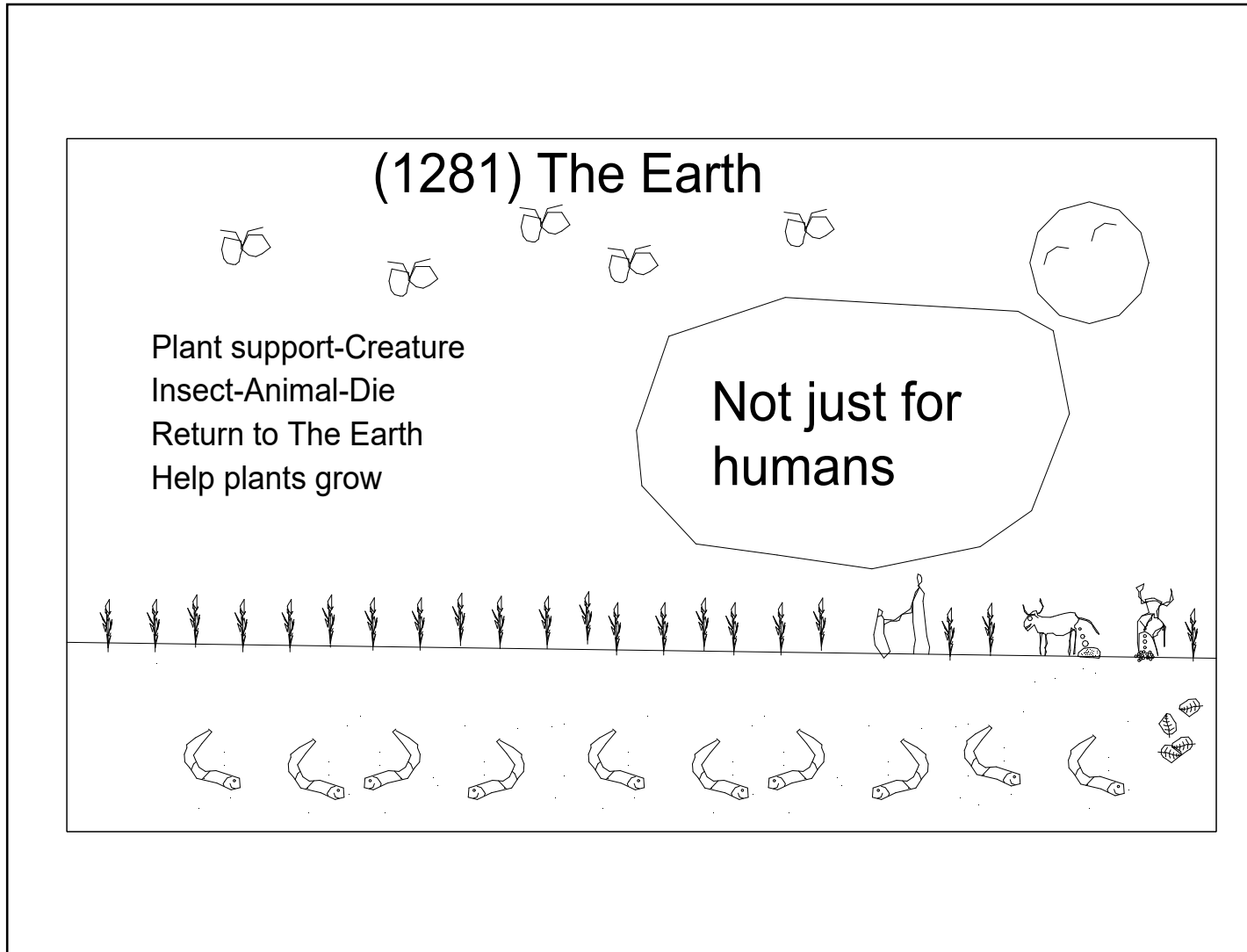
(1279) Rotation of crops 1



(1280) Rotation of crops 2

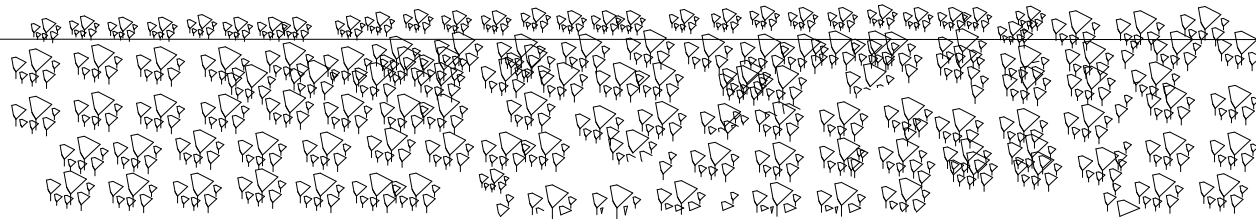


(1281) The Earth



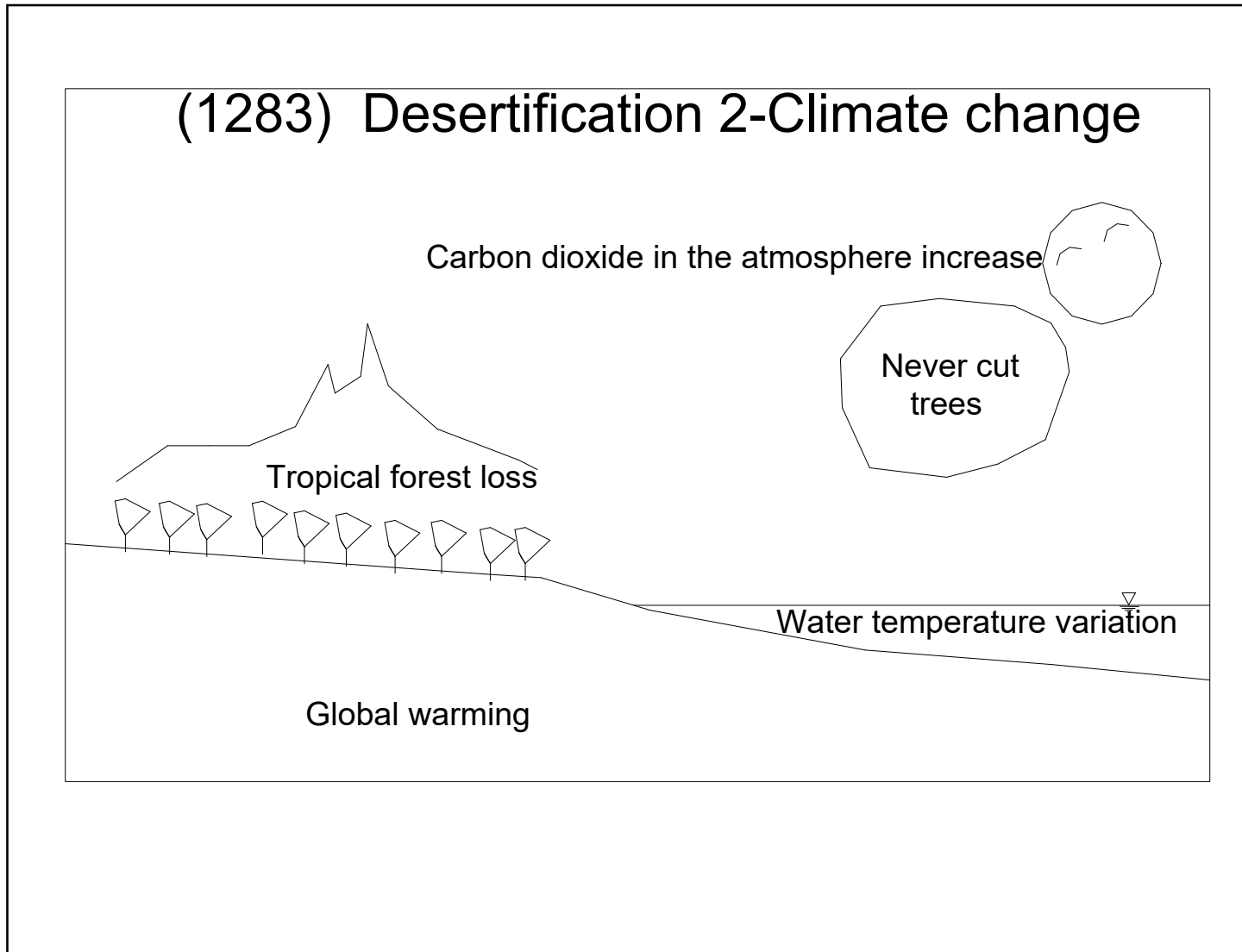
(1282) Desertification 1

(1282) Desertification 1



- 1 Climate change
- 2 Human activity-barren land-human factor
- 3 Overfed sheep-goat
- 4 Cut down too many trees
- 5 Over Cultivation
- 6 Wind erosion
- 7 Water erosion
- 8 Wrong water management -salt damage
- 9 Poverty-Population growth

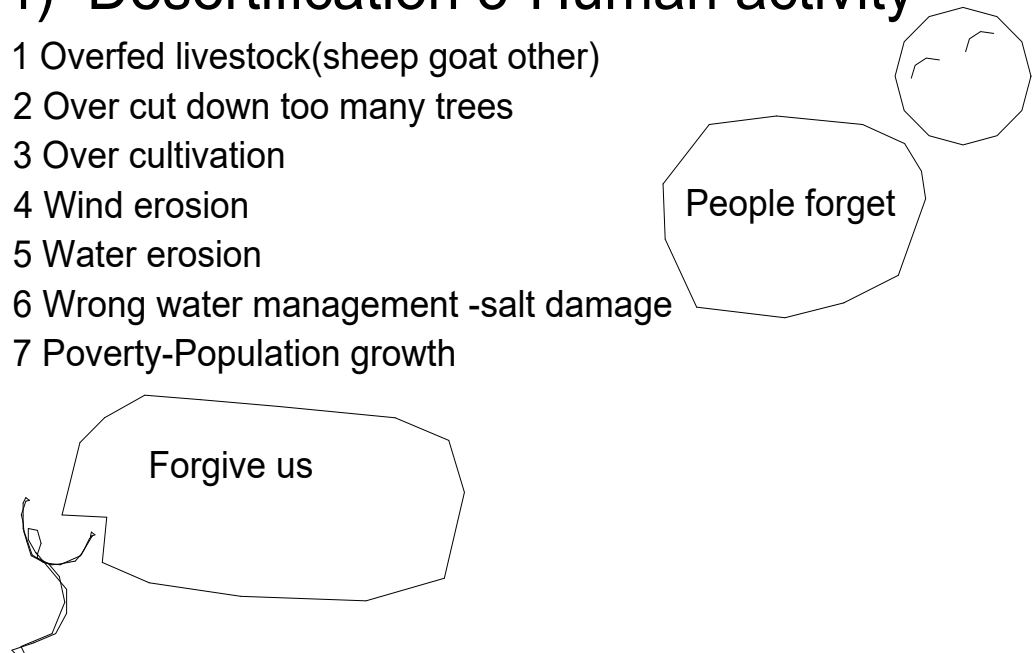
(1283) Desertification 2-Climate change



(1284) Desertification 3-Human activity

(1284) Desertification 3-Human activity

- 1 Overfed livestock(sheep goat other)
- 2 Over cut down too many trees
- 3 Over cultivation
- 4 Wind erosion
- 5 Water erosion
- 6 Wrong water management -salt damage
- 7 Poverty-Population growth



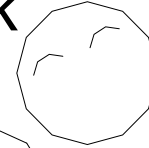
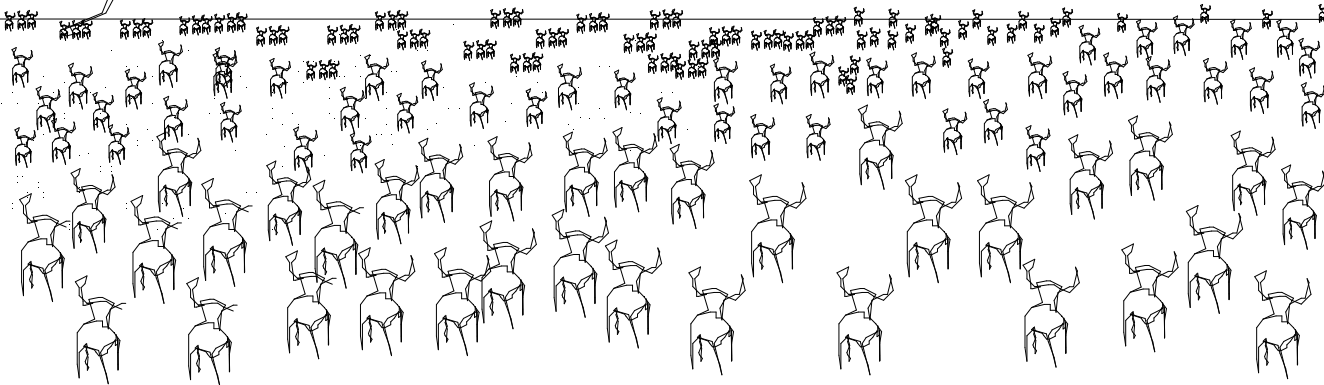
People forget

Forgive us

(1285) Desertification 4-Overfed livestock

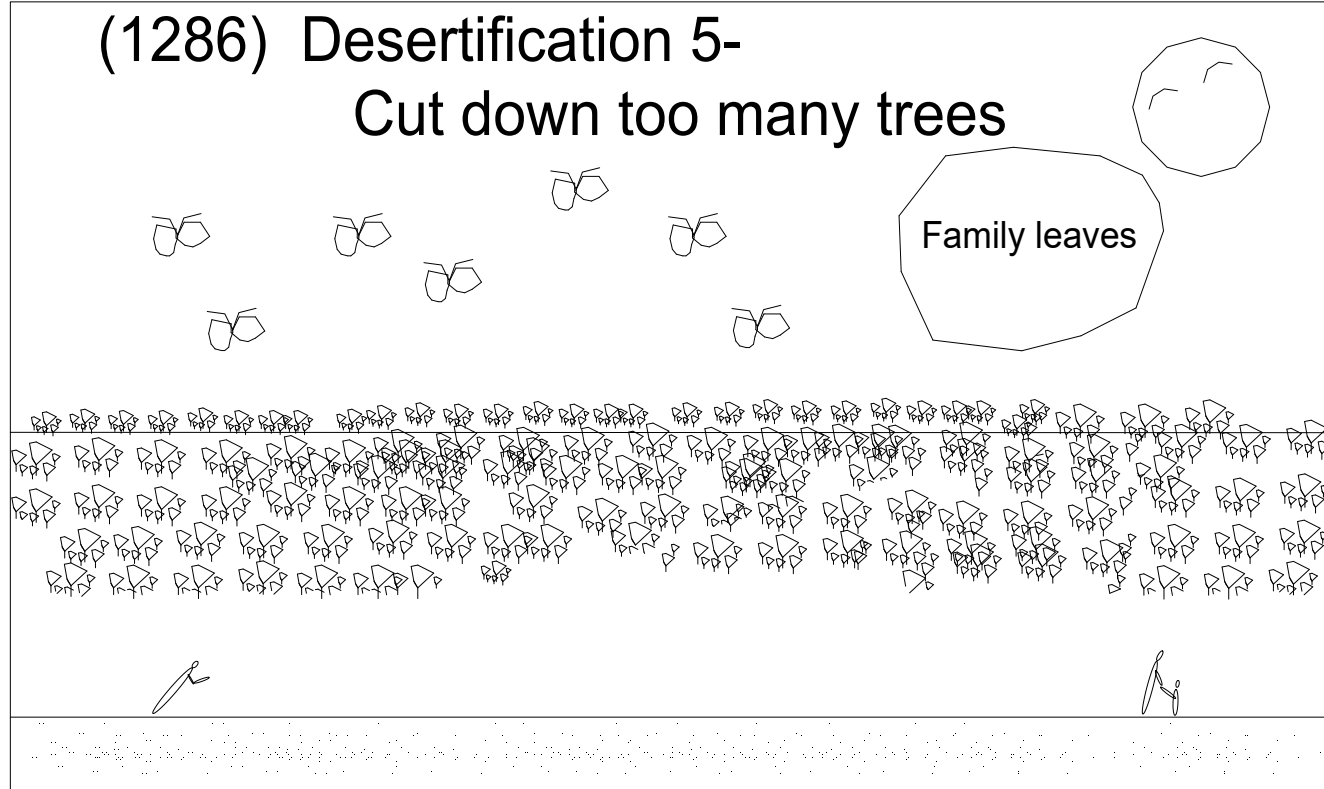
Wonder what should be done

Stop eating meat

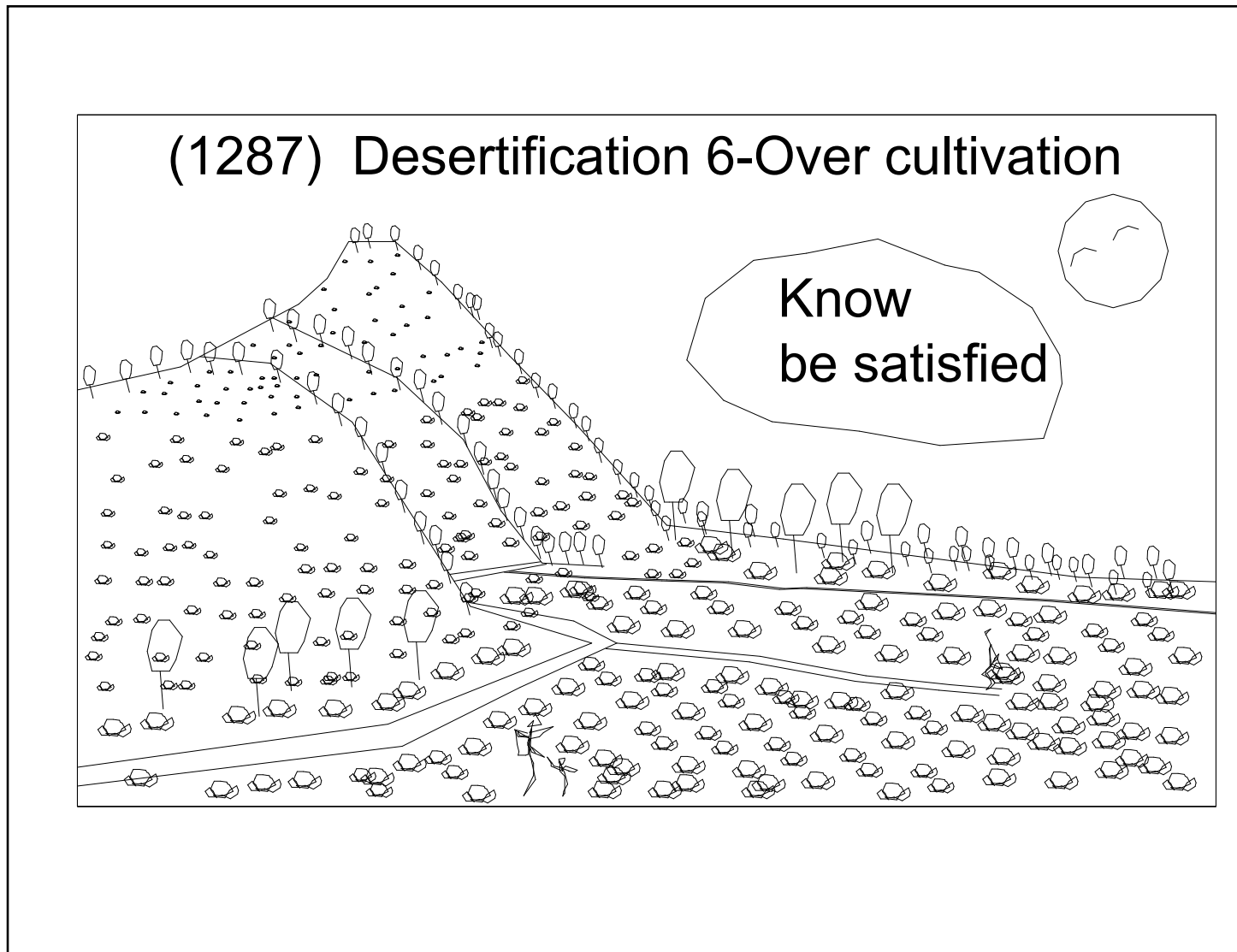


(1286) Desertification 5-Cut down too many trees

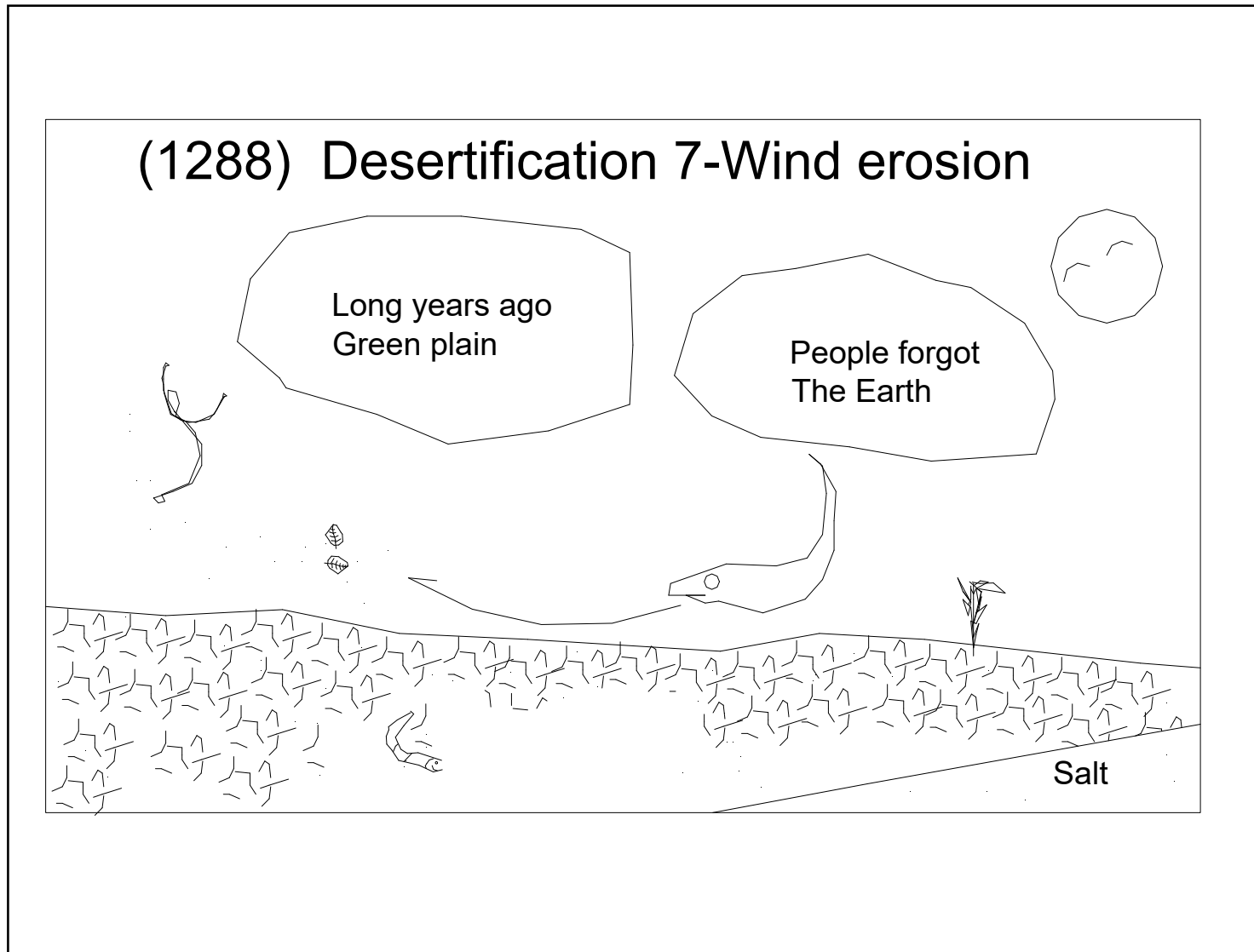
(1286) Desertification 5-
Cut down too many trees



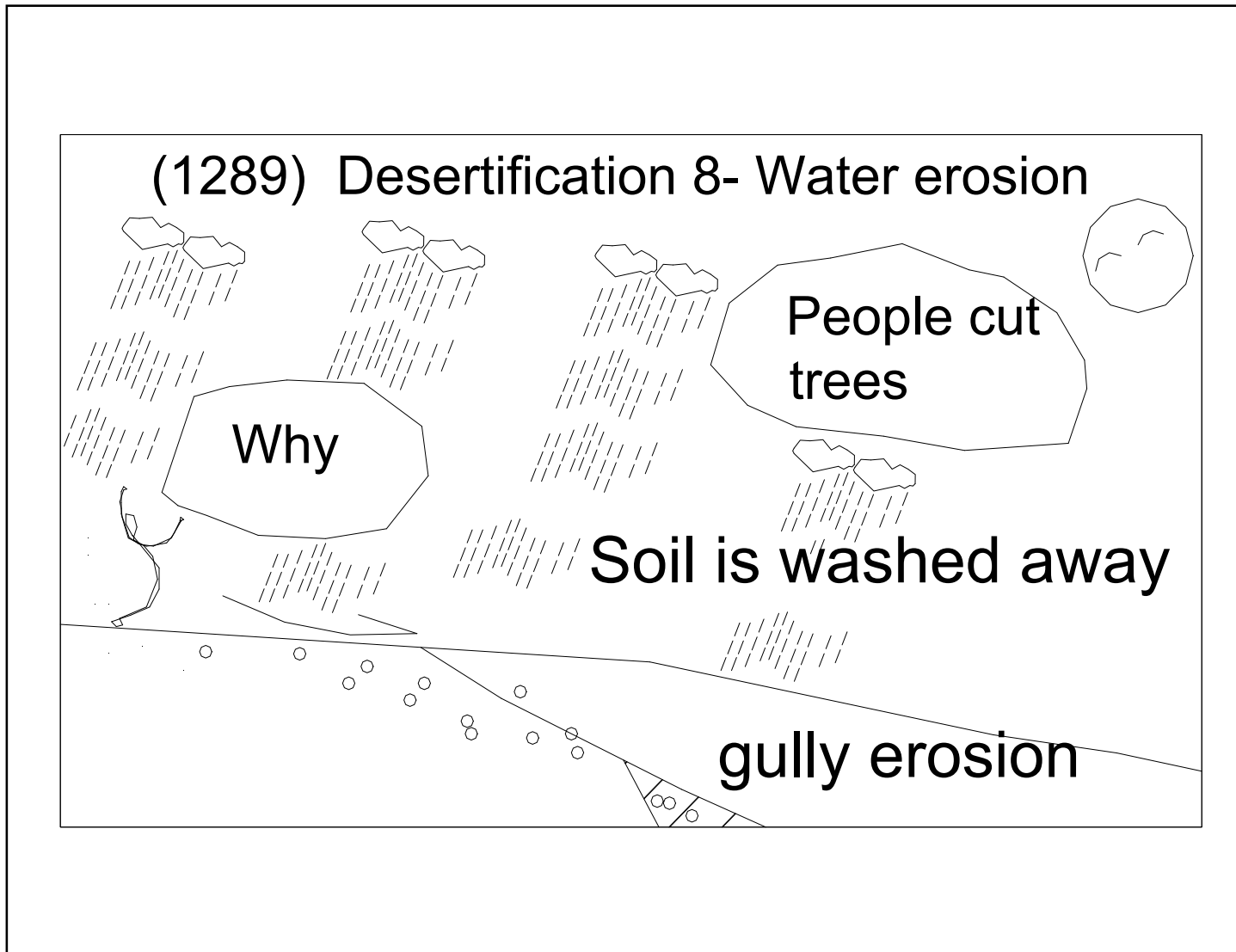
(1287) Desertification 6-Over cultivation



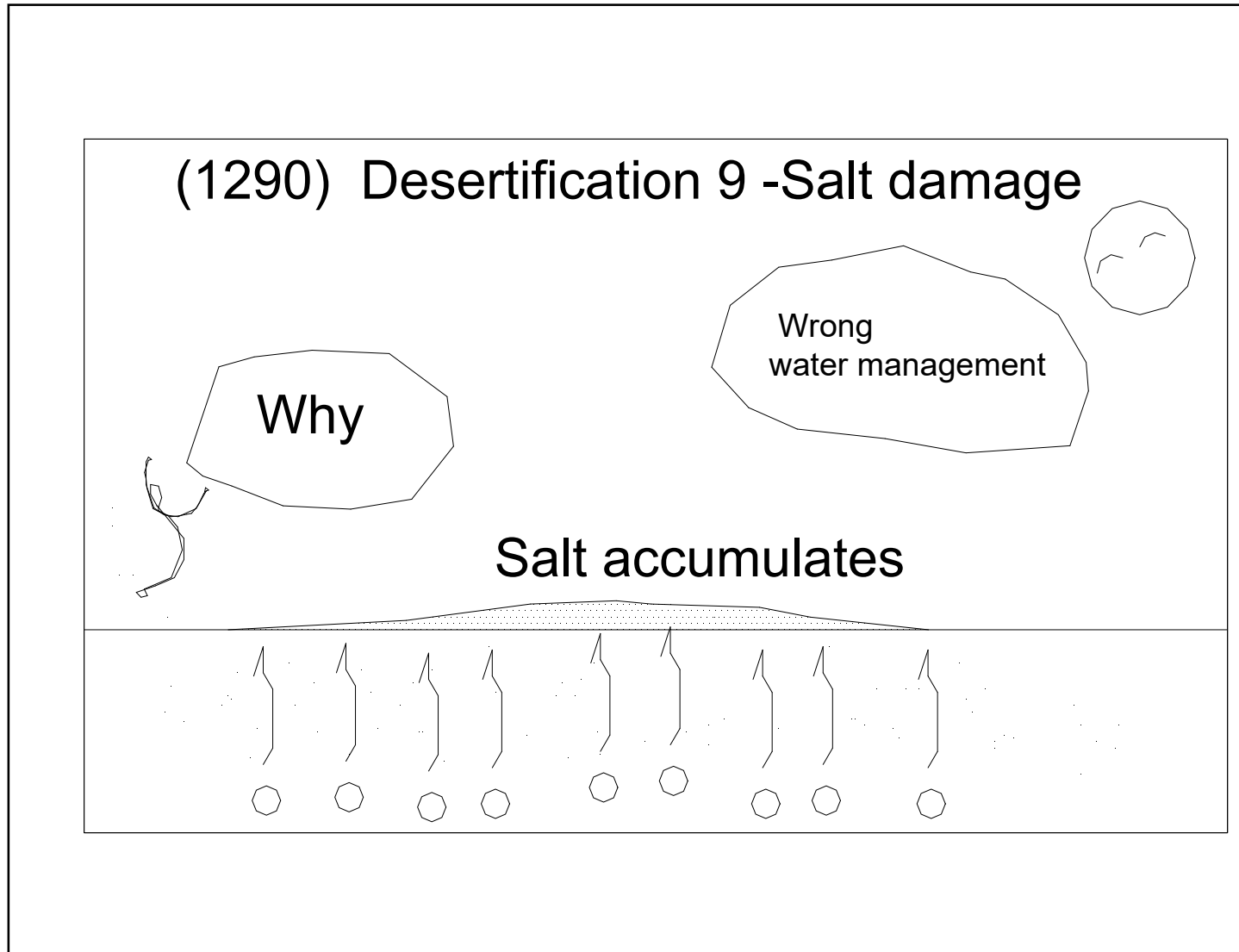
(1288) Desertification 7-Wind erosion



(1289) Desertification 8-Water erosion

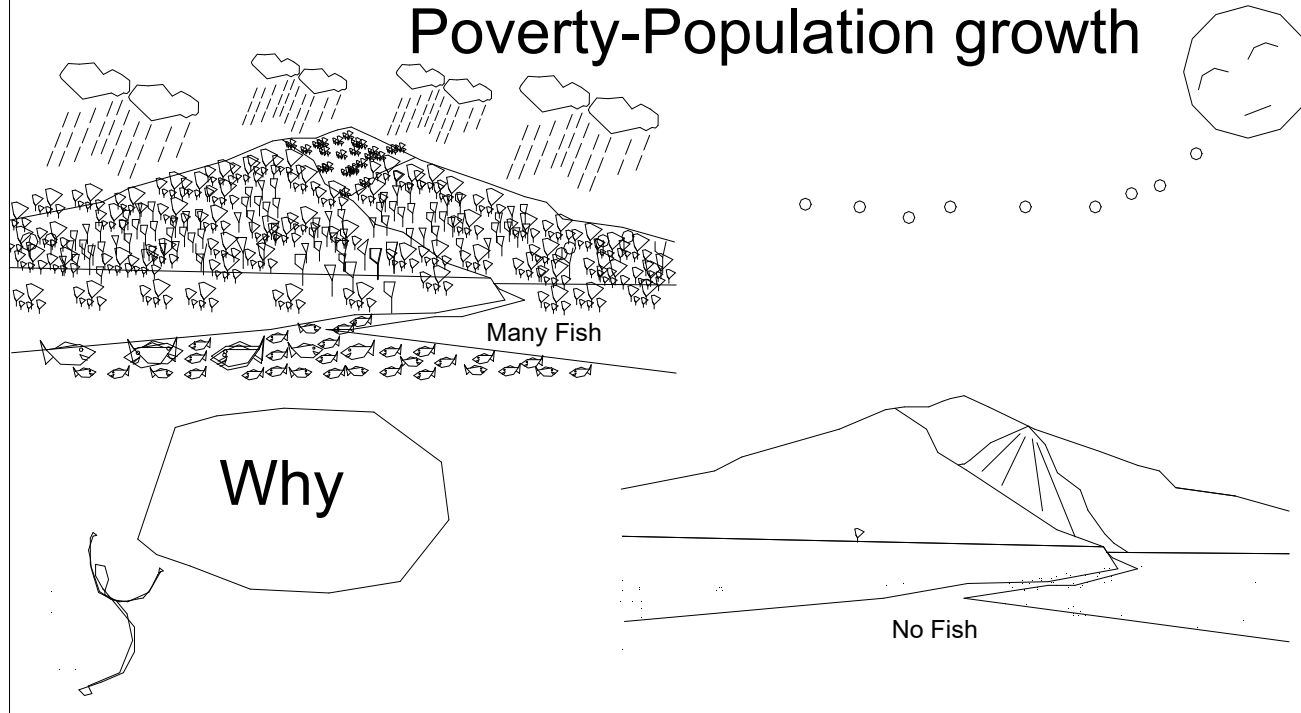


(1290) Desertification 9-Salt damage



(1291) Desertification 10-Poverty-Population growth

(1291) Desertification 10 - Poverty-Population growth

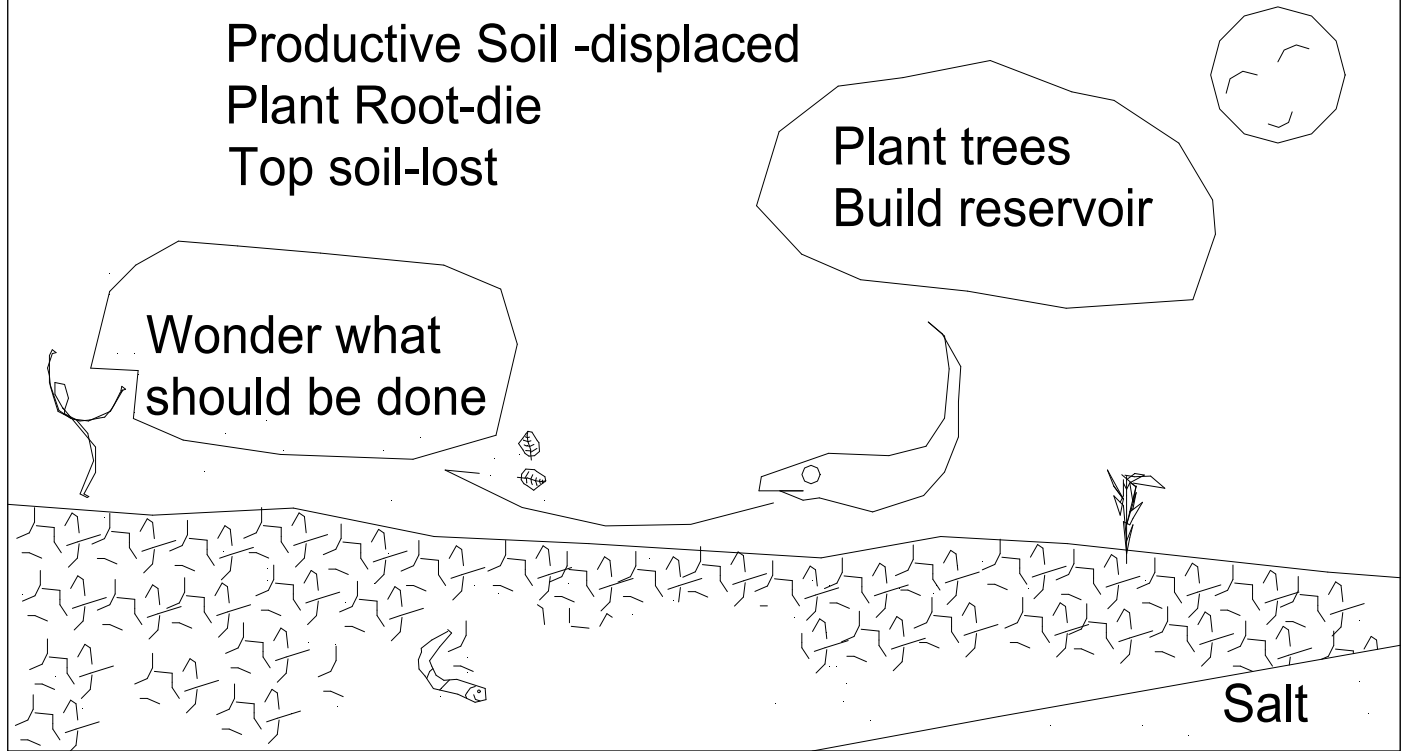


(1292) Desertification 11-Wind Erosion

Productive Soil -displaced
Plant Root-die
Top soil-lost

Plant trees
Build reservoir

Wonder what
should be done

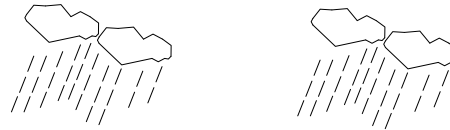


(1293) Desertification 12 -Water erosion

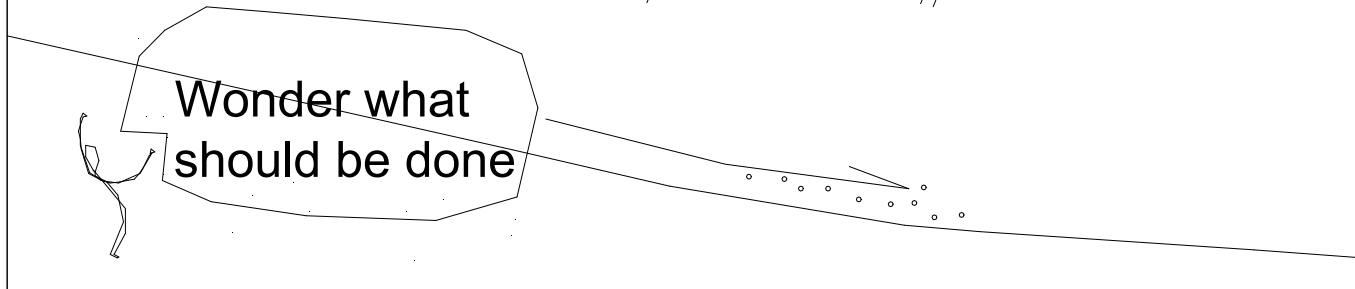
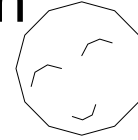
Soil washed away
Water holding capacity-
decrease

Plant trees
Build reservoir

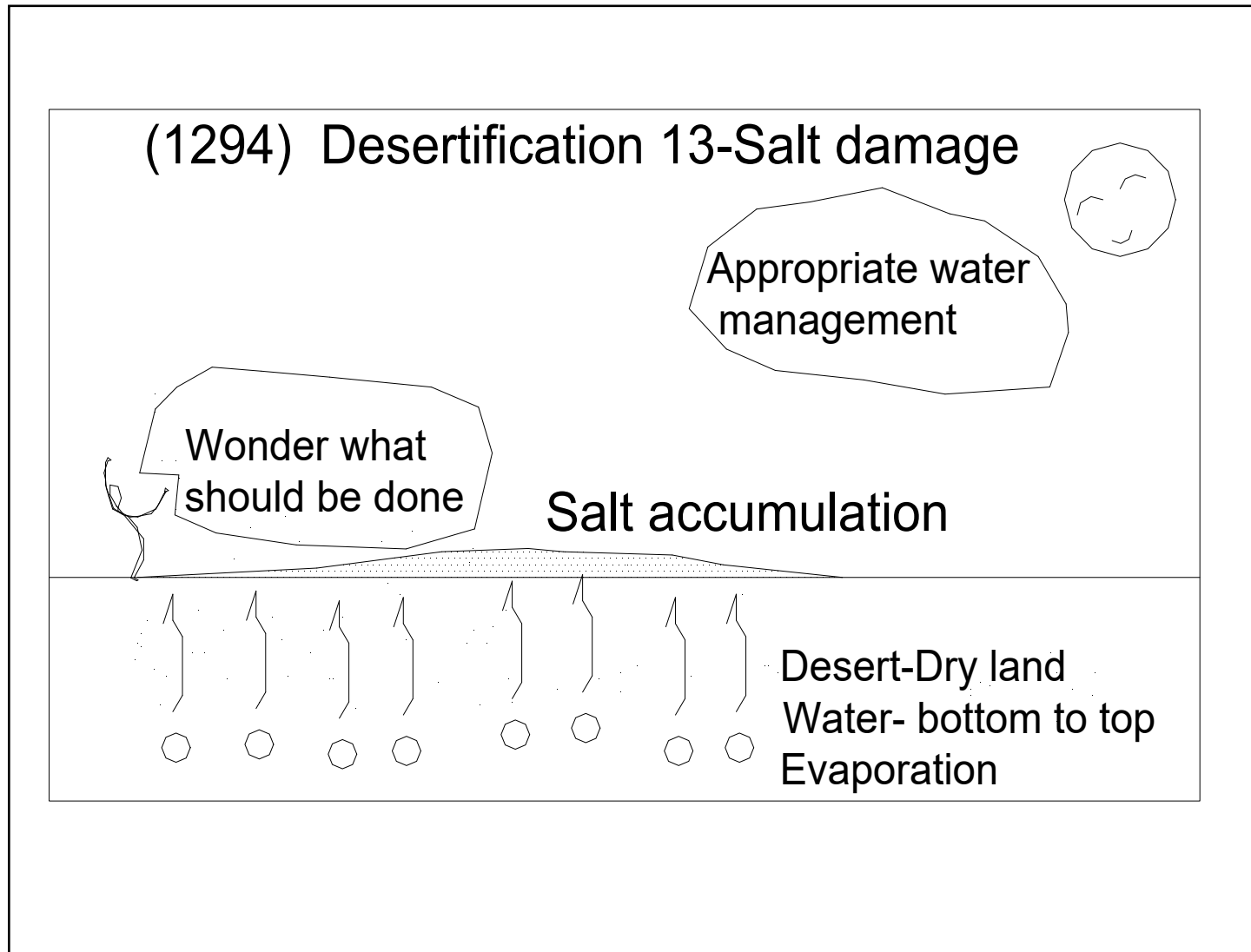
Plant don't grow



Wonder what
should be done



(1294) Desertification 13-Salt damage



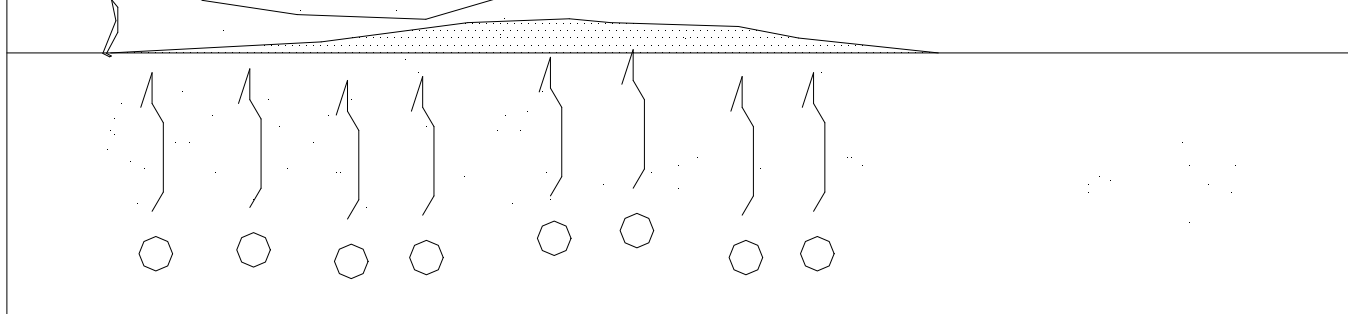
(1295) Desertification 14—Measures against salt damage

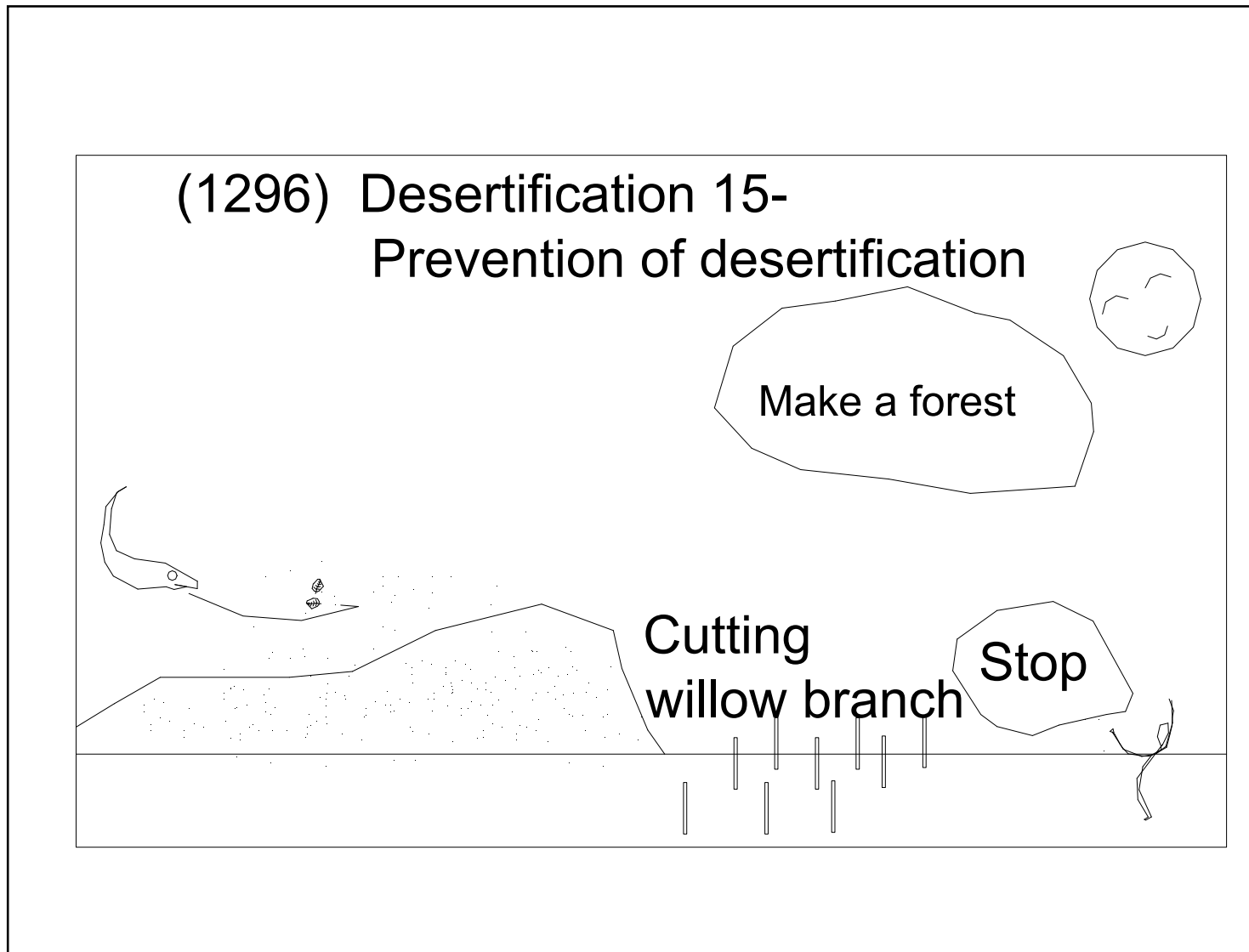
(1295) Desertification 14-
Measures against salt damage

Wonder what
should be done

Salt removal
Plant proper trees

Salt accumulation

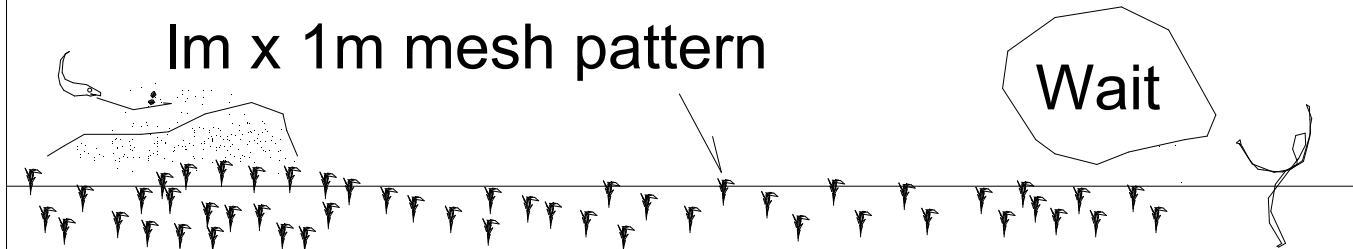




(1297) Desertification 16-Low fence

(1297) Desertification 16-Low fence
Reducing technique drift sand

Tree branch or Straw-Pushed into the sand
1m x 1m mesh pattern



(1298) Desertification 17-What kind of trees to plant ?

(1298) Desertification 17-

Dry land What kind of trees to plant ?

Tree planting

No money or hassle

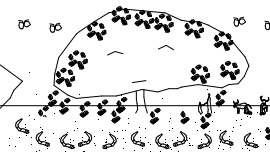
Resistant to drying

Livestock feed

Fruit

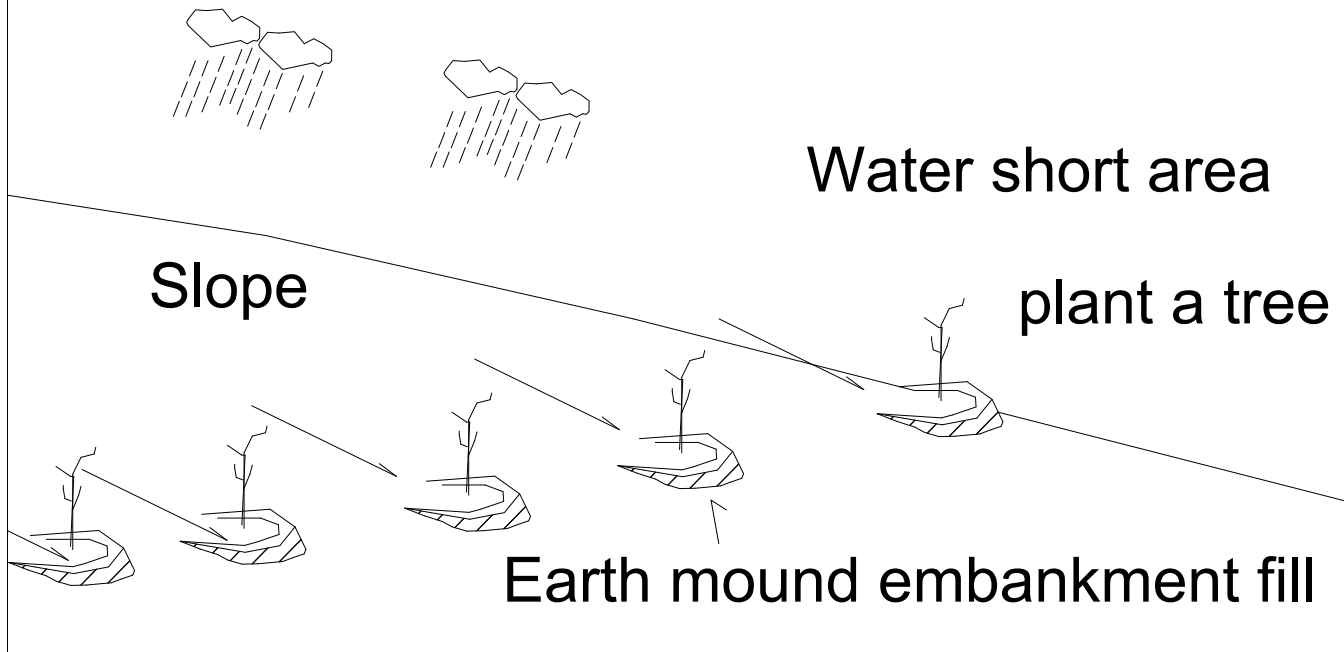
Use plants that grow naturally in the land

Know
Enough



(1299) Desertification 18-Effective use of limited rainwater

(1299) Desertification 18-
Effective use of limited rainwater

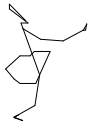
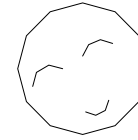


(1300) Desertification 19-Spread seeds

(1300) Desertification 19-Spread seeds

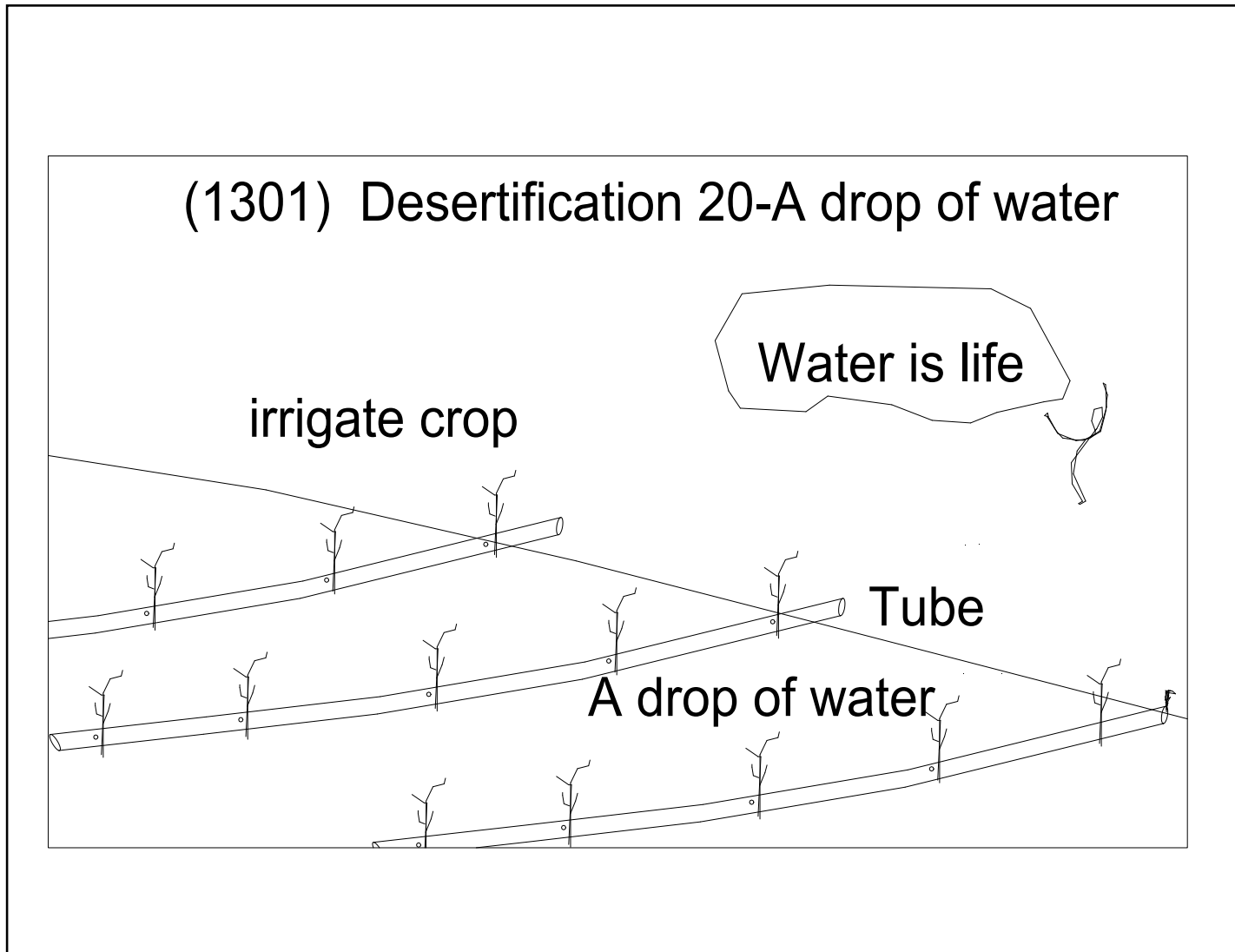
Plant seeds (native plant)

Man sowing seed



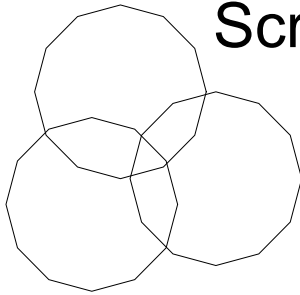
Earthen ball seeds and fertilizers

(1301) Desertification 20-A drop of water



(1302) Desertification 21-How to improve saline soil

(1302) Desertification 21-
How to improve saline soil



Scrape and remove saline soil

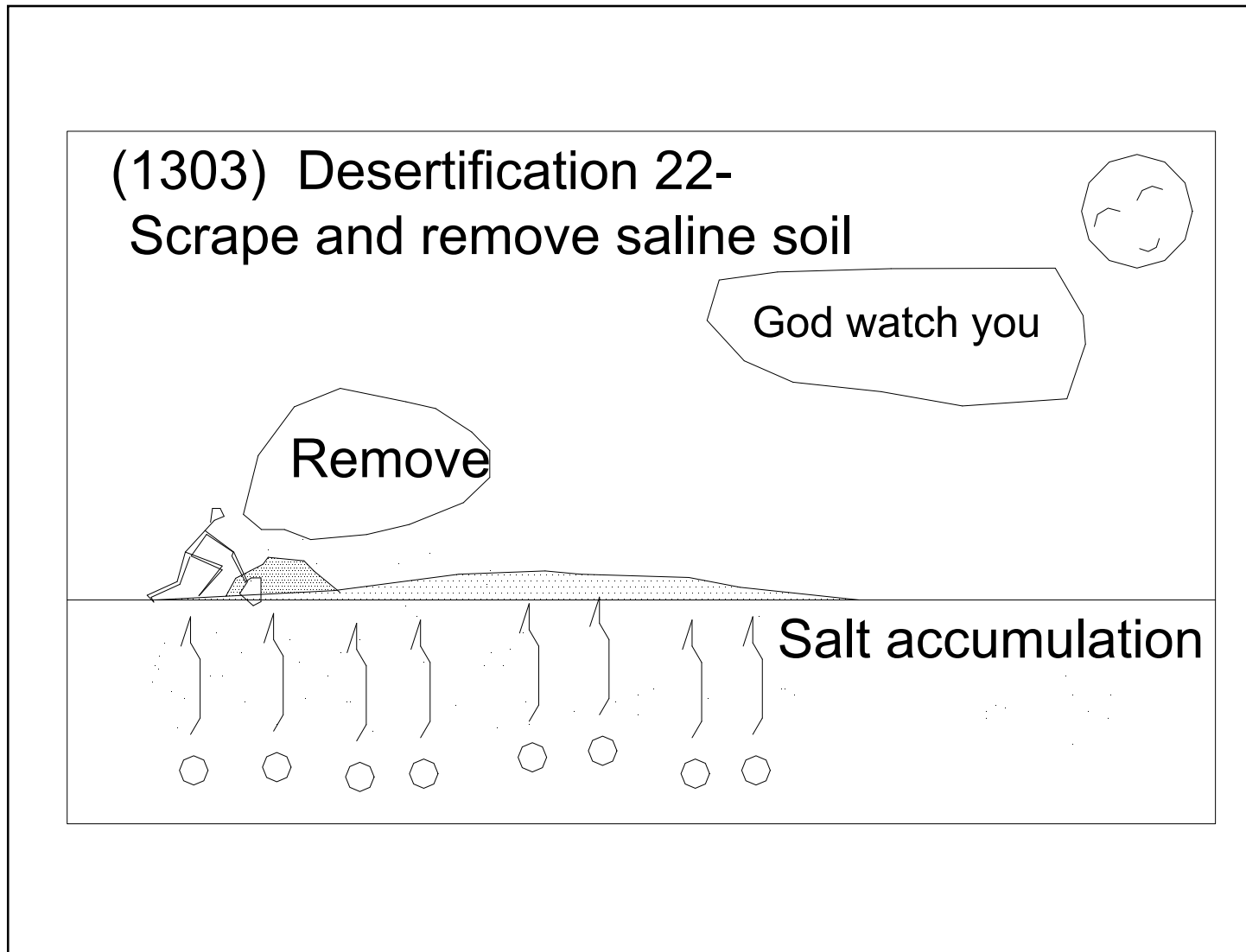
Plant crop that absorbs salt

Leaching

Wash off the salt (plenty of water)

Soil dressing by warping

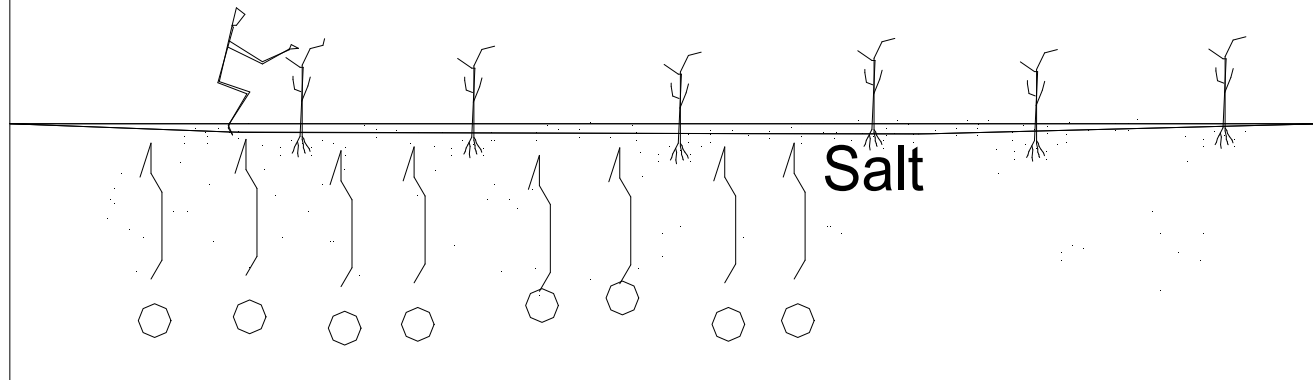
(1303) Desertification 22-Scrape and remove saline soil



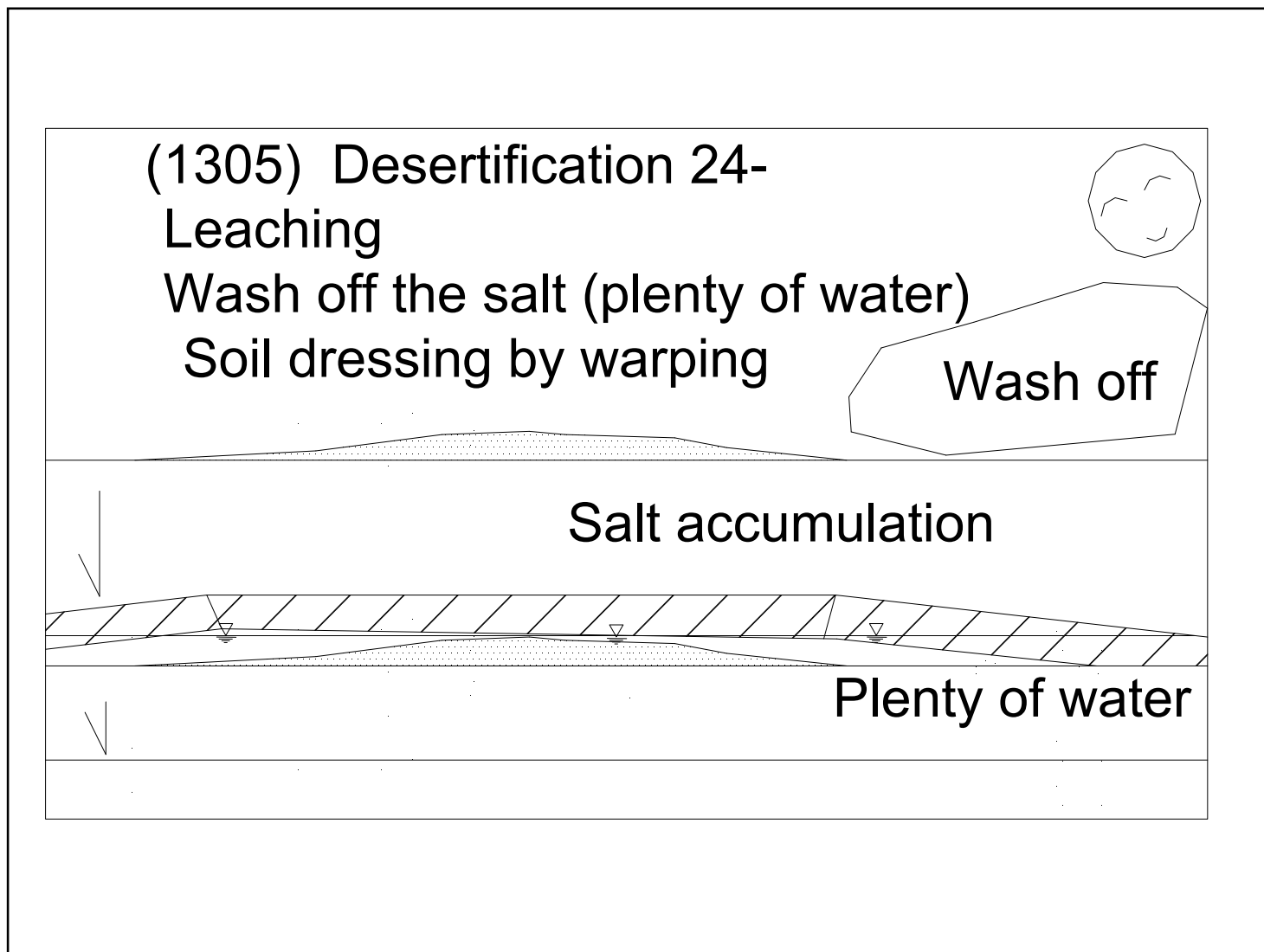
(1304) Desertification 23-Plant crop that absorbs salt

(1304) Desertification 23-
Plant crop that absorbs salt

Resistant to salt

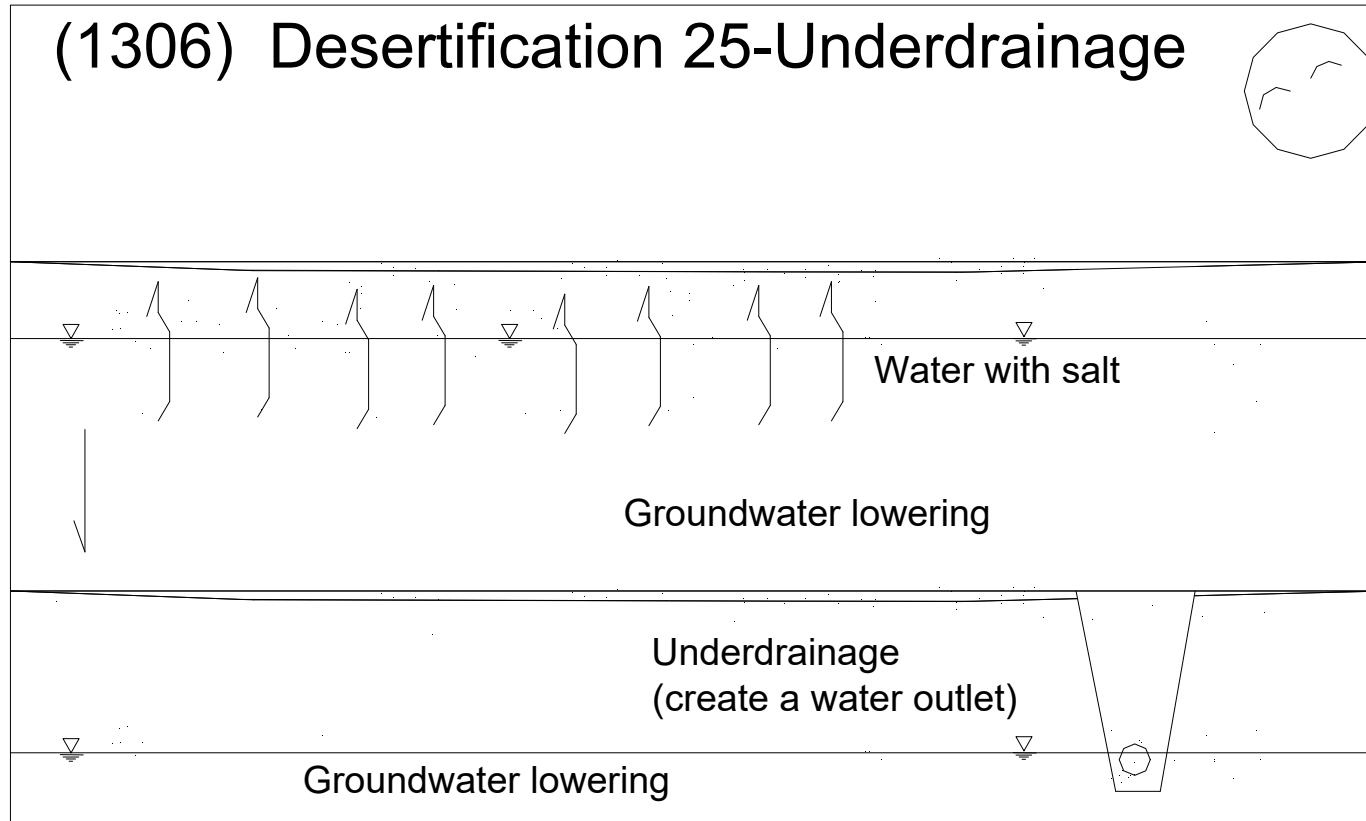
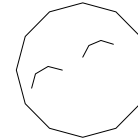


(1305) Desertification 24–Leaching Wash off the salt (plenty of water)



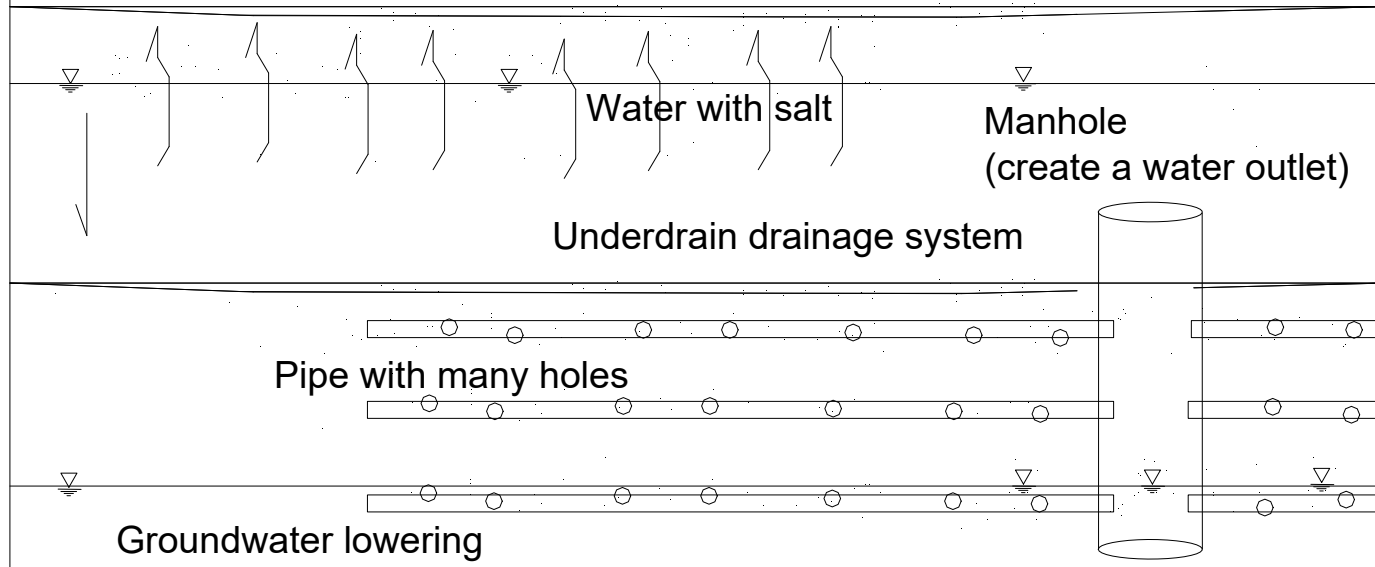
(1306) Desertification 25-Underdrainage

(1306) Desertification 25-Underdrainage



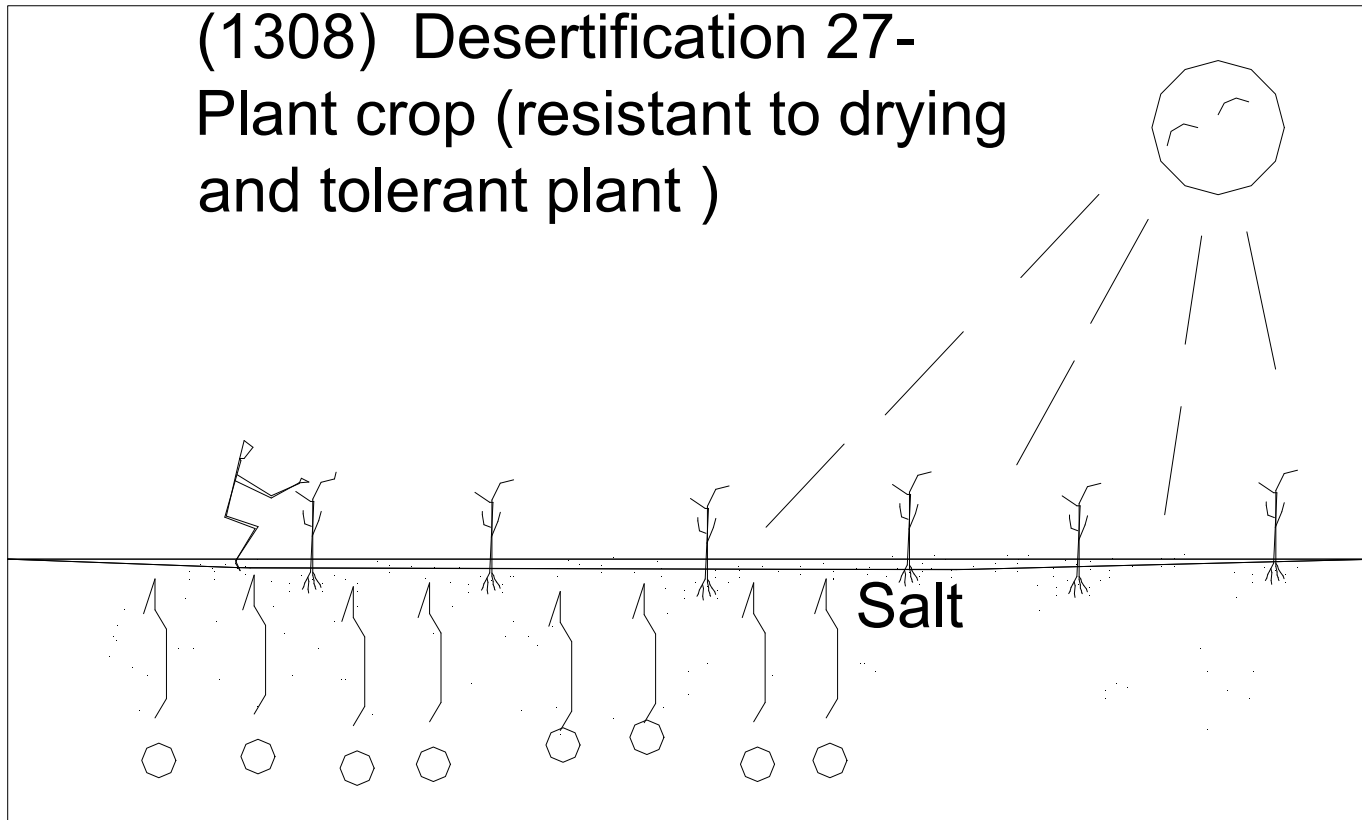
(1307) Desertification 26-Underdrain drainage system

(1307) Desertification 26-
Underdrain drainage system



(1308) Desertification 27-Plant crop (resistant to drying and tolerant plant)

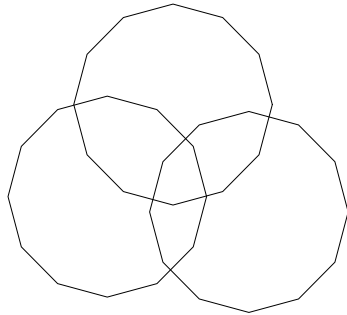
(1308) Desertification 27-
Plant crop (resistant to drying
and tolerant plant)



(1309) Desertification 28-Sustainable agriculture

(1309) Desertification 28-
Sustainable agriculture

Appropriate soil and
water management



Environmental conservation

Technology and mechanism

1310 Irrigation Underdrain 1

1310 Irrigation Underdrain 1
Irrigation channel



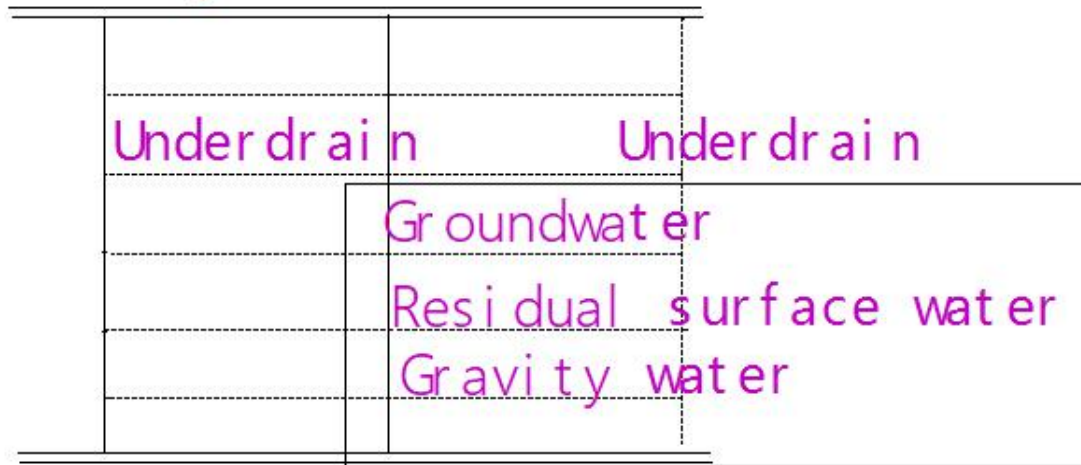
Drainage channel



(1311) Irrigation Underdrain 2

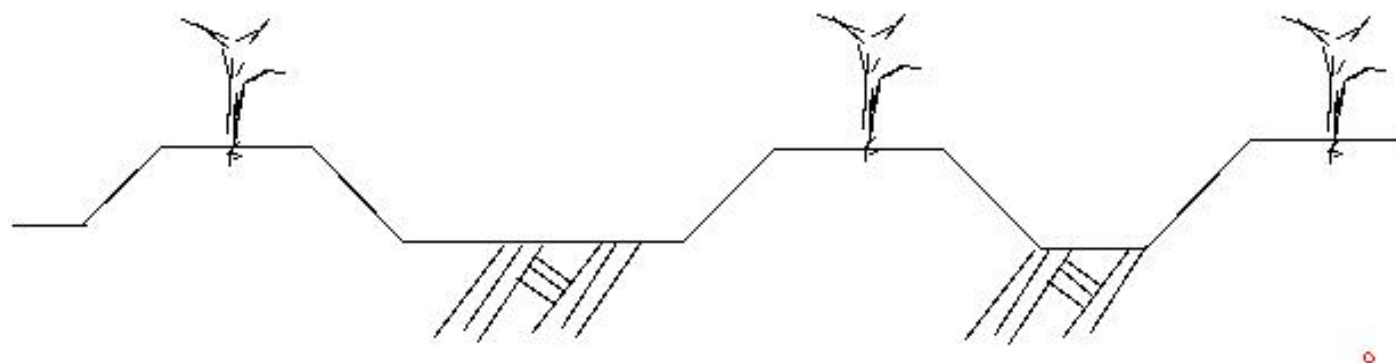
1311 Irrigation Underdrain 2

Irrigation channel



(1312) Irrigation Skip Furrow Irrigation

1312 Irrigation Skip Furrow Irrigation



Upl and farming

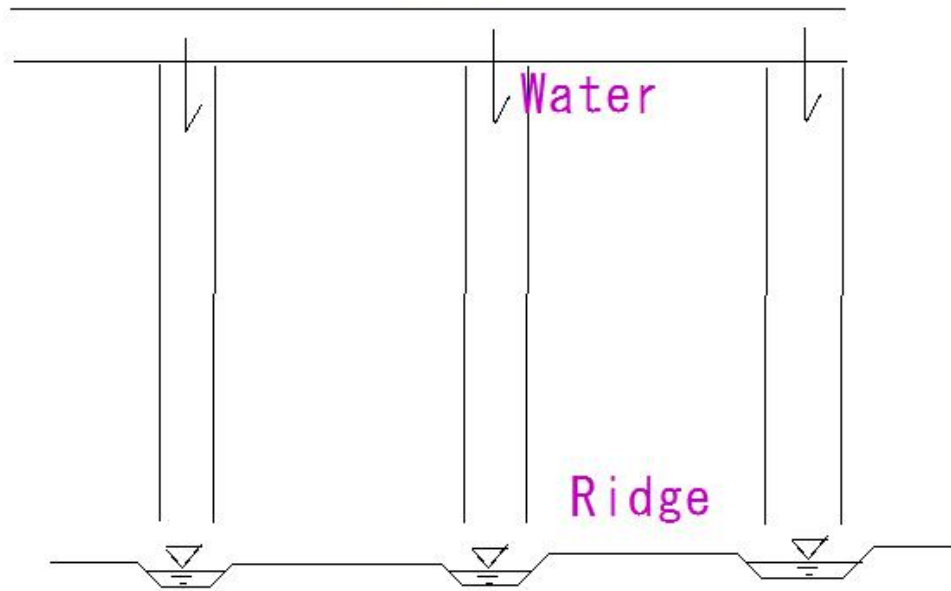
Cultivation

Ridge

(1313)Surface Irrigation Skip Furrow Irrigation

1313 Surface Irrigation Skip Furrow Irrigation

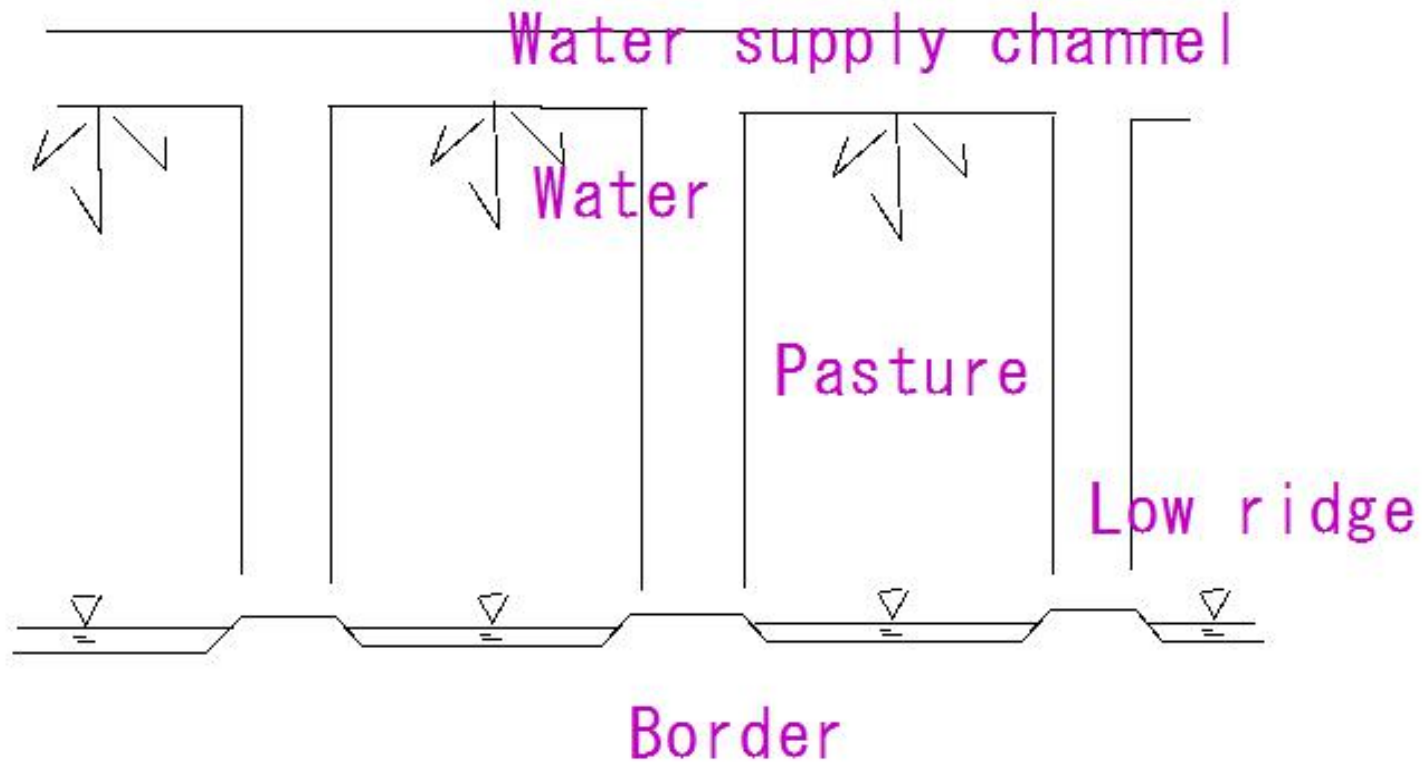
Water supply channel



Skip Furrow Irrigation

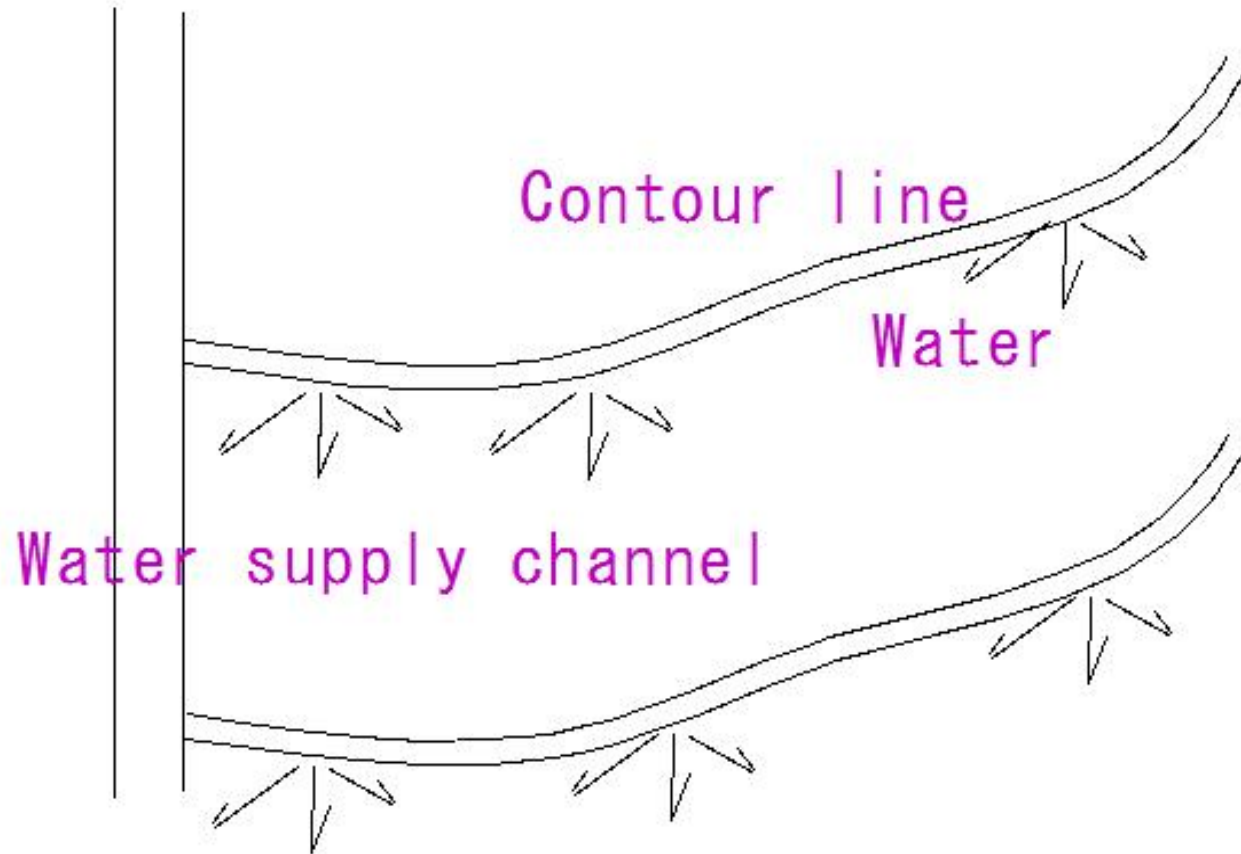
(1314) Surface Irrigation Border

1314 Surface Irrigation Border



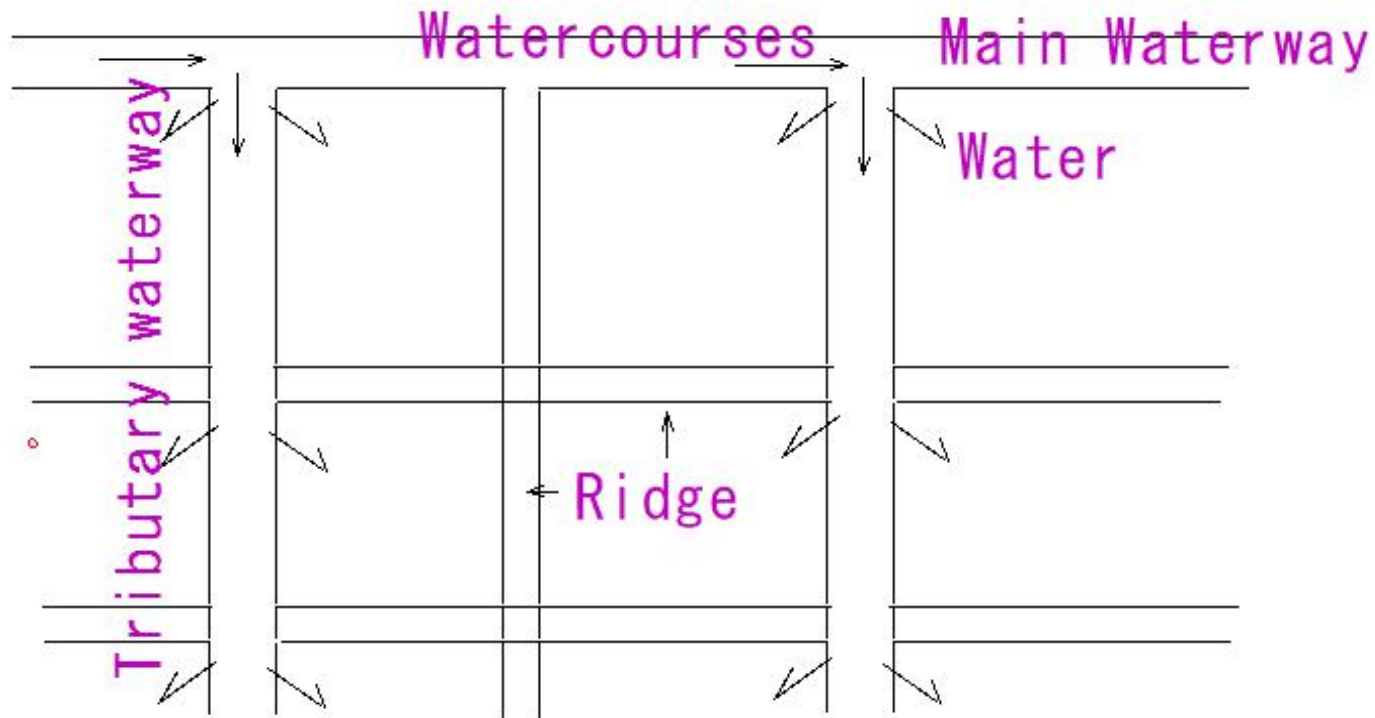
(1315) Surface Irrigation Contour Ridge

1315 Surface Irrigation Contour Ridge



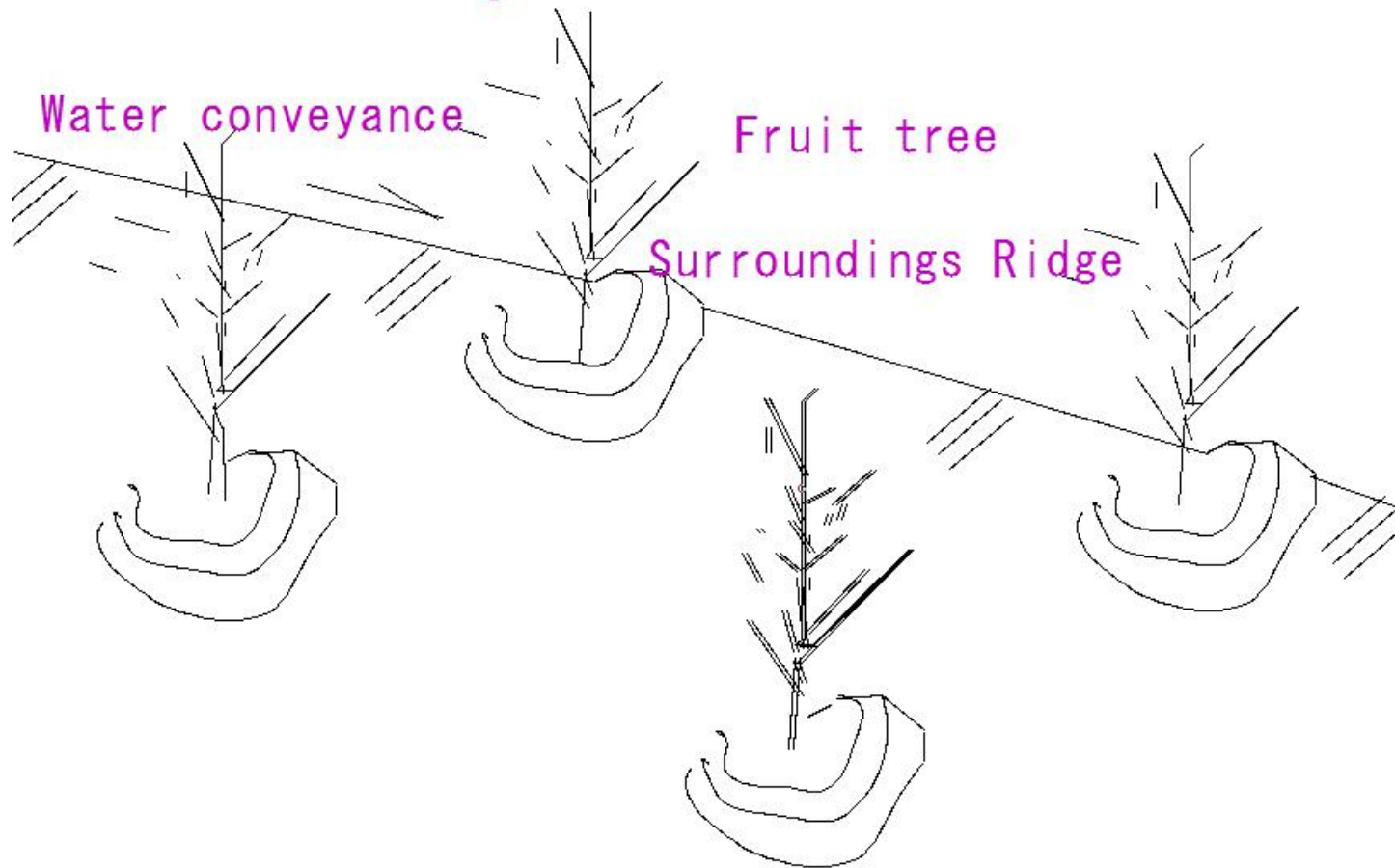
(1316) Surface Irrigation Division Method

1316 Surface Irrigation Division Method



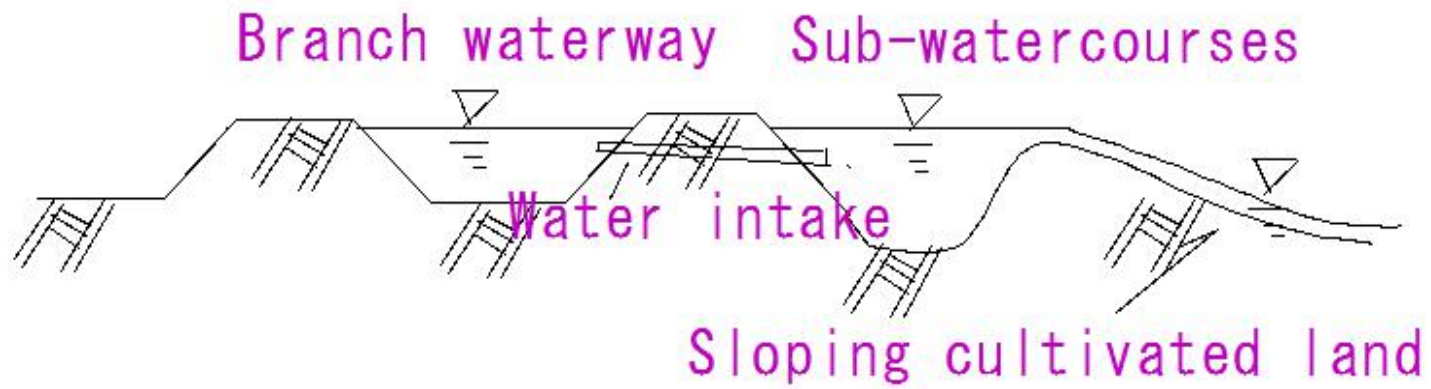
(1317) Surface Irrigation Basin

1317 Surface Irrigation Basin



(1318) Overflow Irrigation

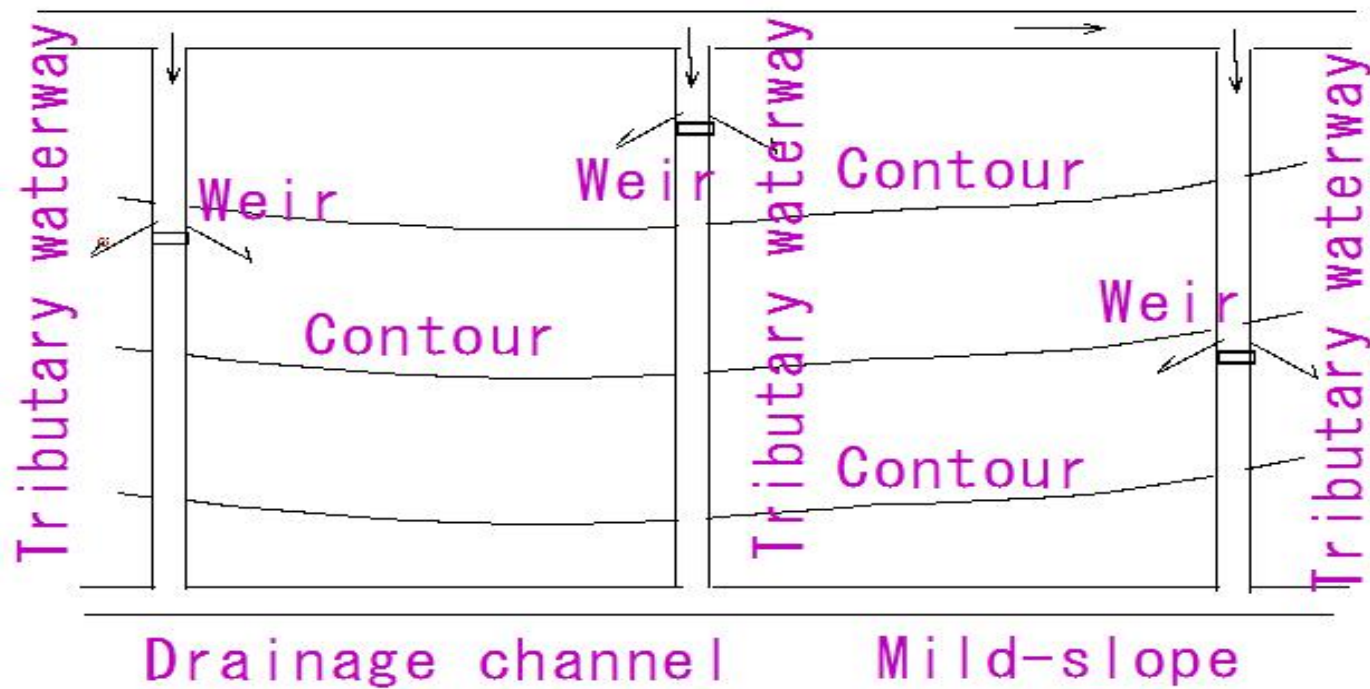
1318 Overflow Irrigation



(1319) Overflow Irrigation Watercourses

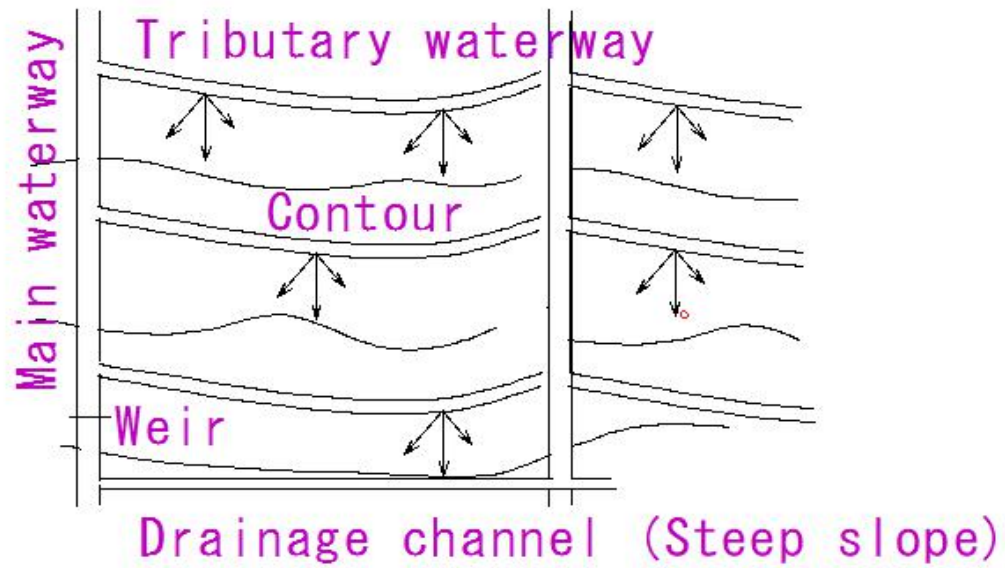
1319 Overflow Irrigation Watercourses

Watercourses



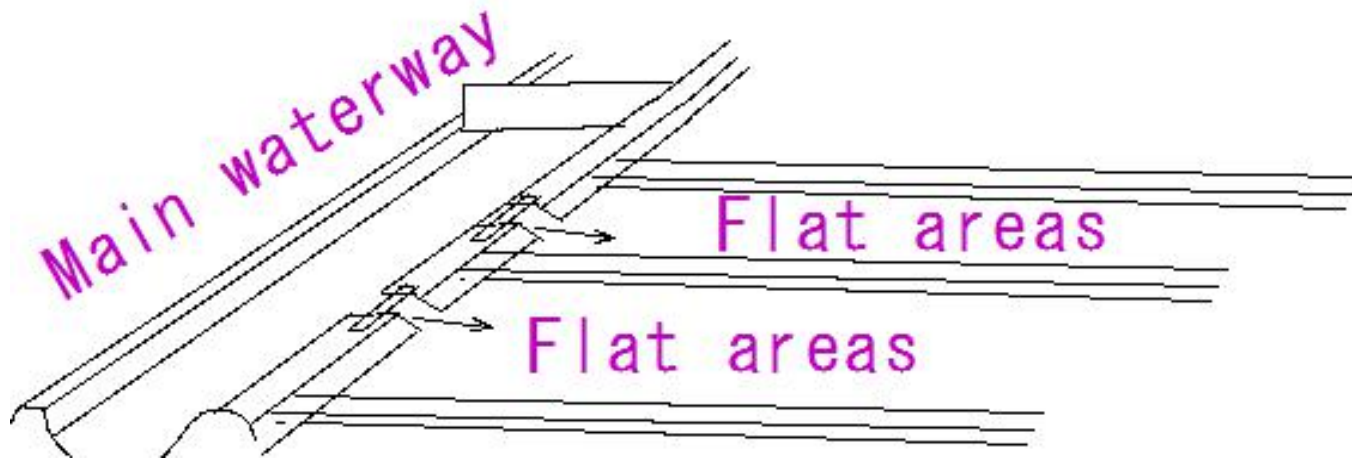
(1320) Overflow Irrigation Tributary waterway

(1320) Overflow Irrigation Tributary waterway



(1321) Border irrigation

(1321) Border irrigation



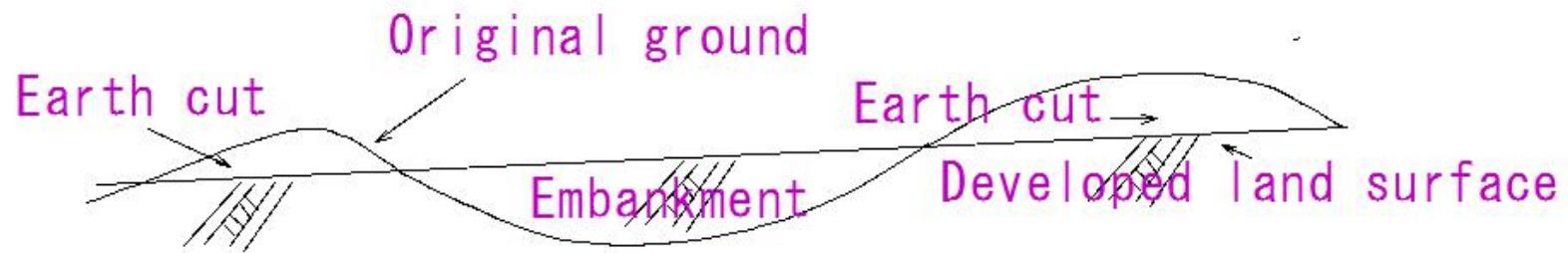
(1322) Field reclamation Original Field

(1322) Field reclamation Original Field



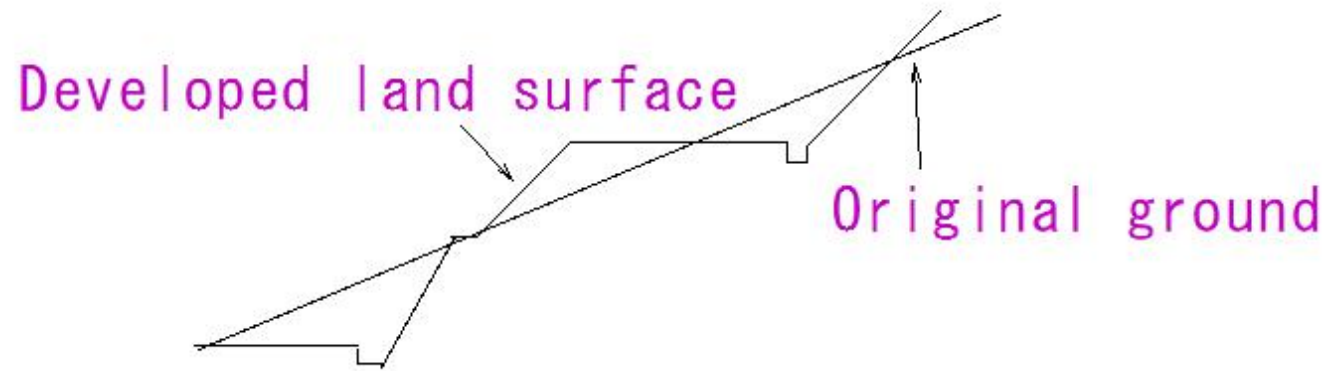
(1323) Field reclamation Improvement Original Field

(1323) Field reclamation Improvement Original Field



(1324) Field reclamation Stairs Field

(1324) Field reclamation Stairs Field

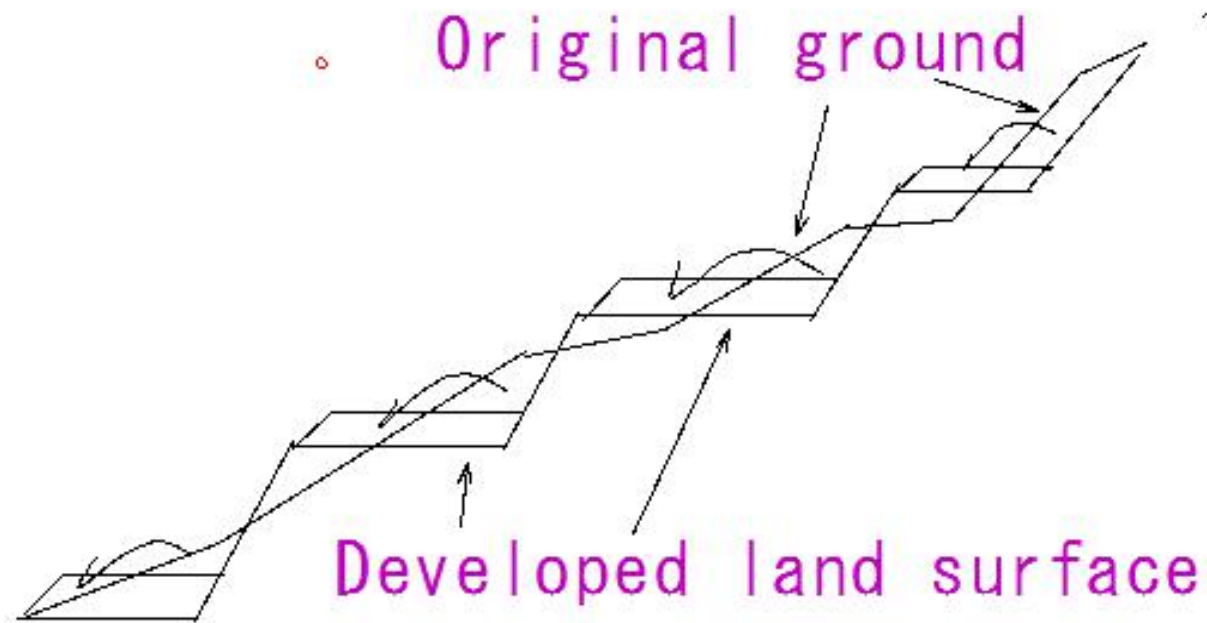


Cut and fill method

(1325) Field reclamation Full section cutting method

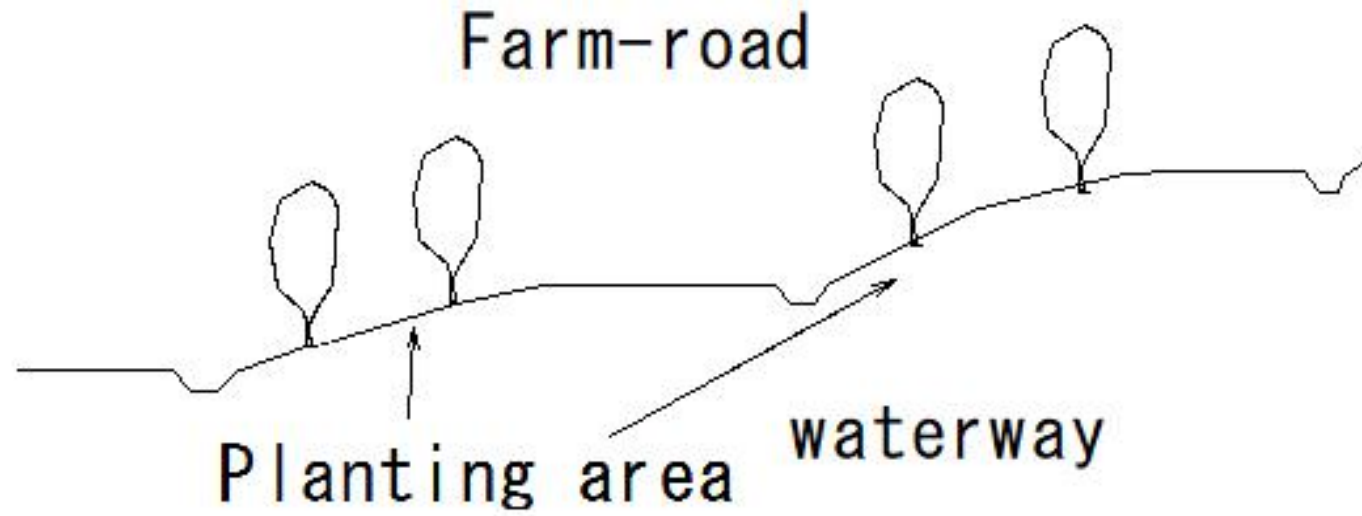
(1325) Field reclamation

Full section cutting method



(1326) Field reclamation Slope Field

(1326) Field reclamation Slope Field

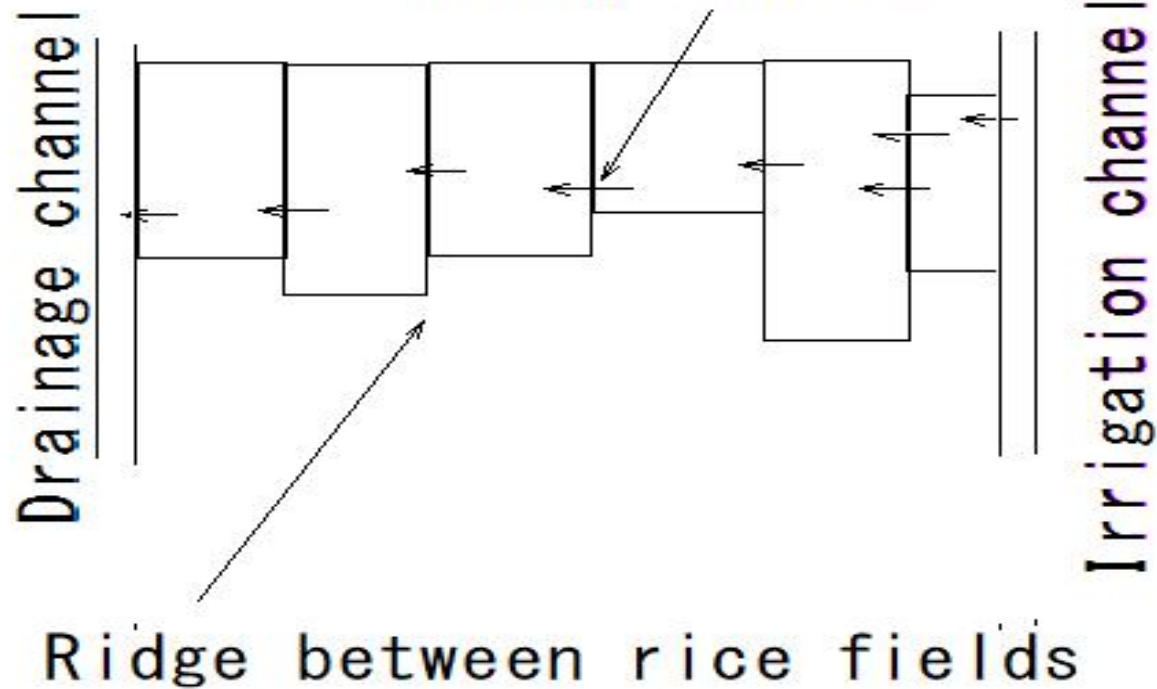


(1327) Paddy field Plot-to-plot irrigation

1327 Paddy field

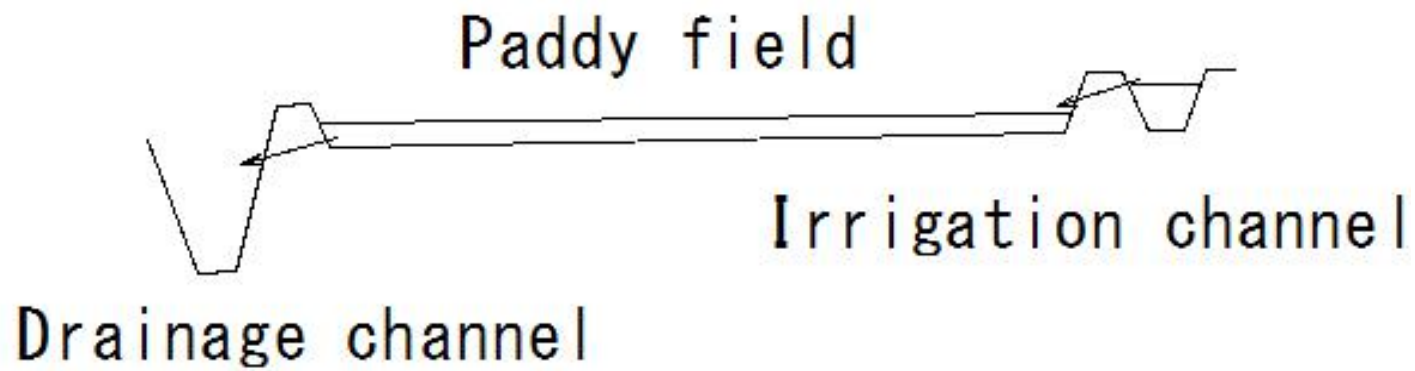
Plot-to-plot irrigation

Paddy sluice



(1328) Paddy field Continuous irrigation

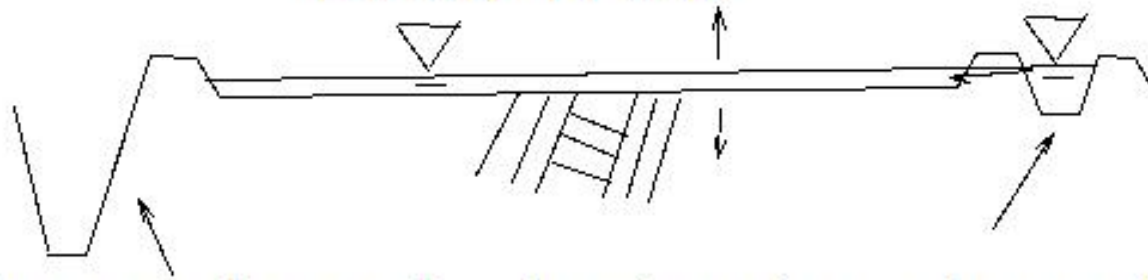
1328 Paddy field Continuous irrigation



(1329) Flush irrigation

1329 Flush irrigation

Paddy field

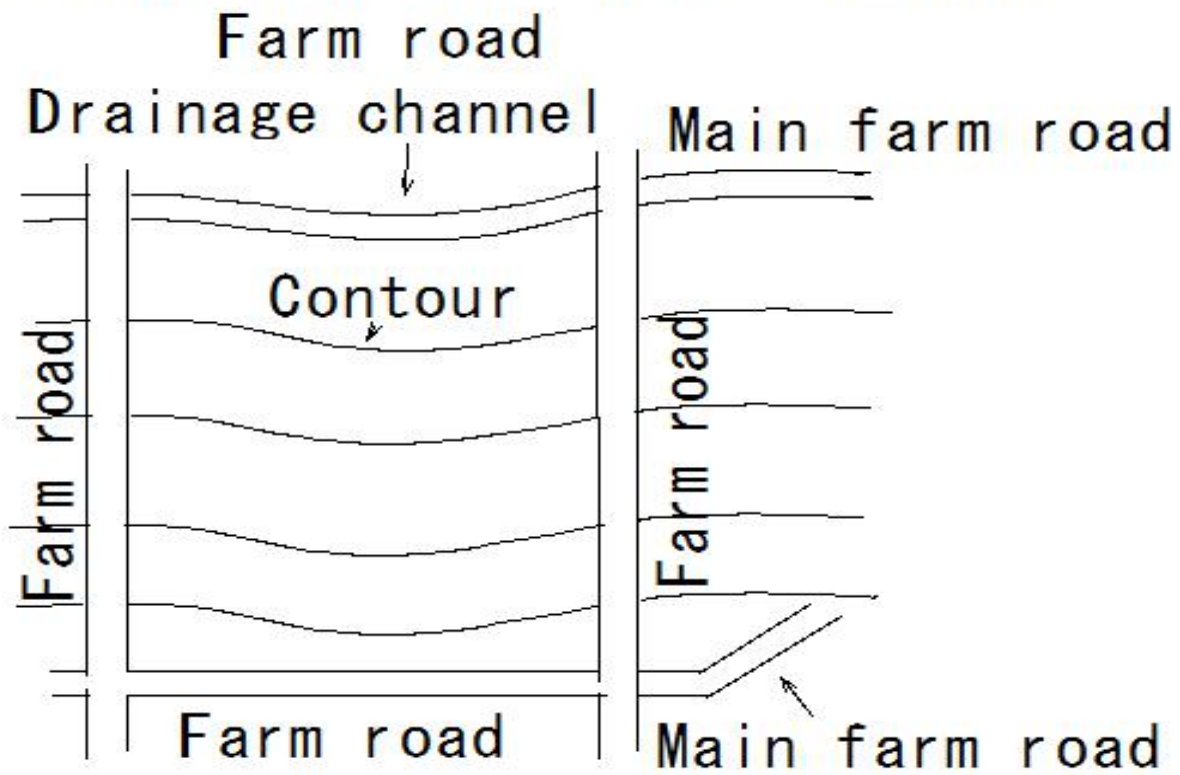


Drainage channel

Irrigation channel

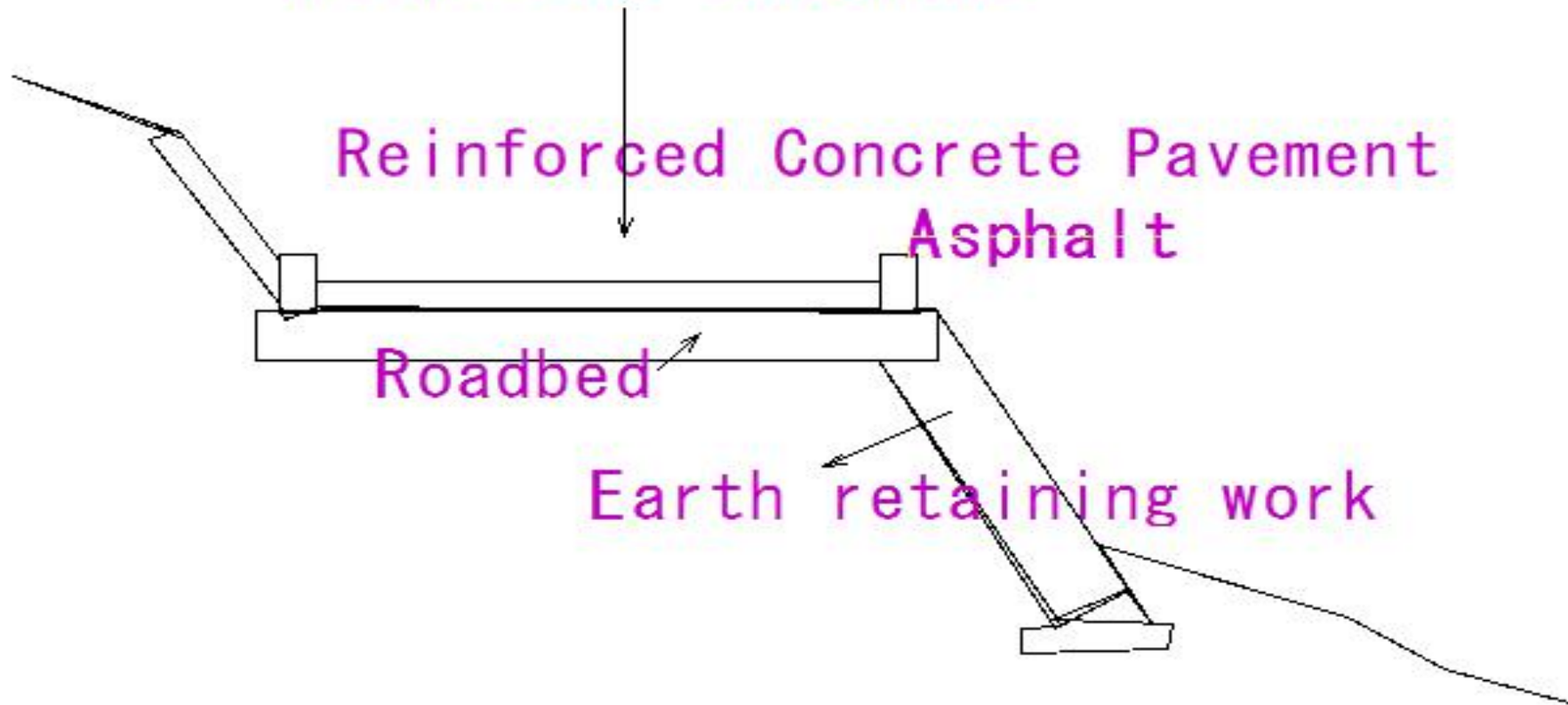
(1330) Agricultural water channel/Farm road

1330 Agricultural water channel



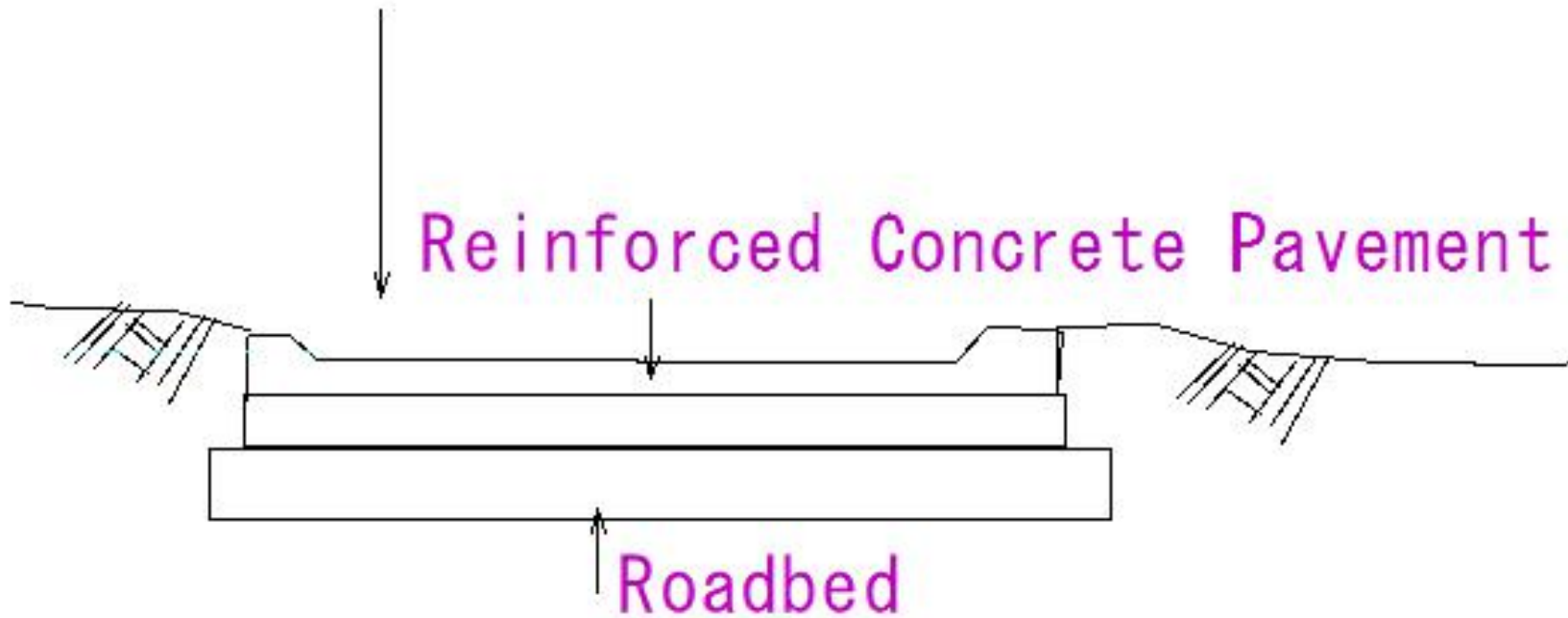
(1331) Agricultural water channel/Farm road Pavement

1331 Agricultural water channel Farm road Pavement



(1332) Agricultural water channel/Farm road Pavement Concrete Slab

1332 Agricultural water channel Farm road Pavement Concrete Slab



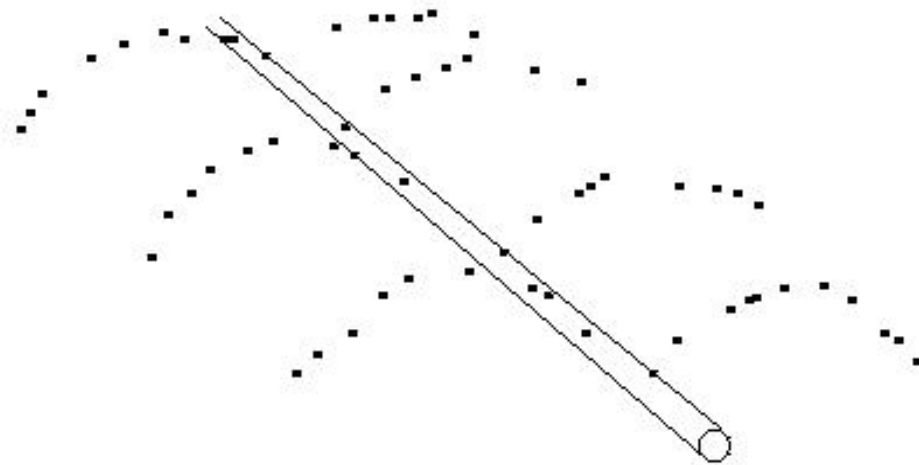
(1333) Raindrop Erosion

(1333) Raindrop Erosion



(1334) Irrigation facility

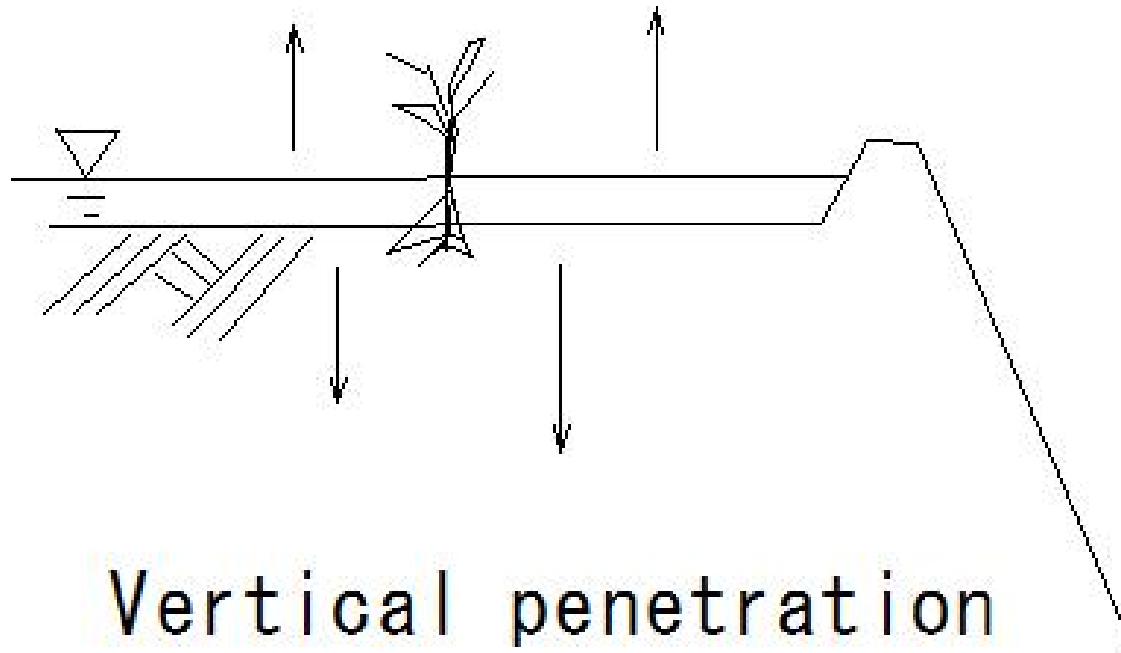
(1334) Irrigation facility



Perforated pipe irrigation
Sprinkling facility
sprinkler

(1335) Evapotranspiration

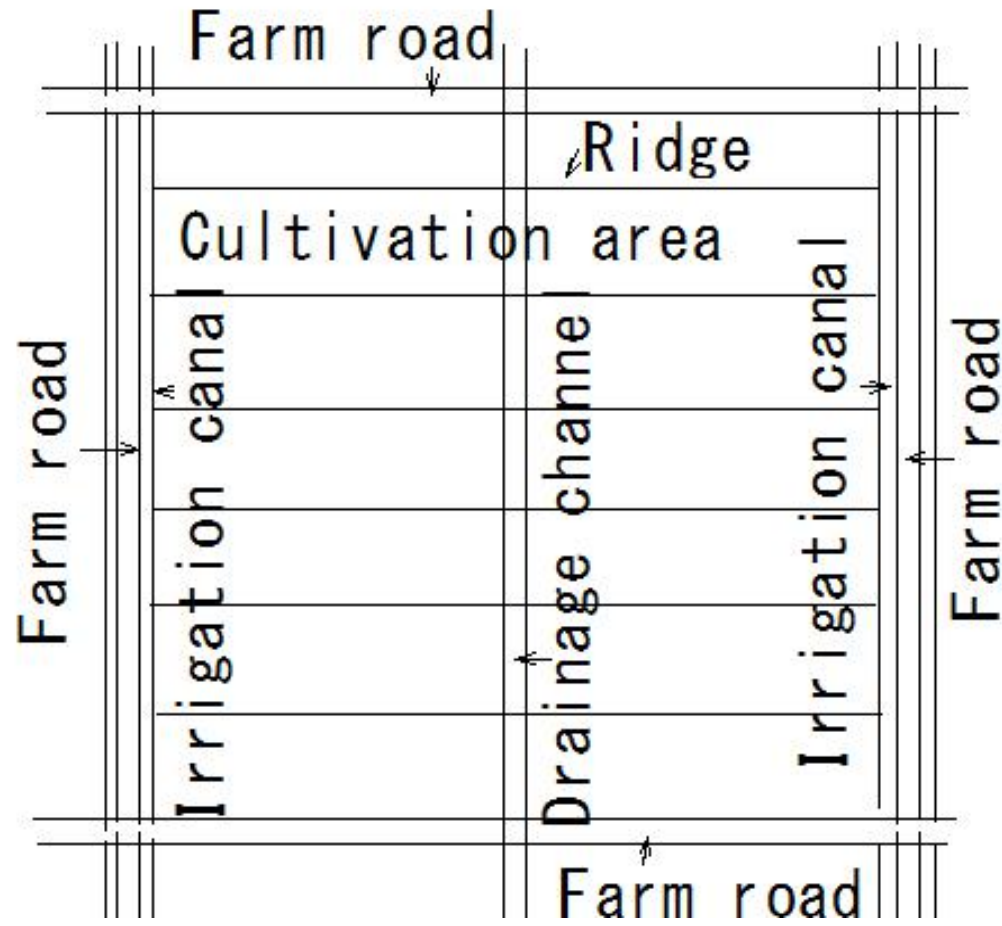
(1335) Evapotranspiration



Vertical penetration

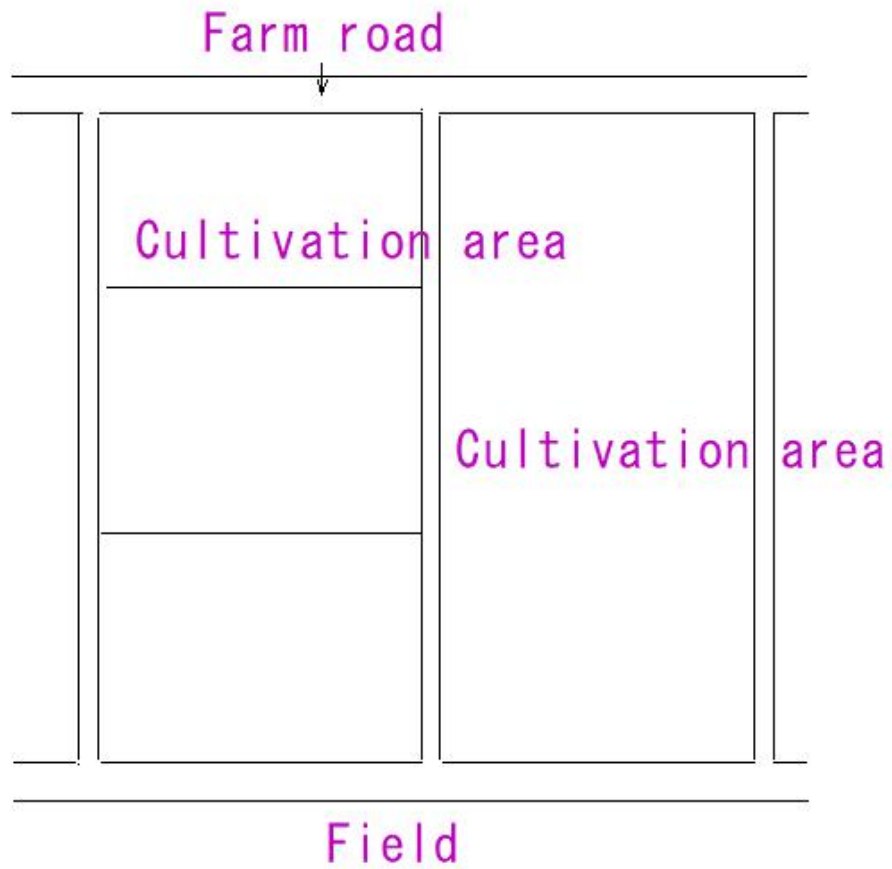
(1336) Cultivated plot

(1336) Cultivated plot



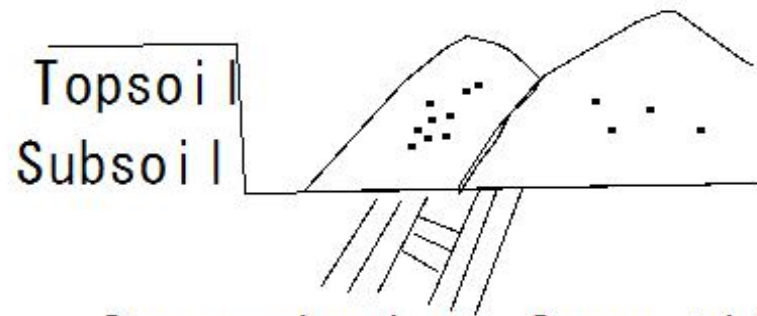
(1337) Cultivated plot Field

(1337) Cultivated plot Field

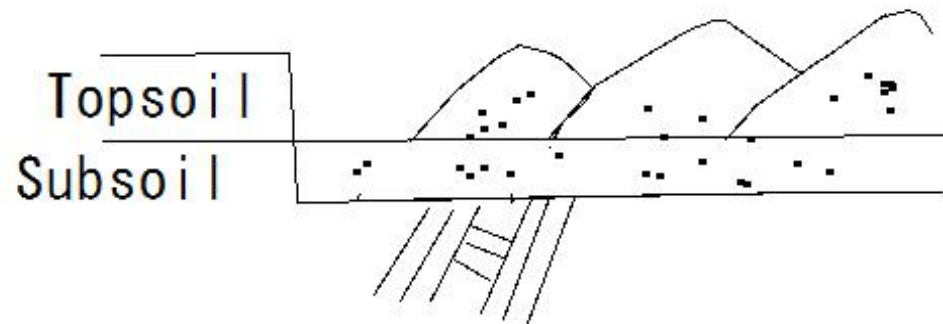


(1338) Soil layer improvement

(1338) Soil layer improvement



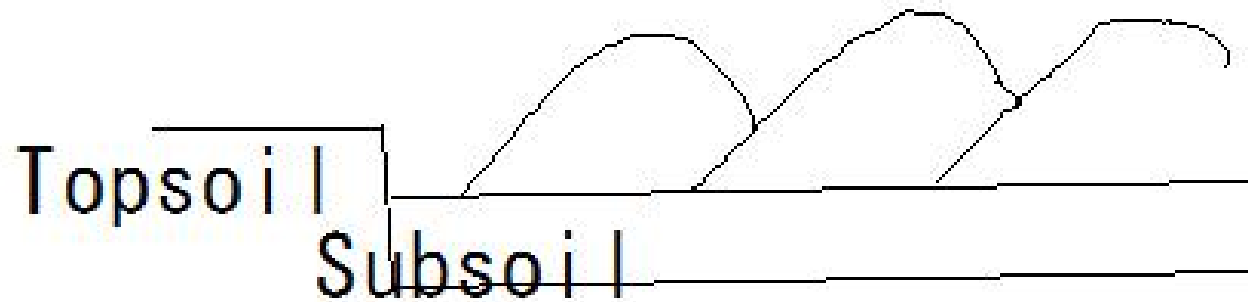
Deep plowing: Deep tillage



Subsoil mixed layer cultivation

(1339) Subsoil mixed layer cultivation

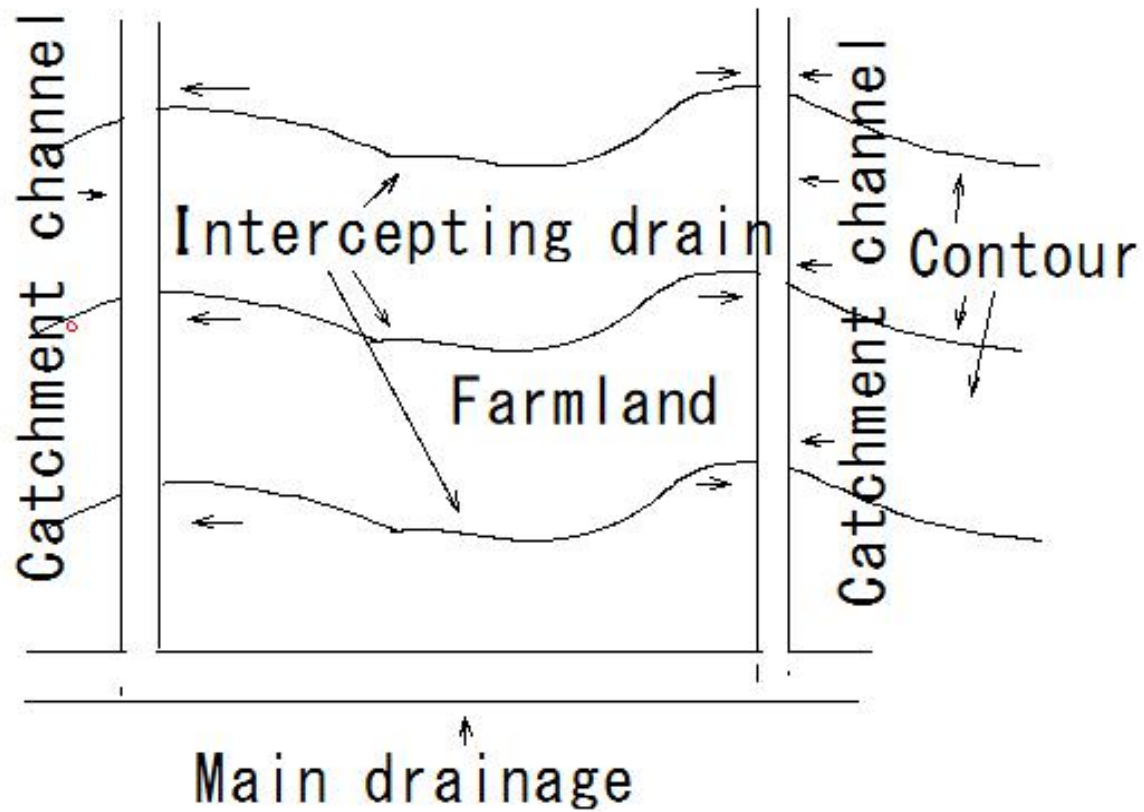
(1339) Subsoil mixed layer cultivation



Soil layer improvement

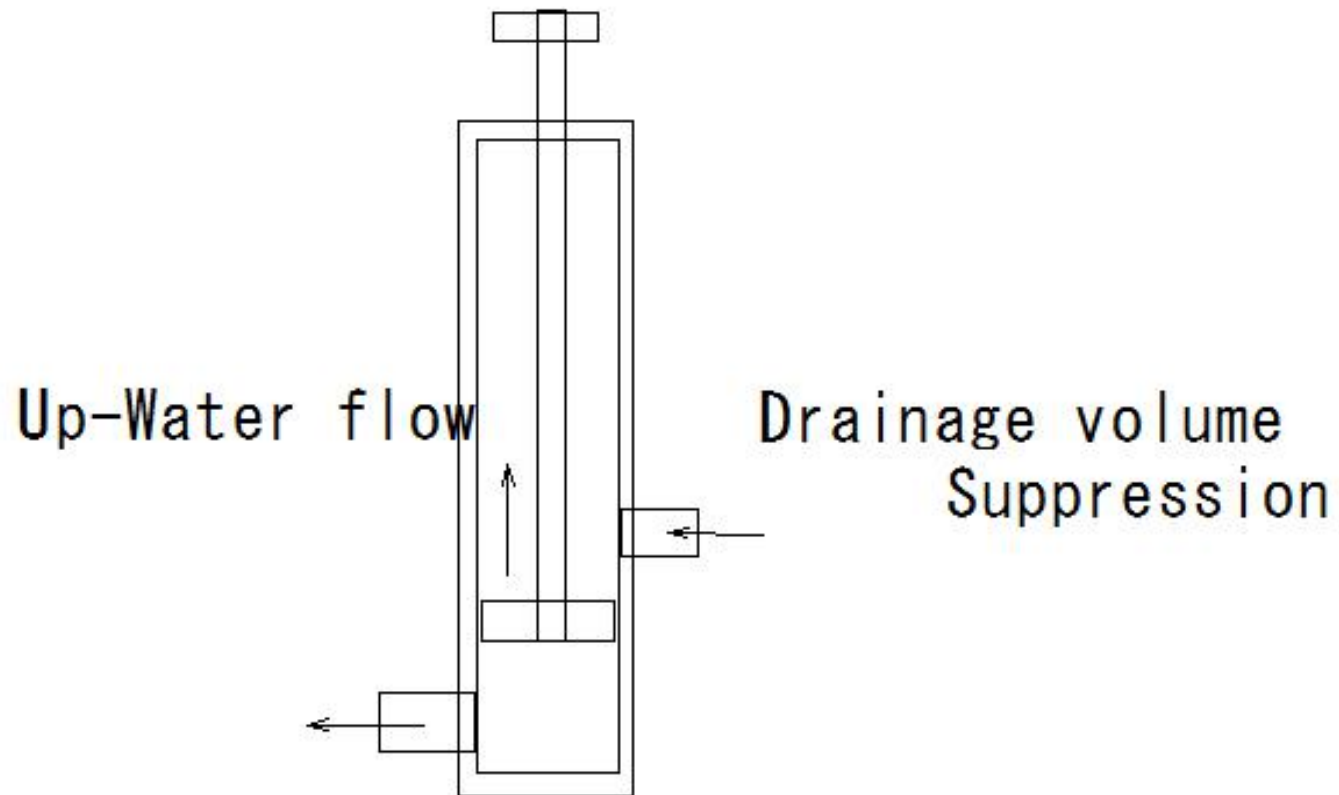
(1340) Intercepting drain

(1340) Intercepting drain Water erosion prevention



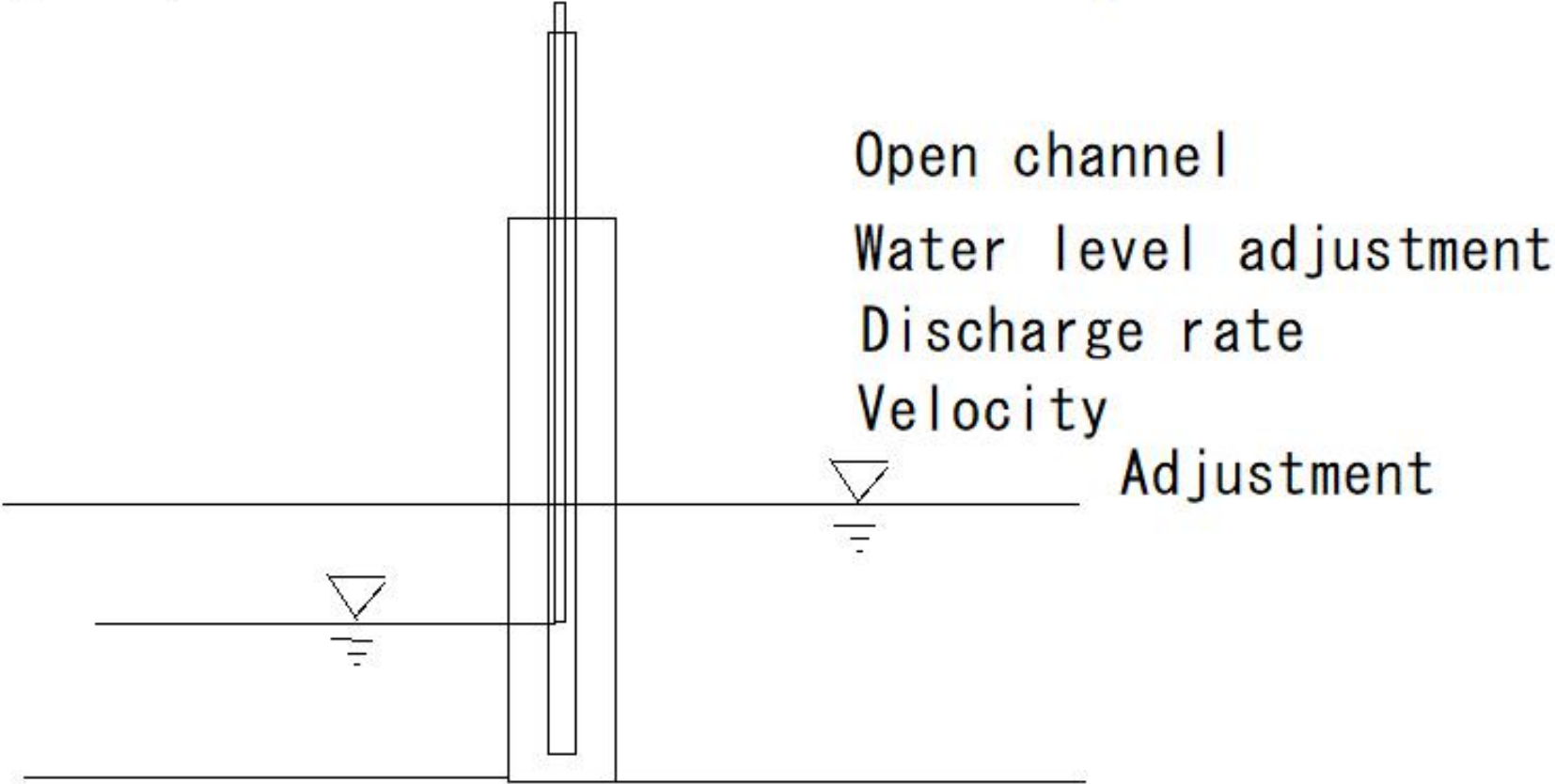
(1341) Water lock

(1341) Water lock



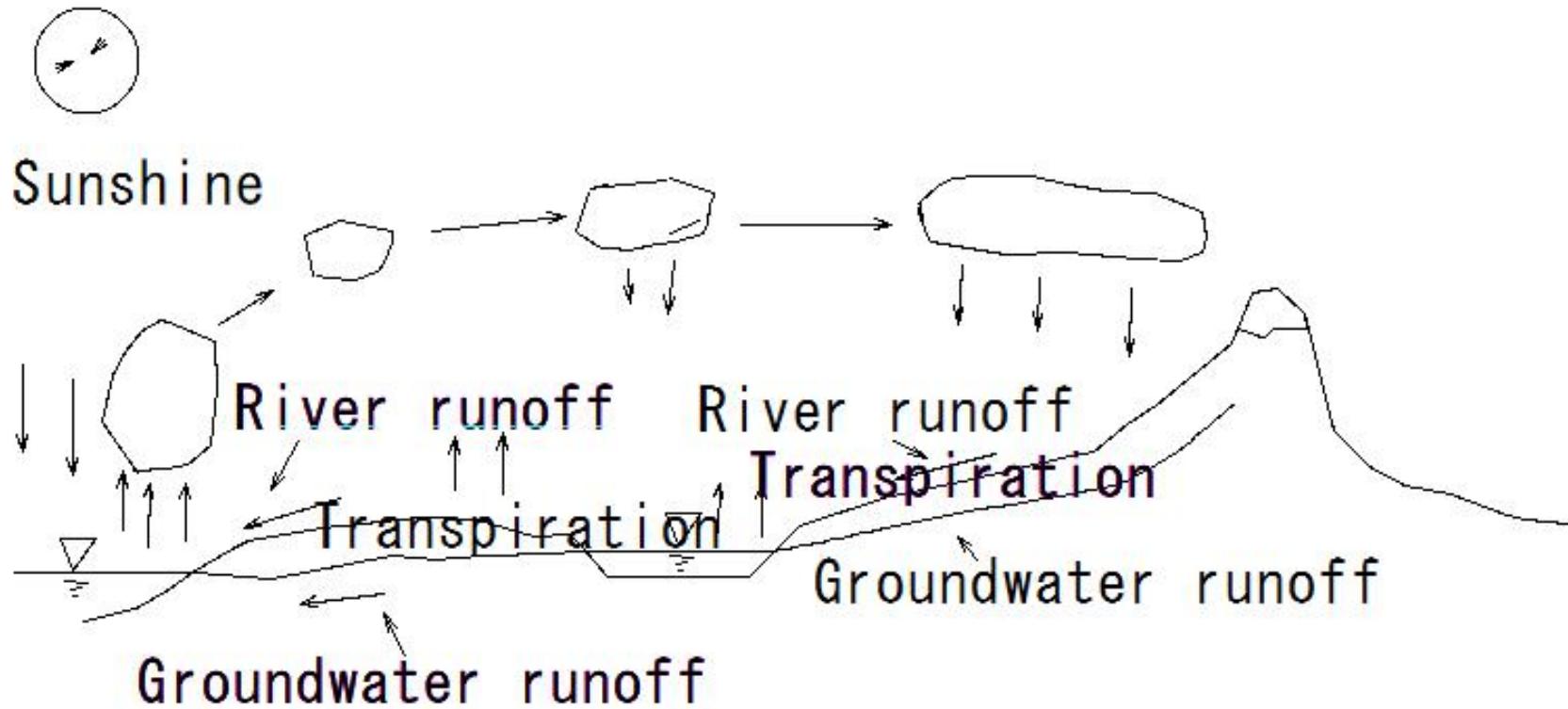
(1342) Water level control facility

(1342) Water level control facility



(1343) Hydrological cycle

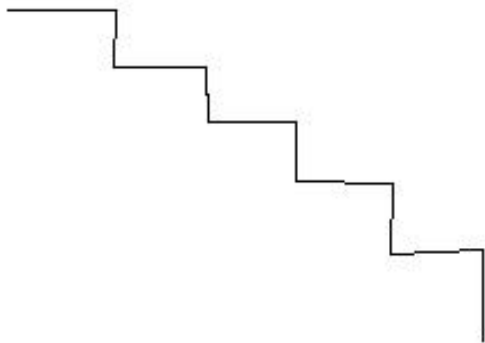
(1343) Hydrological cycle



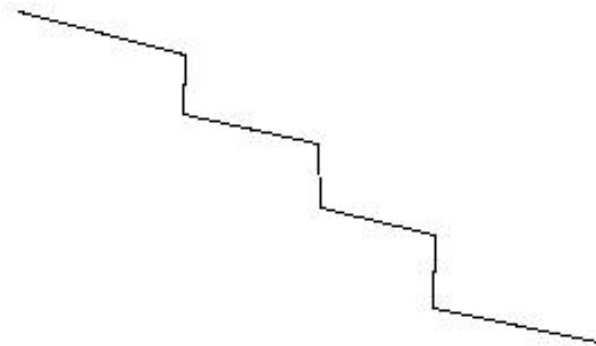
(1344) Prevention of water erosion

(1344) Prevention of water erosion

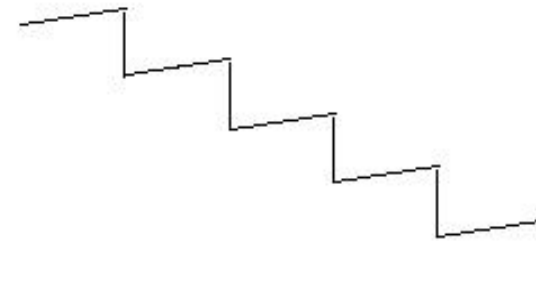
Field



Bench terrace



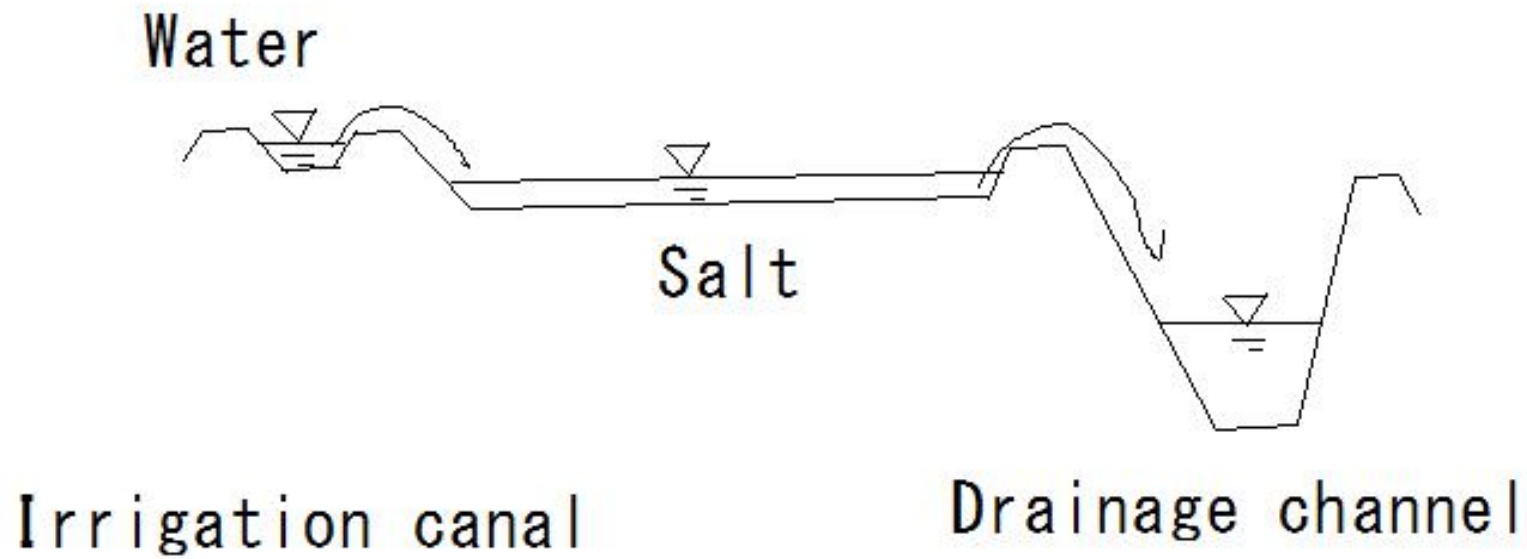
Inclination



Reverse inclination

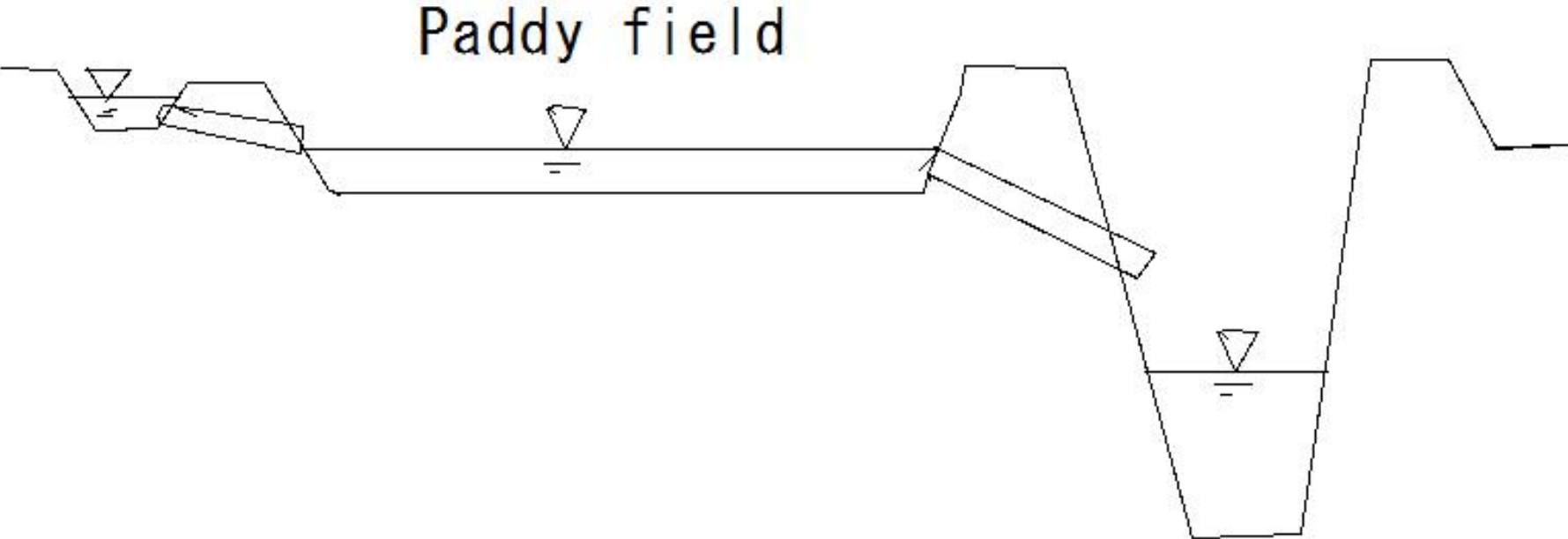
(1345) Desalination Saltwater replacement

(1345) Desalination Saltwater replacement



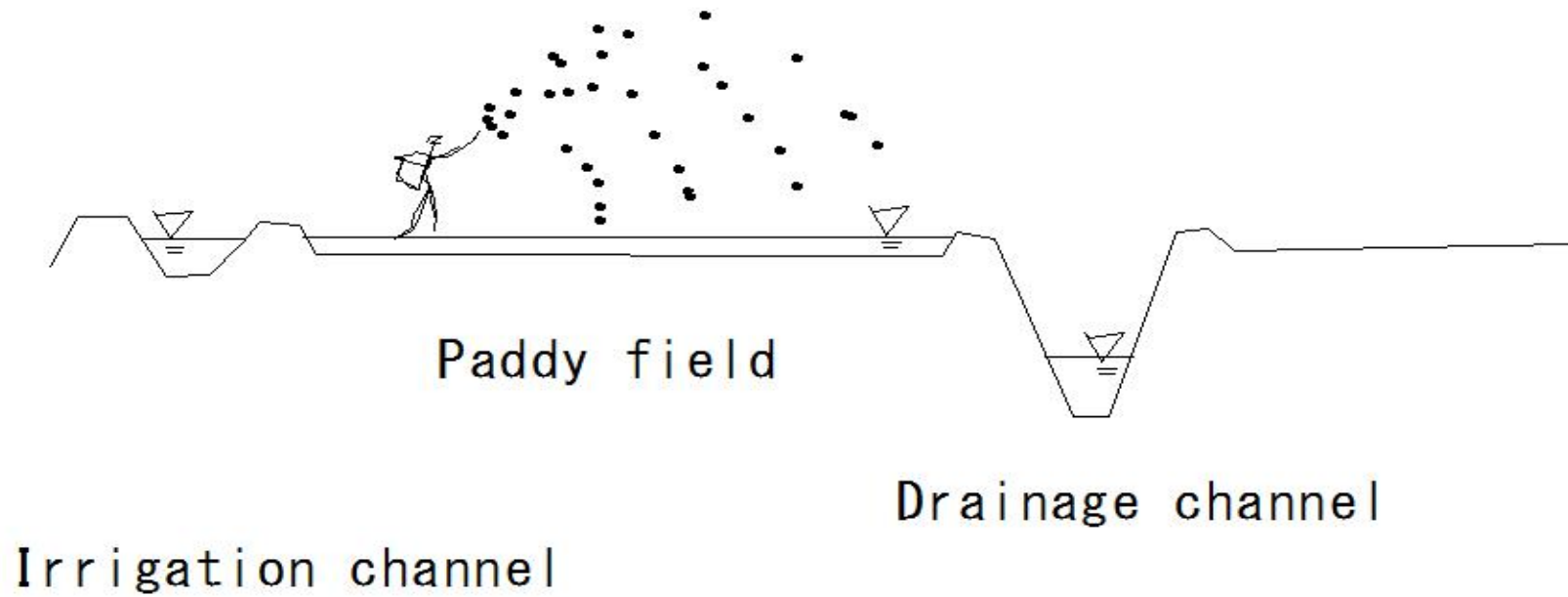
(1346) Flood irrigation

(1346) Flood irrigation



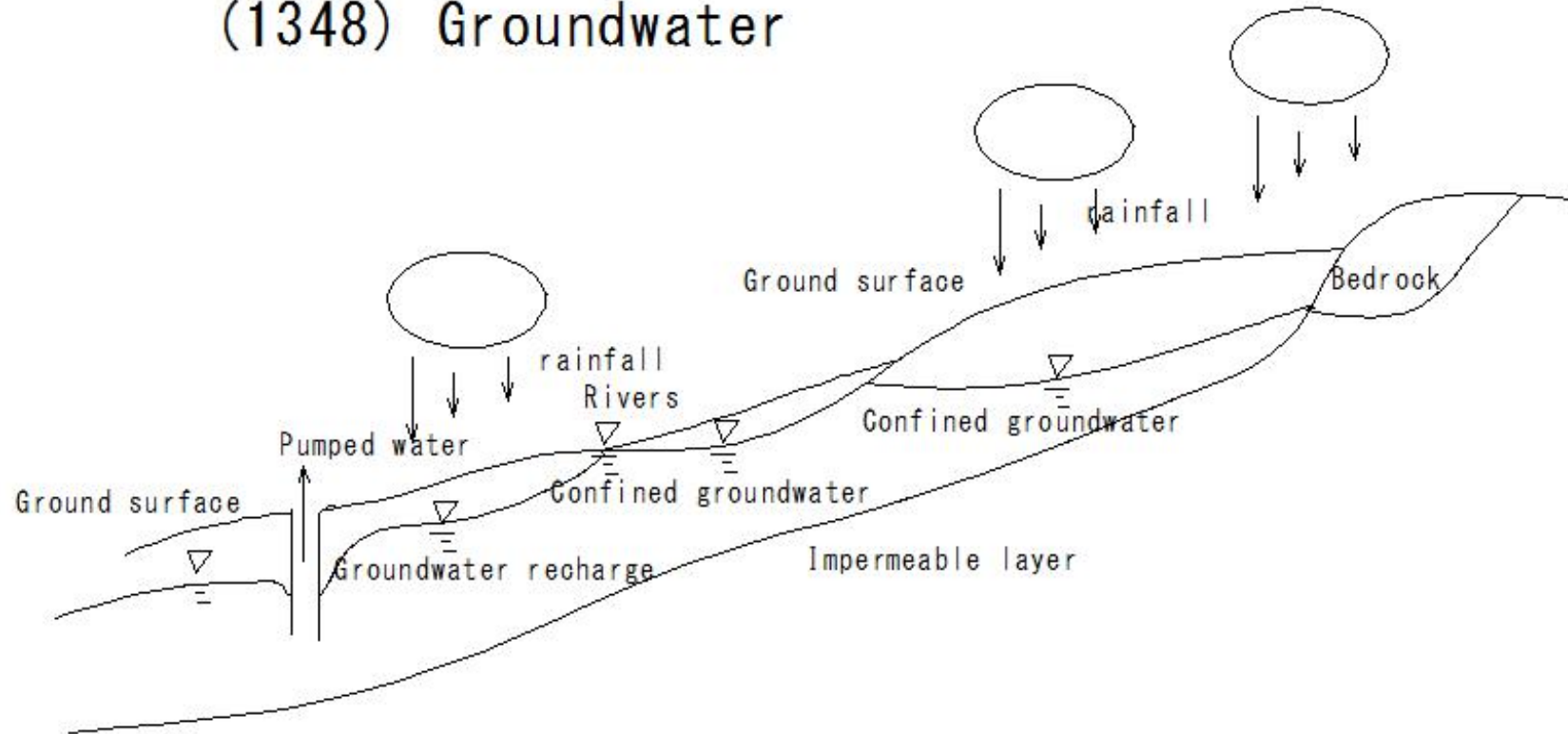
(1347) Direct seeding in flooded

(1347) Direct seeding in flooded



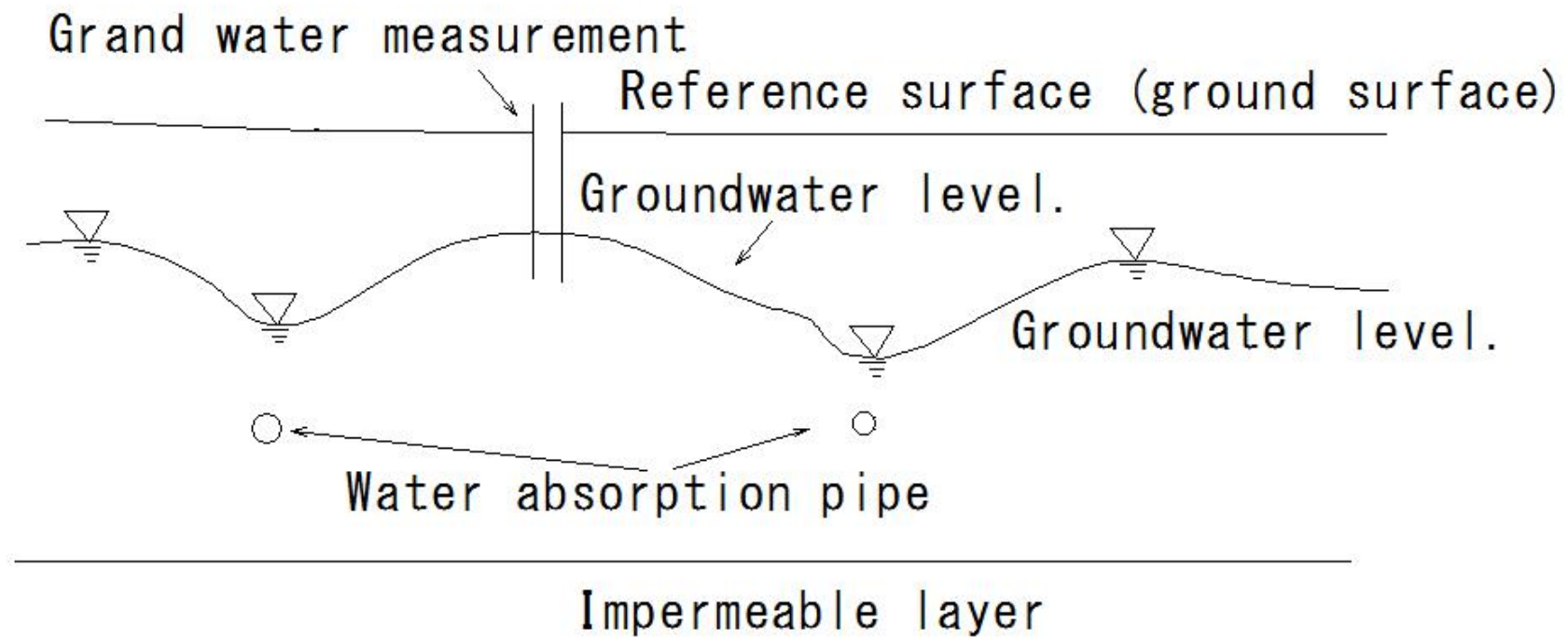
(1348) Groundwater

(1348) Groundwater



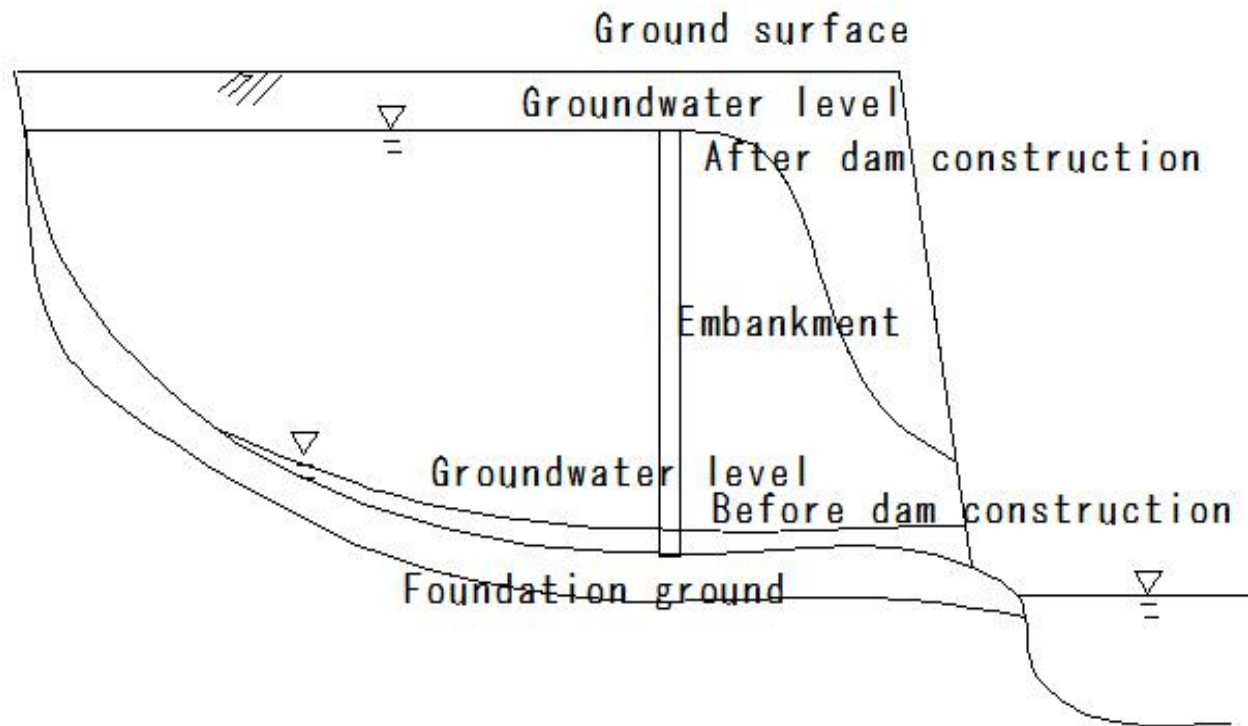
(1349) Groundwater level

(1349) Groundwater level



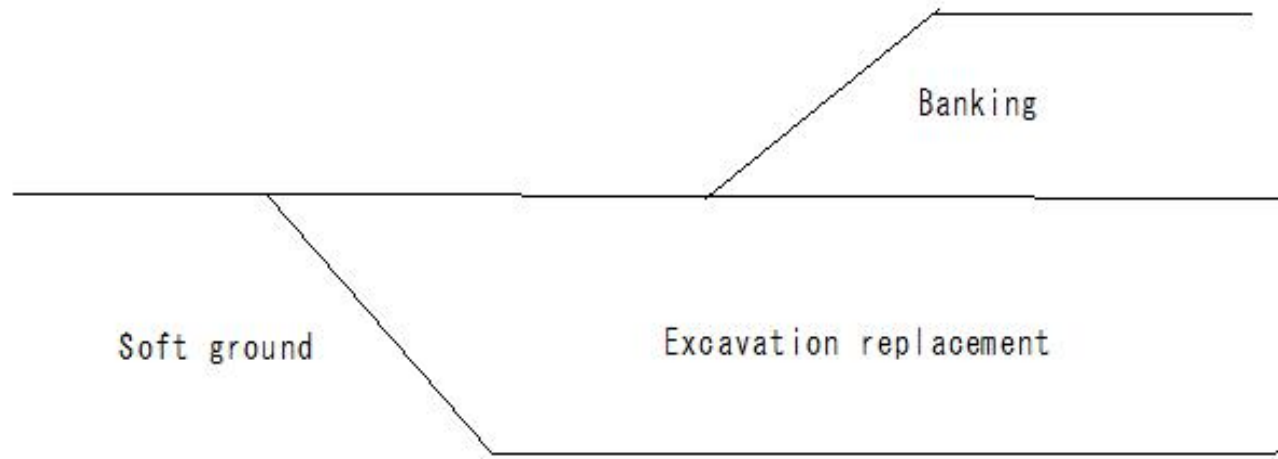
(1350) Underground dam

(1350) Underground dam



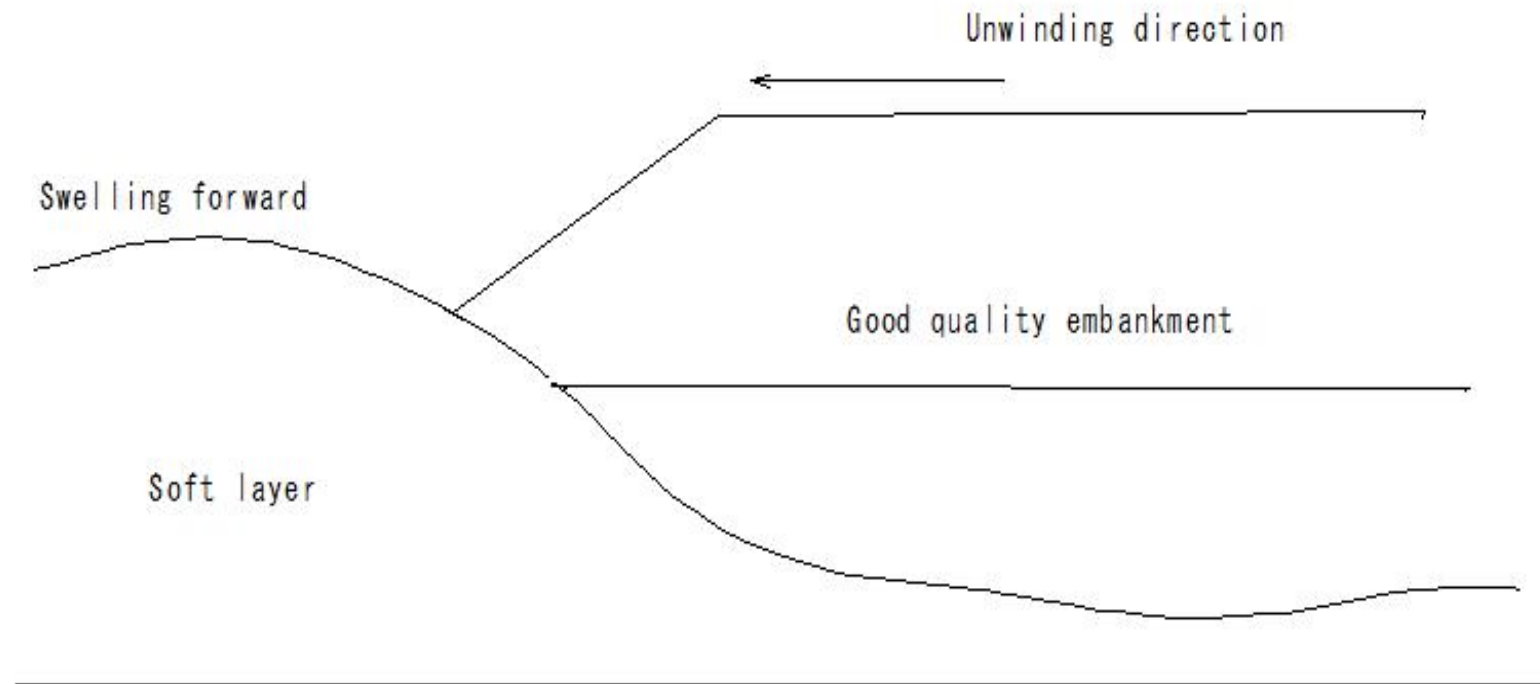
(1351) Replacement method Excavation replacement

(1351) Replacement method Excavation replacement



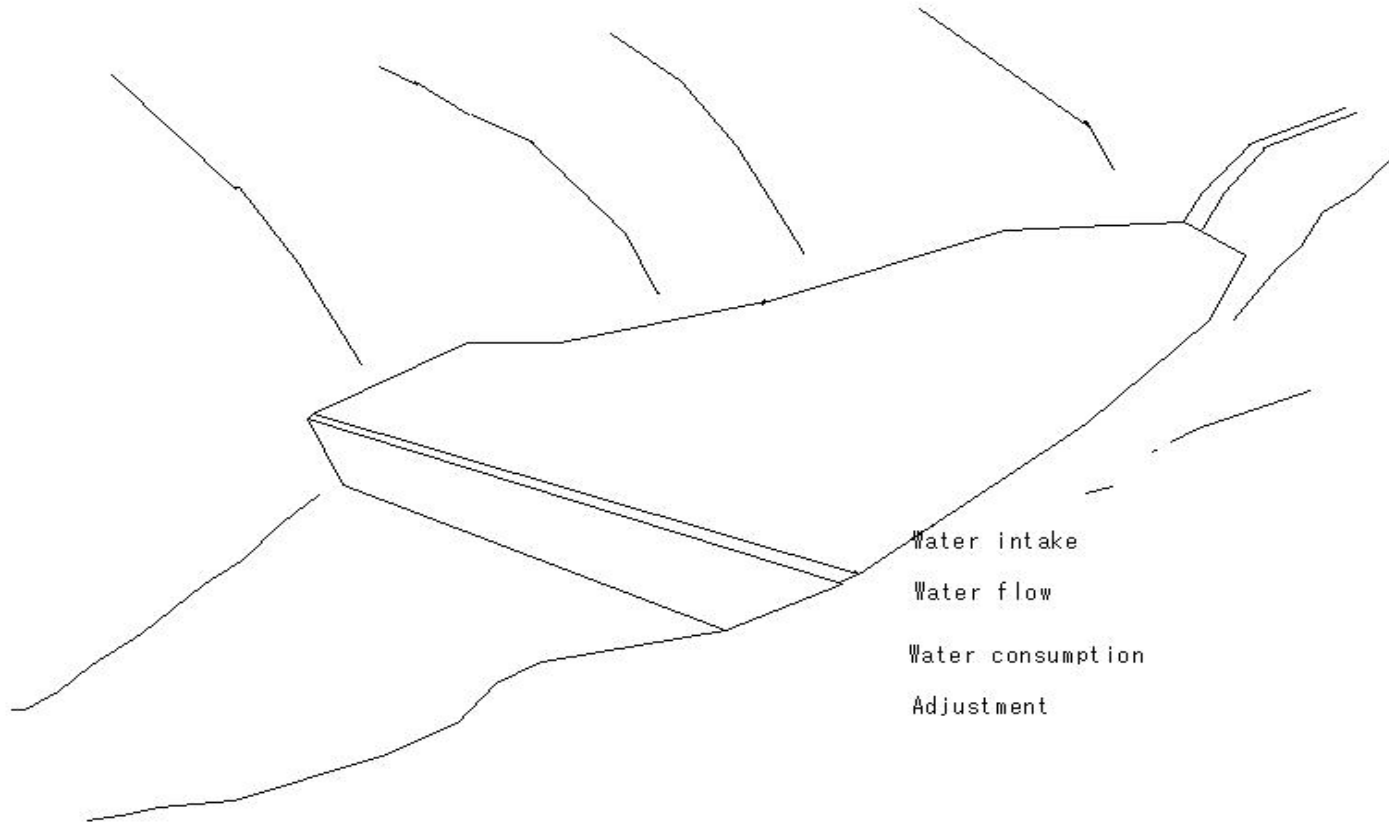
(1352) Replacement method Forced replacement

(1352) Replacement method Forced replacement



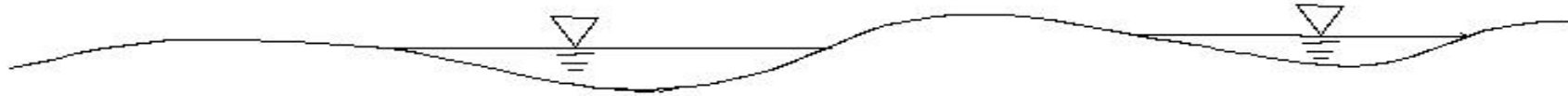
(1353) Regulating Reservoir

(1353) Regulating Reservoir



(1354) Terrace catchment channel

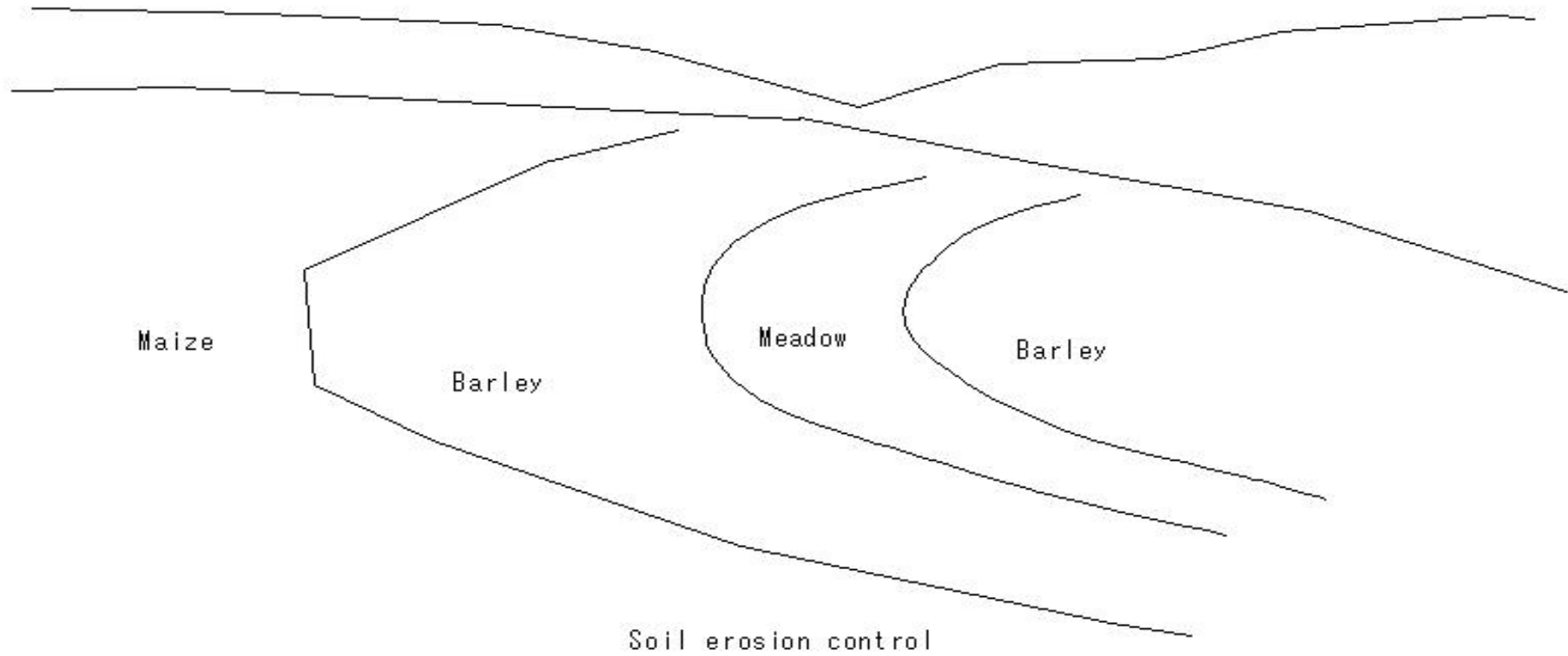
(1354) Terrace catchment channel



slope
Prevention of water erosion
Runoff
Waterway

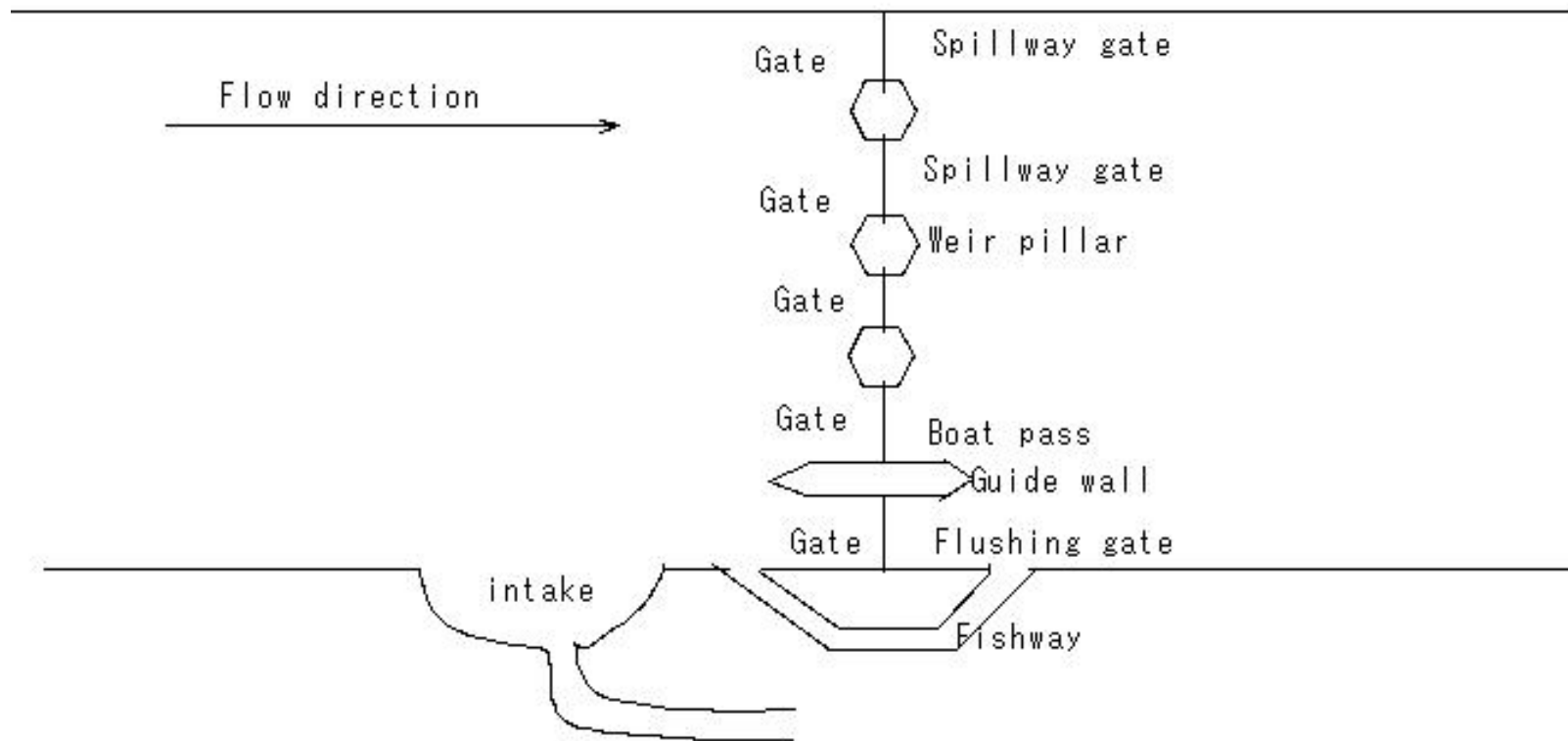
(1355) Contour cultivation

(1355) Contour cultivation



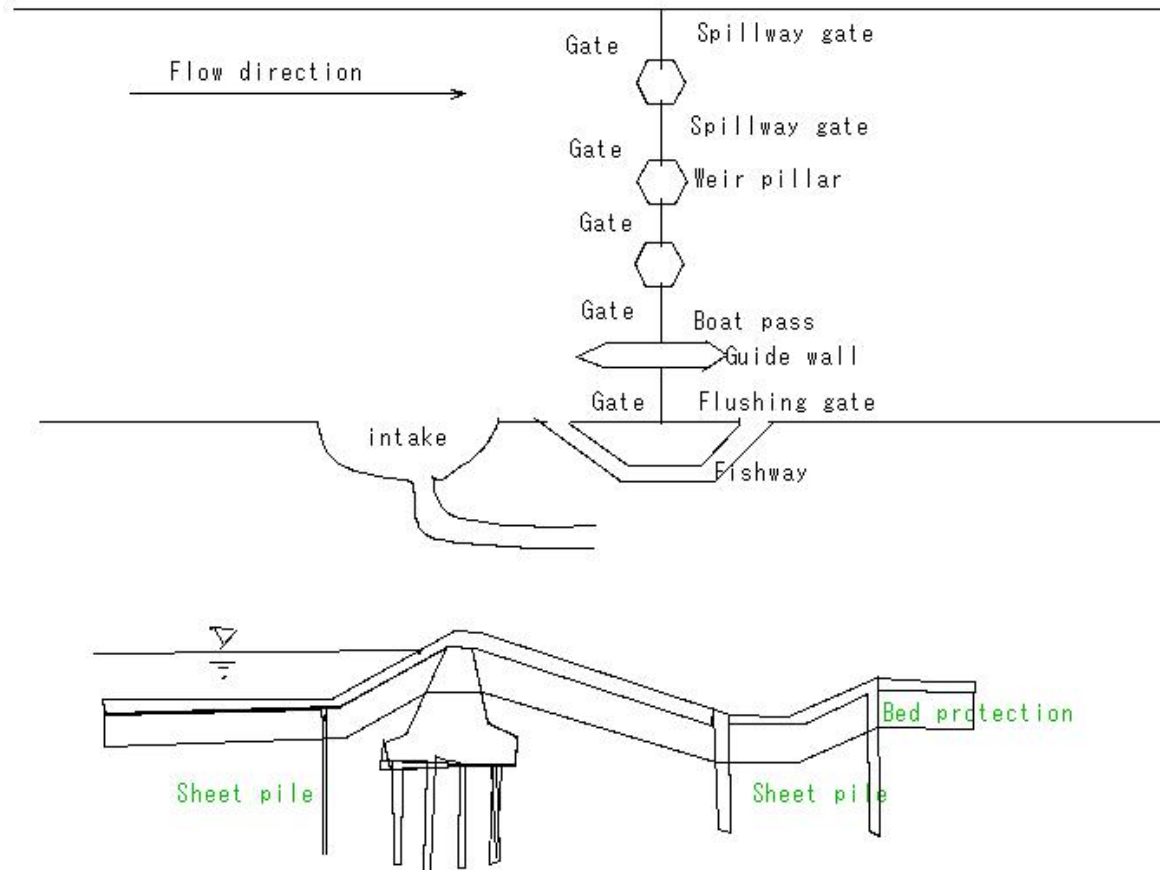
(1356)Division weir; Intake weir

(1356) Division weir; Intake weir



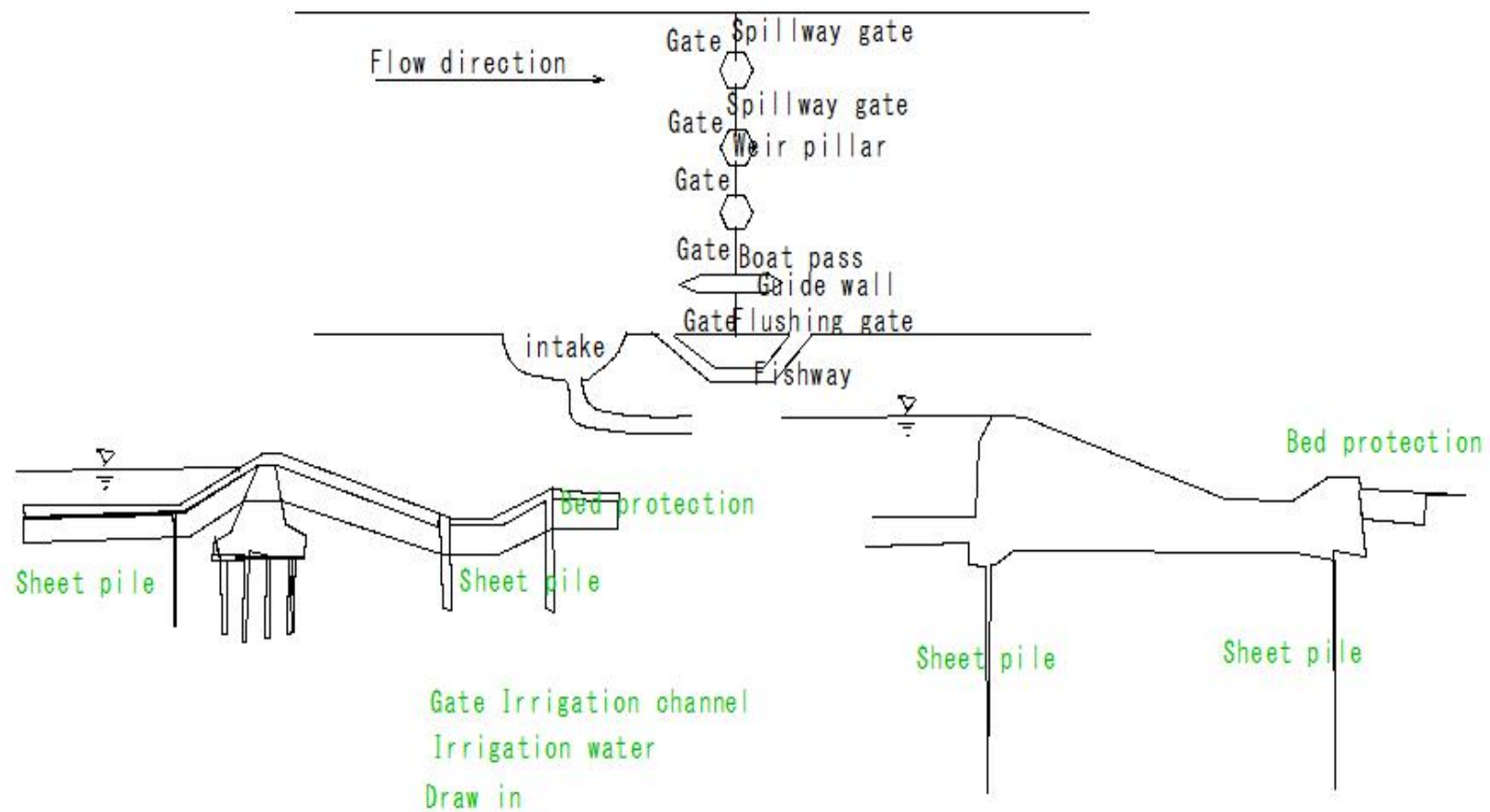
(1357) Division weir; Intake weir1

(1357) Division weir; Intake weir 1



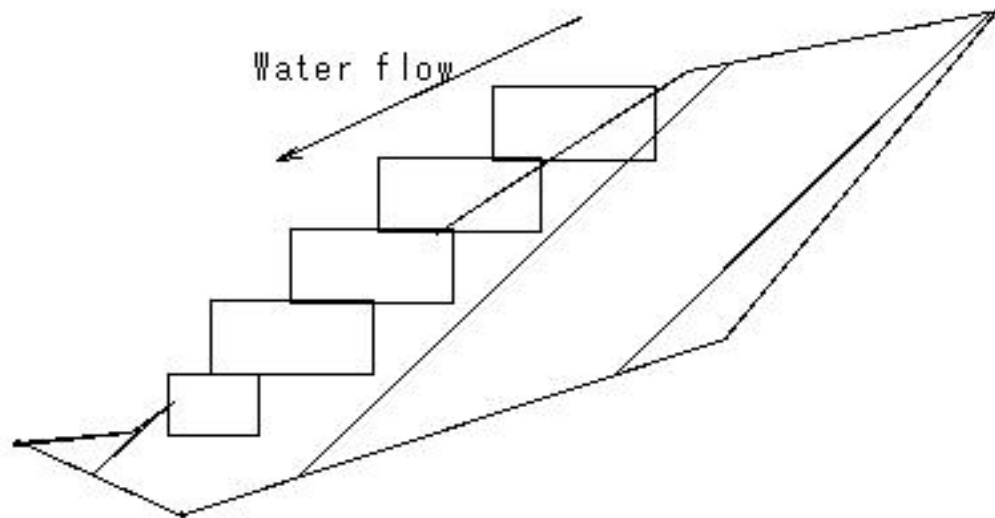
(1358) Division weir; Intake weir 2

(1358) Division weir; Intake weir 2



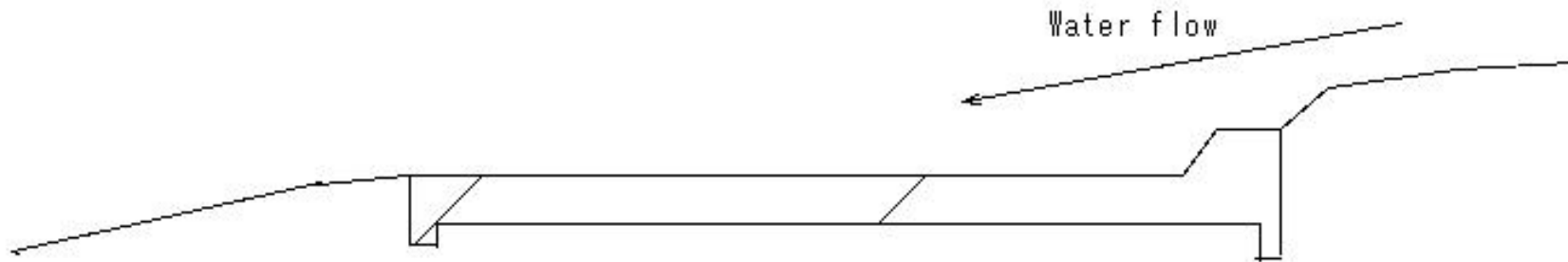
(1359) Consolidation works 1

(1359) Consolidation works 1



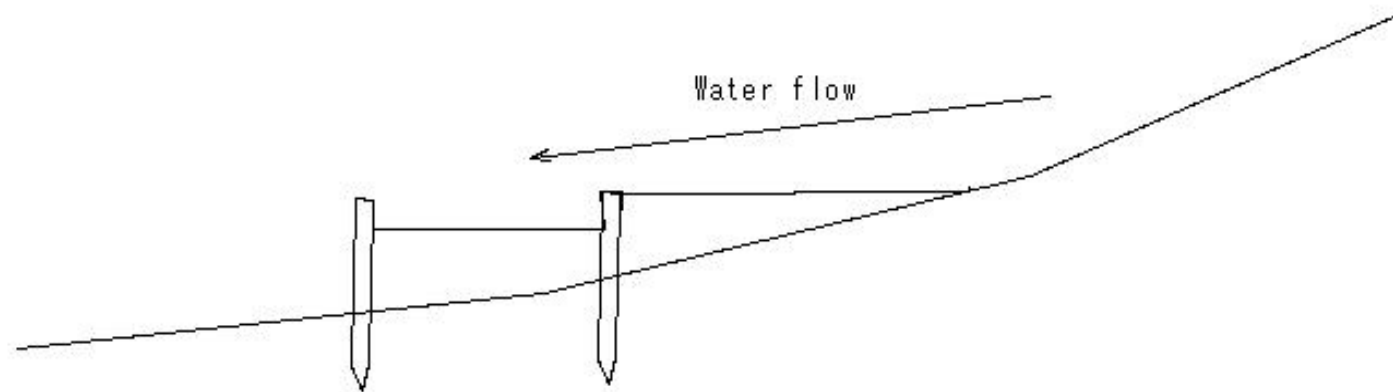
(1360) Consolidation works 2

(1360) Consolidation works 2



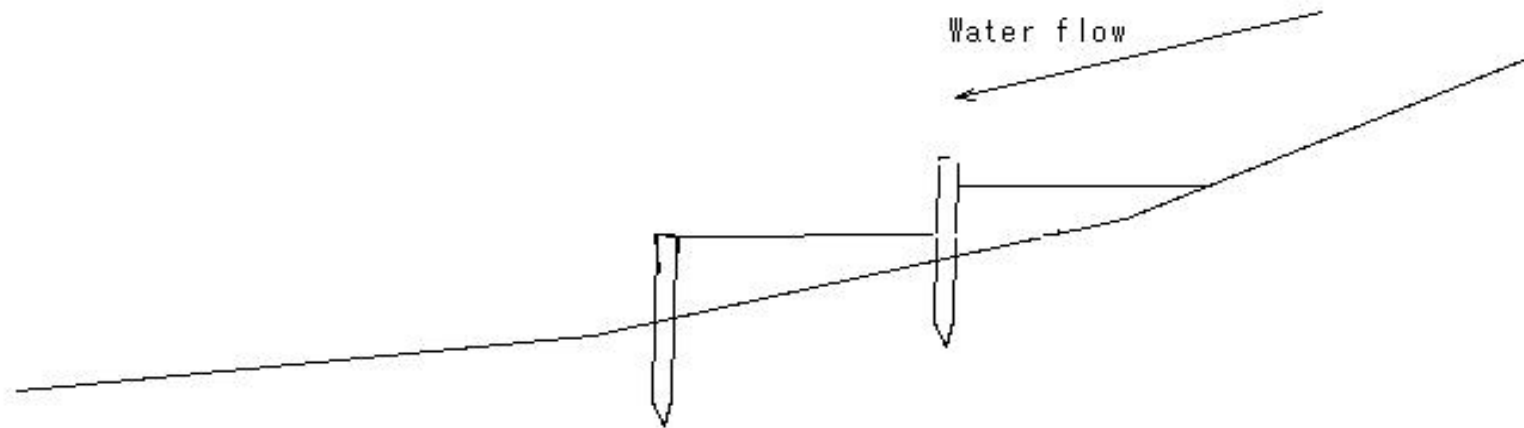
(1361) Consolidation works 3

(1361) Consolidation works 3



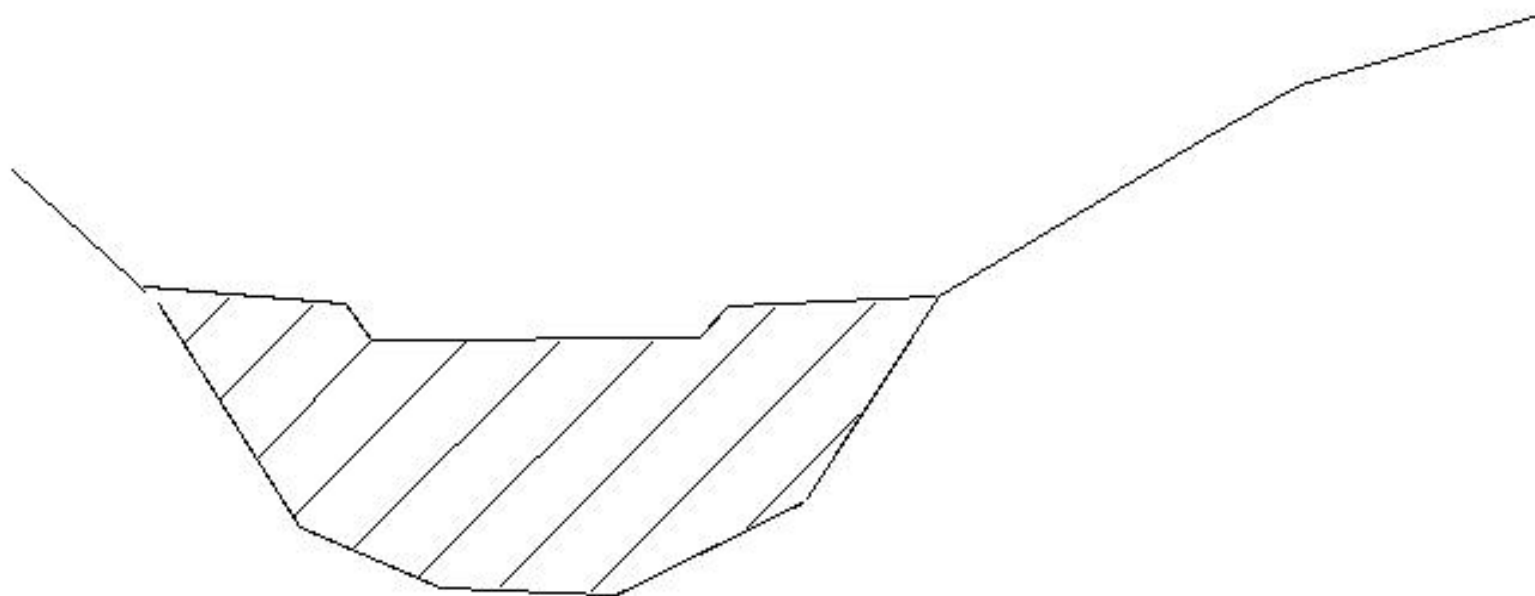
(1362) Consolidation works 4

(1362) Consolidation works 4



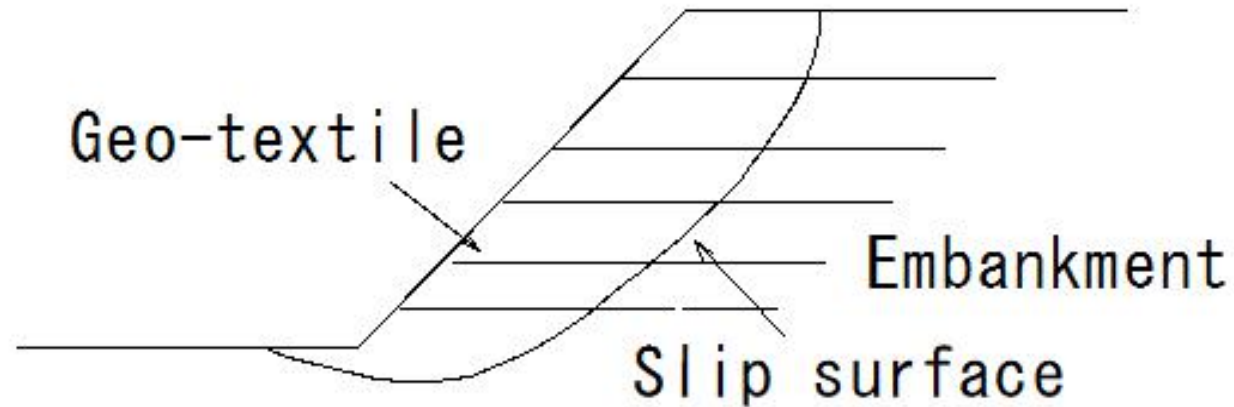
(1363) Consolidation works 5

(1363) Consolidation works 5



(1364) Example of use Geo-textile

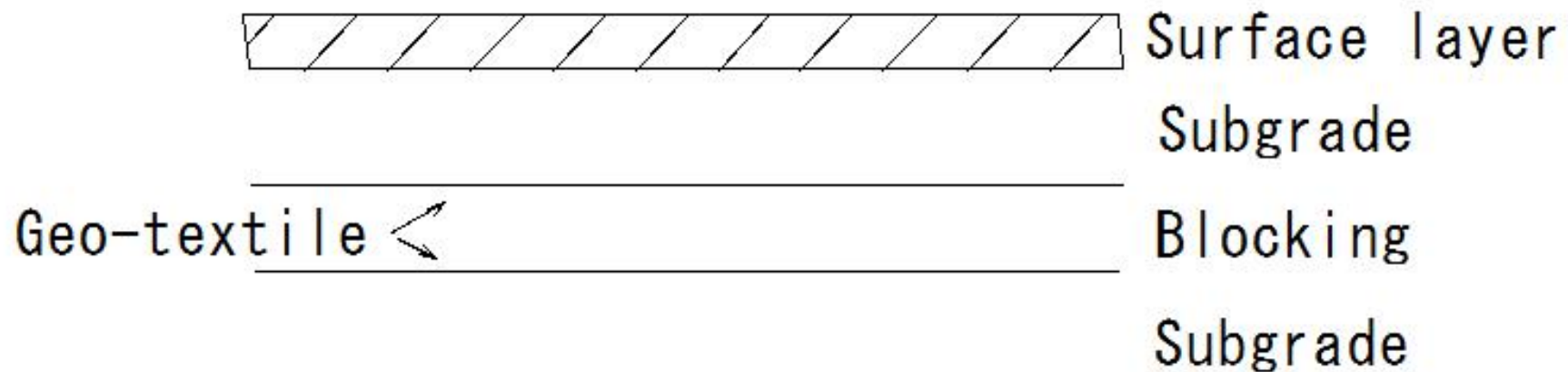
(1364) Example of use Geo-textile



Embankment Drainage Reinforcement

(1365) Example of use Geo-textile 2

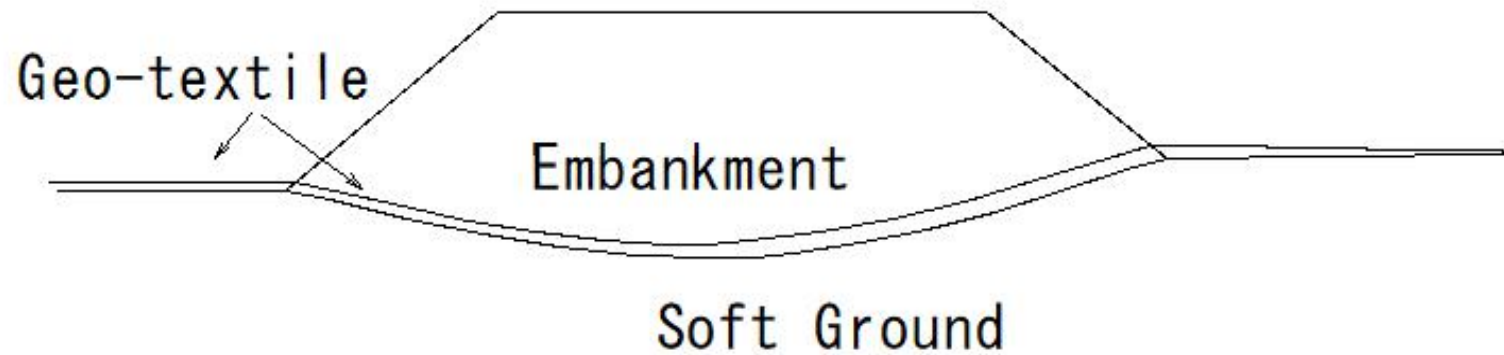
(1365) Example of use Geo-textile 2



Heterogeneous material separate

(1366) Example of use Geo-textile 3

(1366) Example of use Geo-textile 3

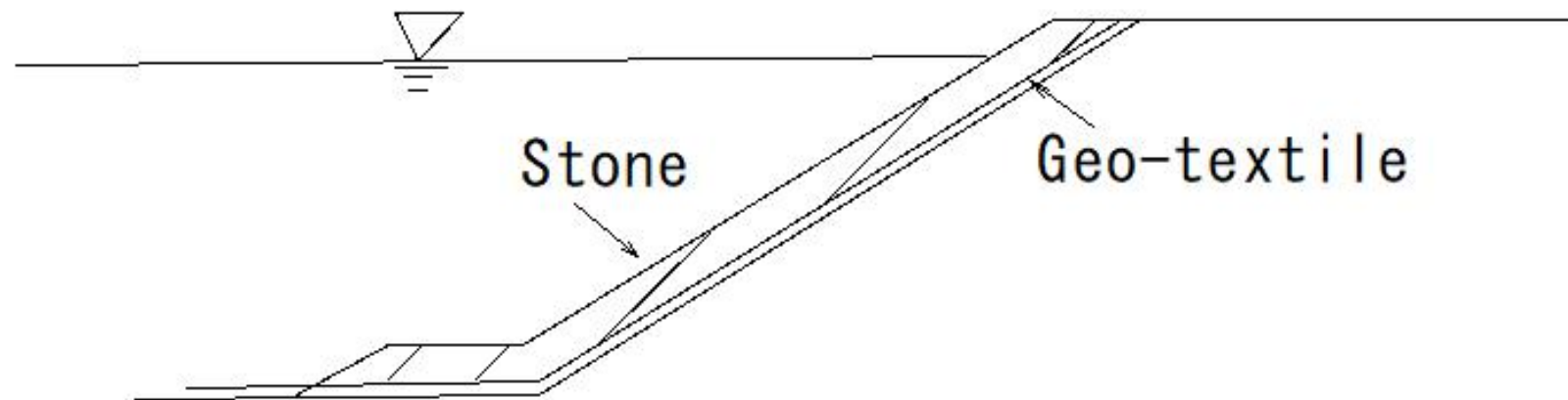


Ground/subgrade reinforcement

Materials reduction, simplification

(1367) Example of use Geo-textile 4

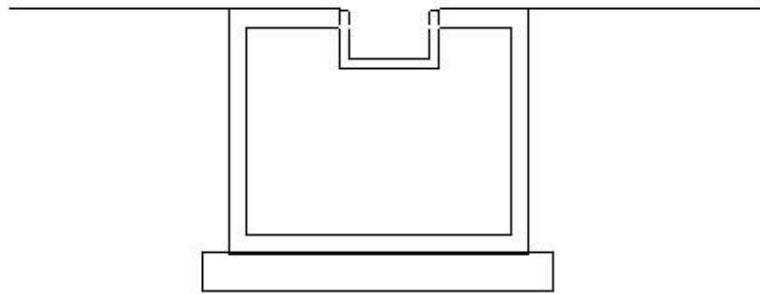
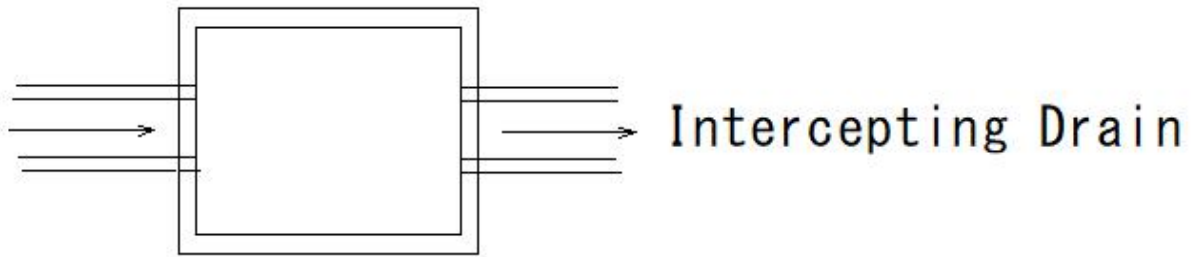
(1367) Example of use Geo-textile 4



Prevention of sediment outflow

(1368) Sedimentation Tank

(1368) Sedimentation Tank

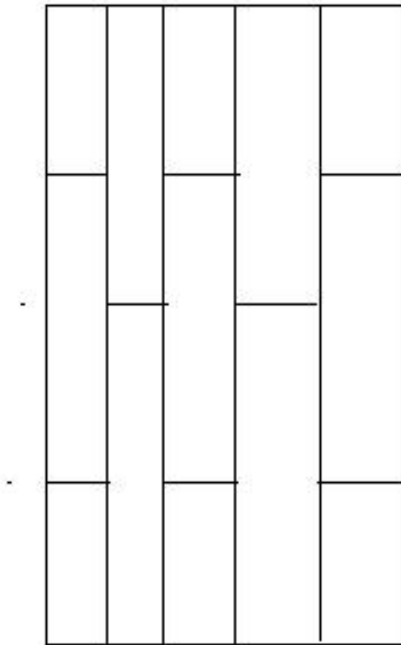


Sedimentation Tank

(1369) Soil structure 1

(1369) Soil structure1

How to enter the earth fissure

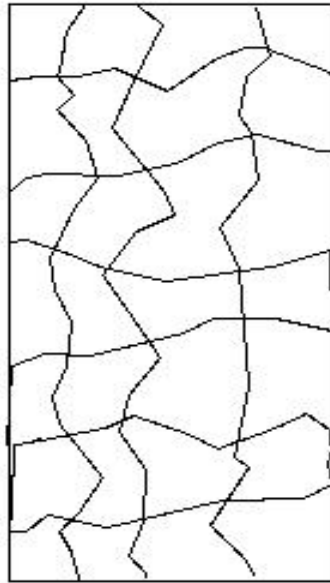


Soil column structure

(1370) Soil structure 2

(1370) Soil structure2

How to enter the earth fissure

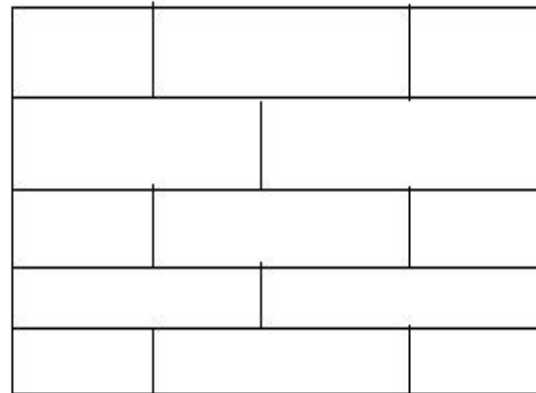


Angular structure

(1371) Soil structure 3

(1371) Soil structure 3

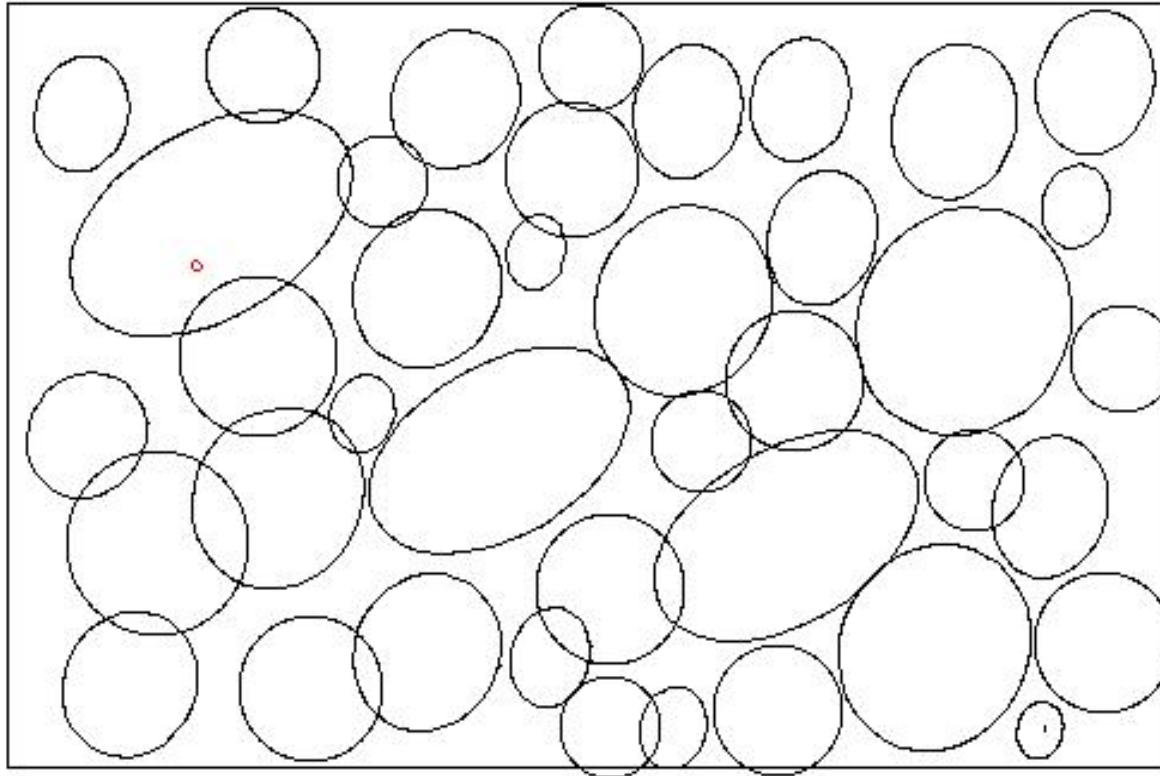
- How to enter the earth fissure



Platy structure

(1372) Binding of soil particles 1

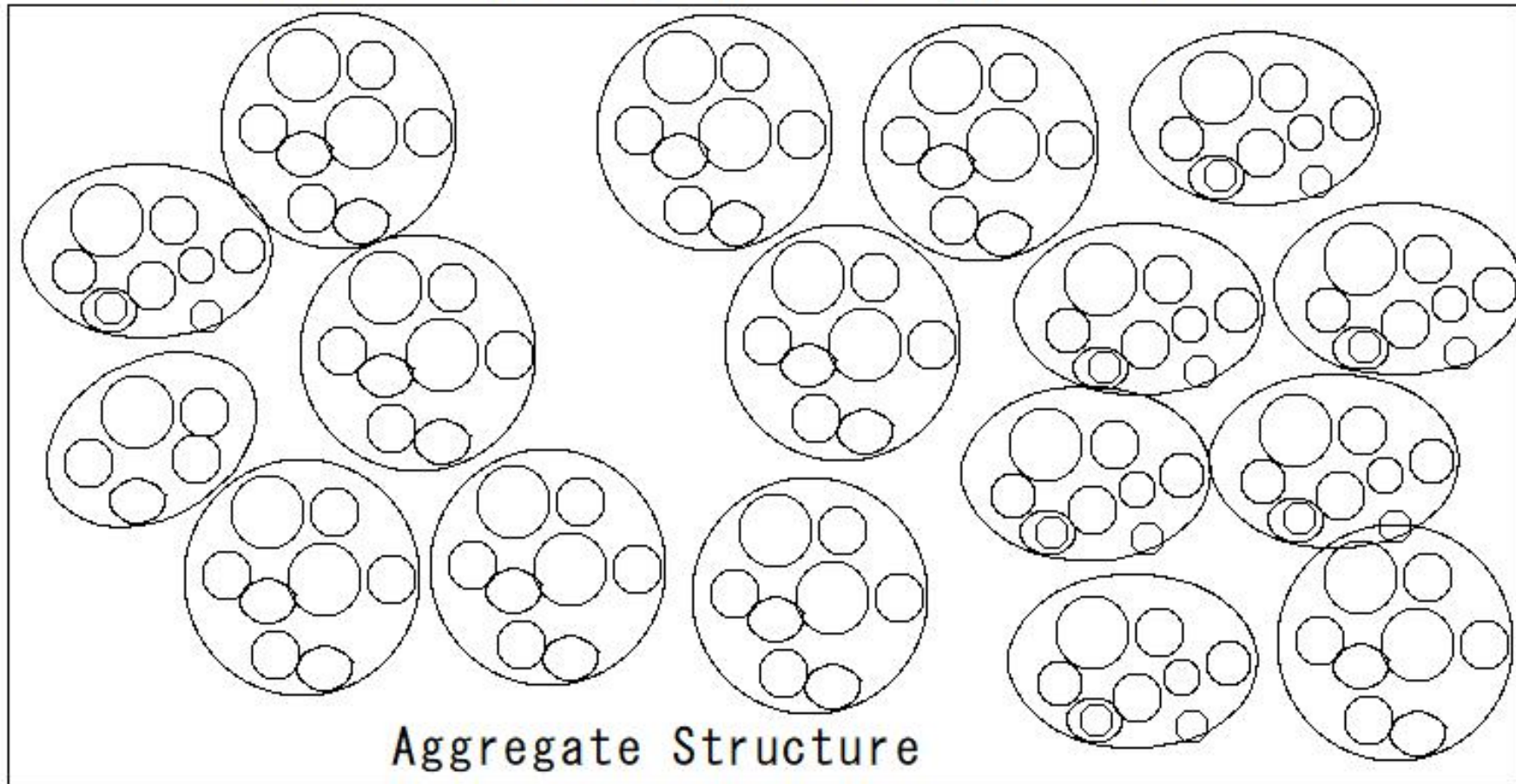
(1372) Binding of soil particles 1



Single grained structure

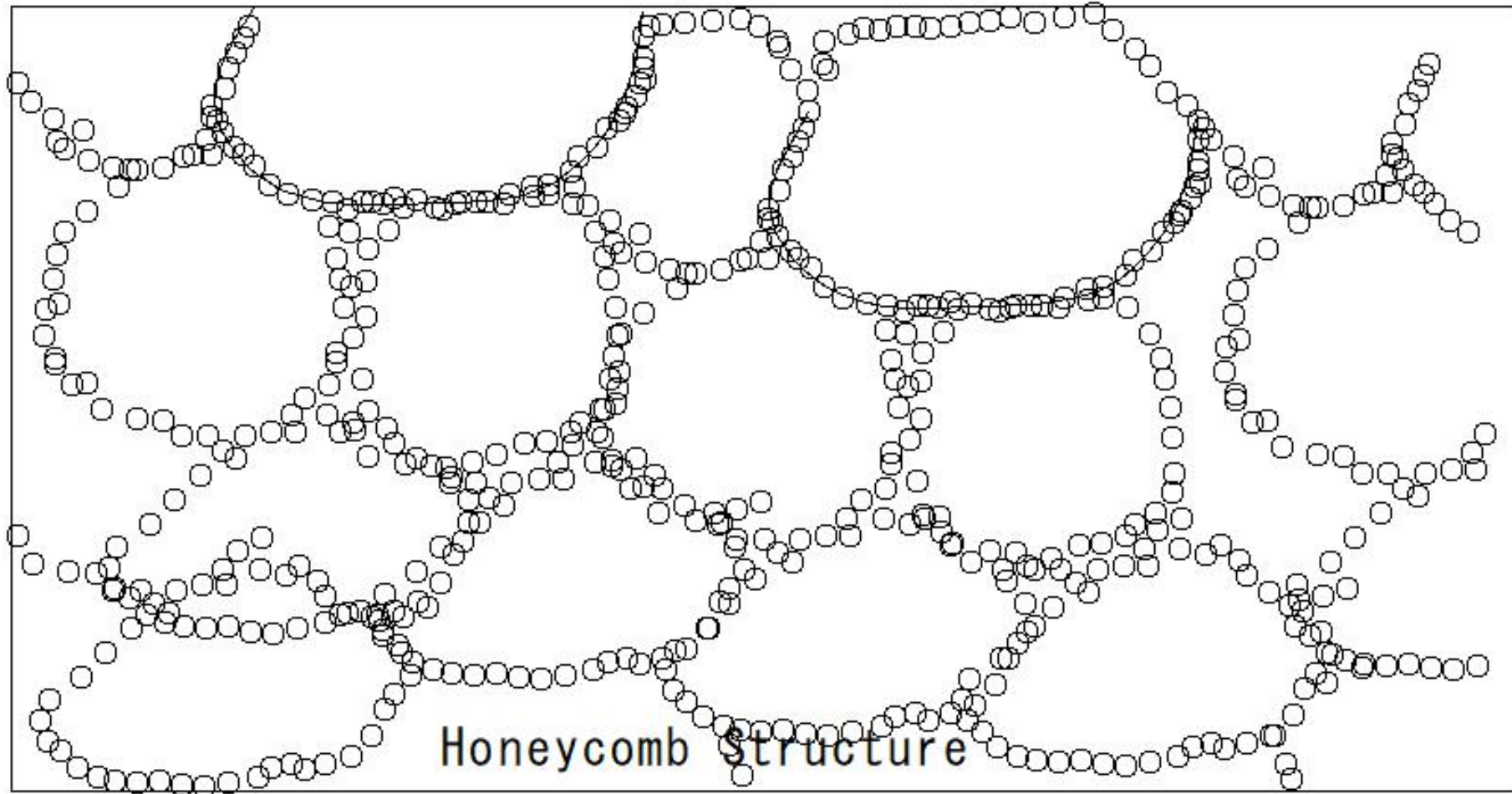
(1373) Binding of soil particles 2

(1373) Binding of soil particles 2



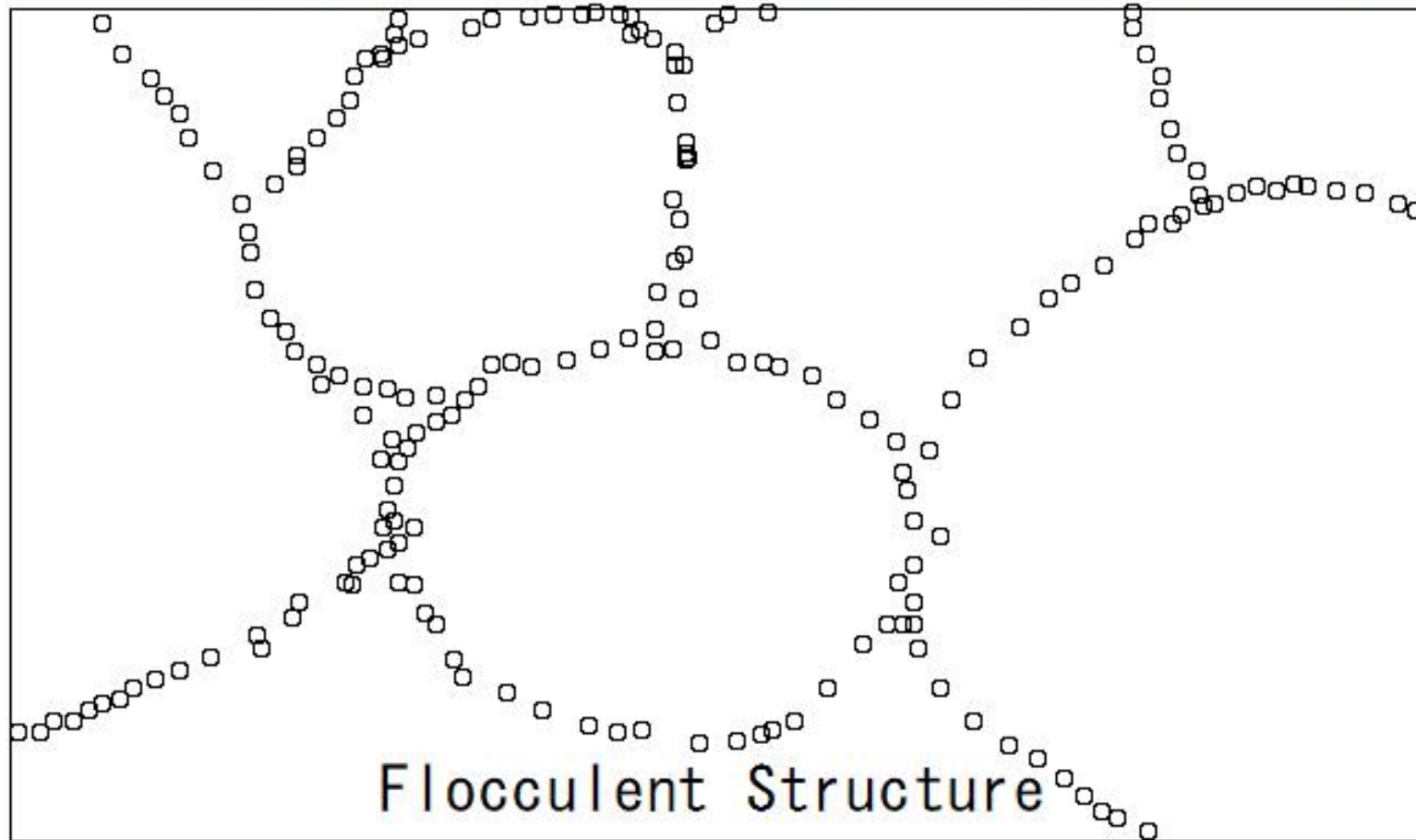
(1374) Binding of soil particles 3

(1374) Binding of soil particles 3



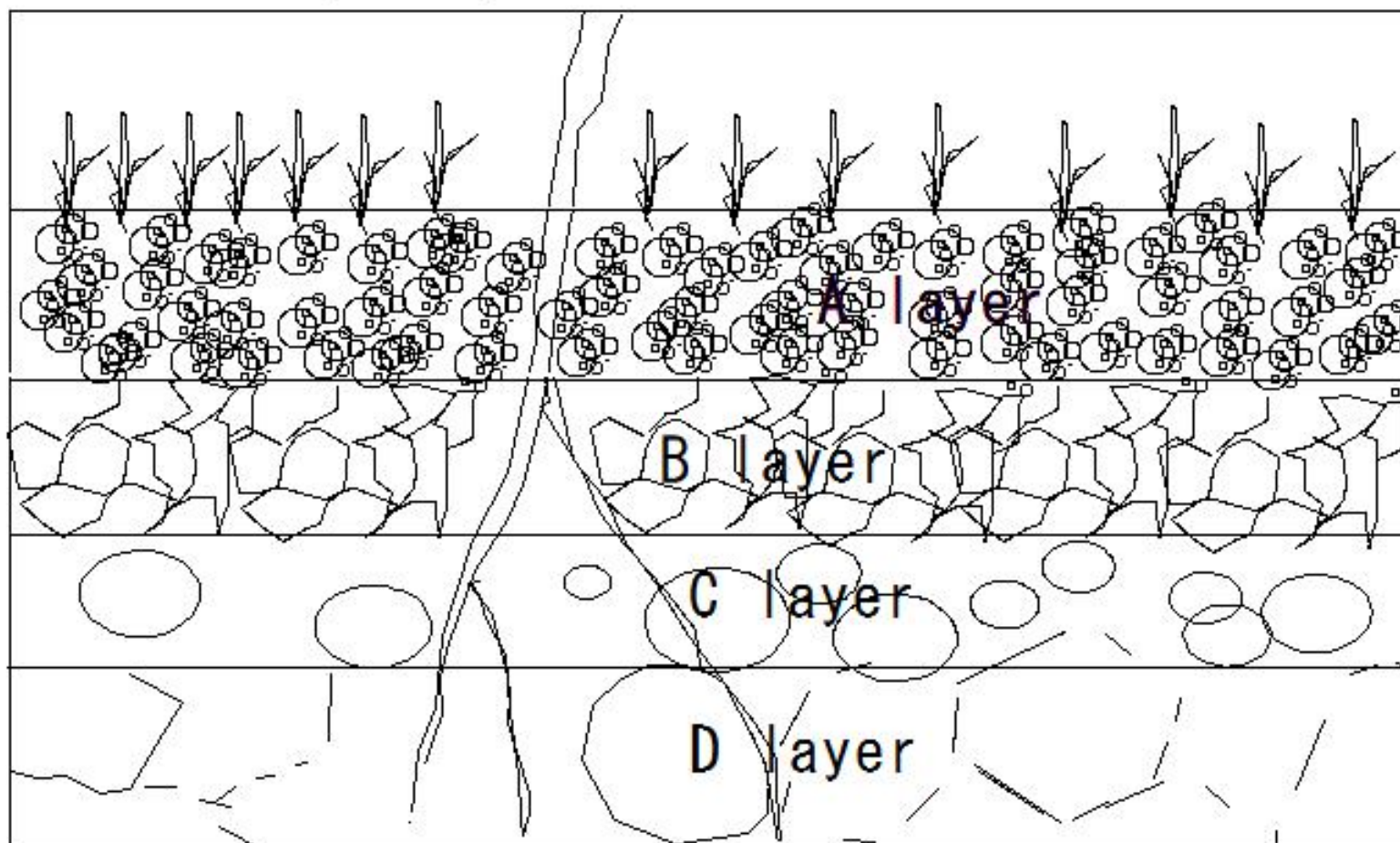
(1375) Binding of soil particles 4

(1375) Binding of soil particles 4



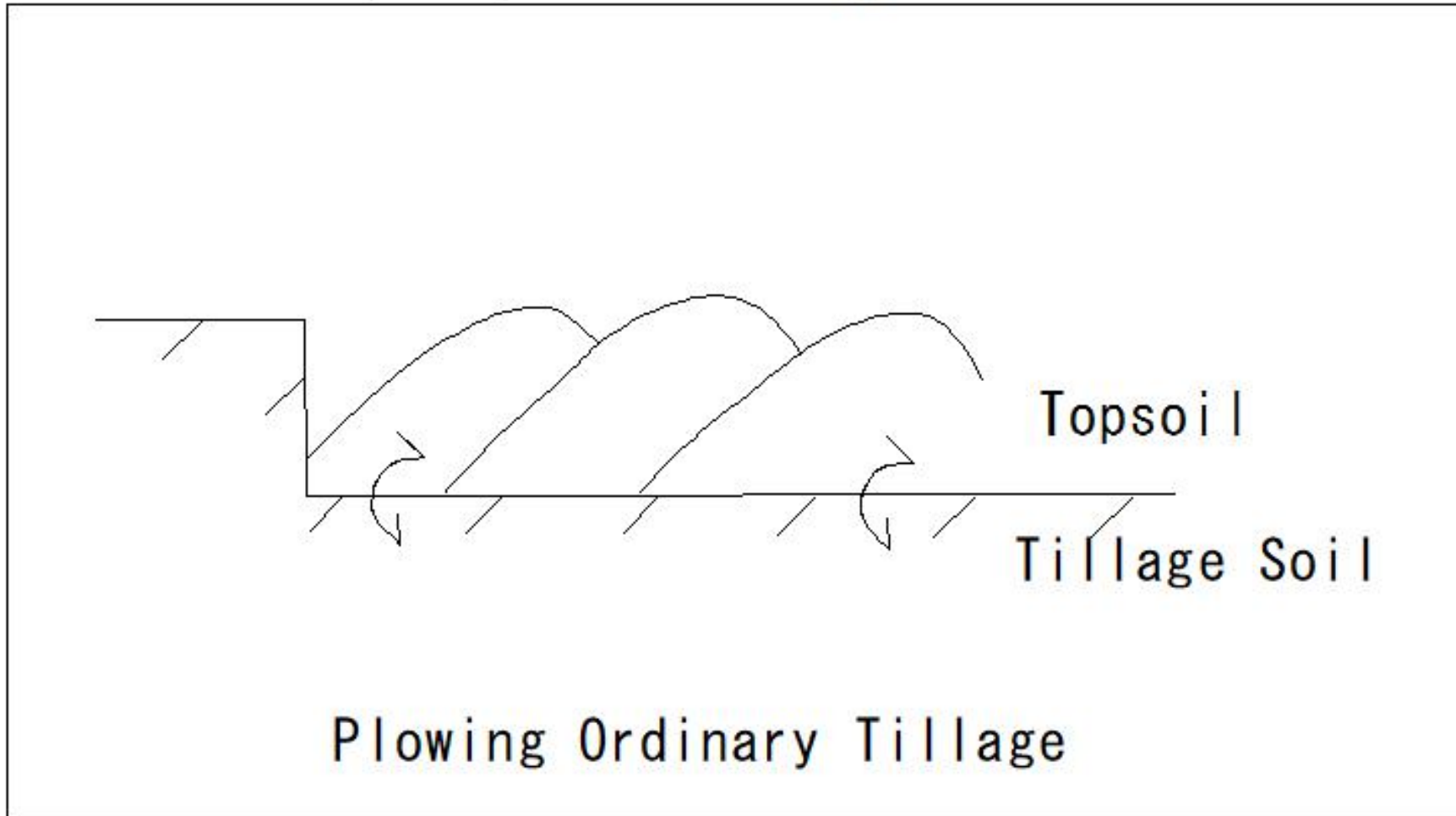
(1376) Soil Horizon

(1376) Soil Horizon



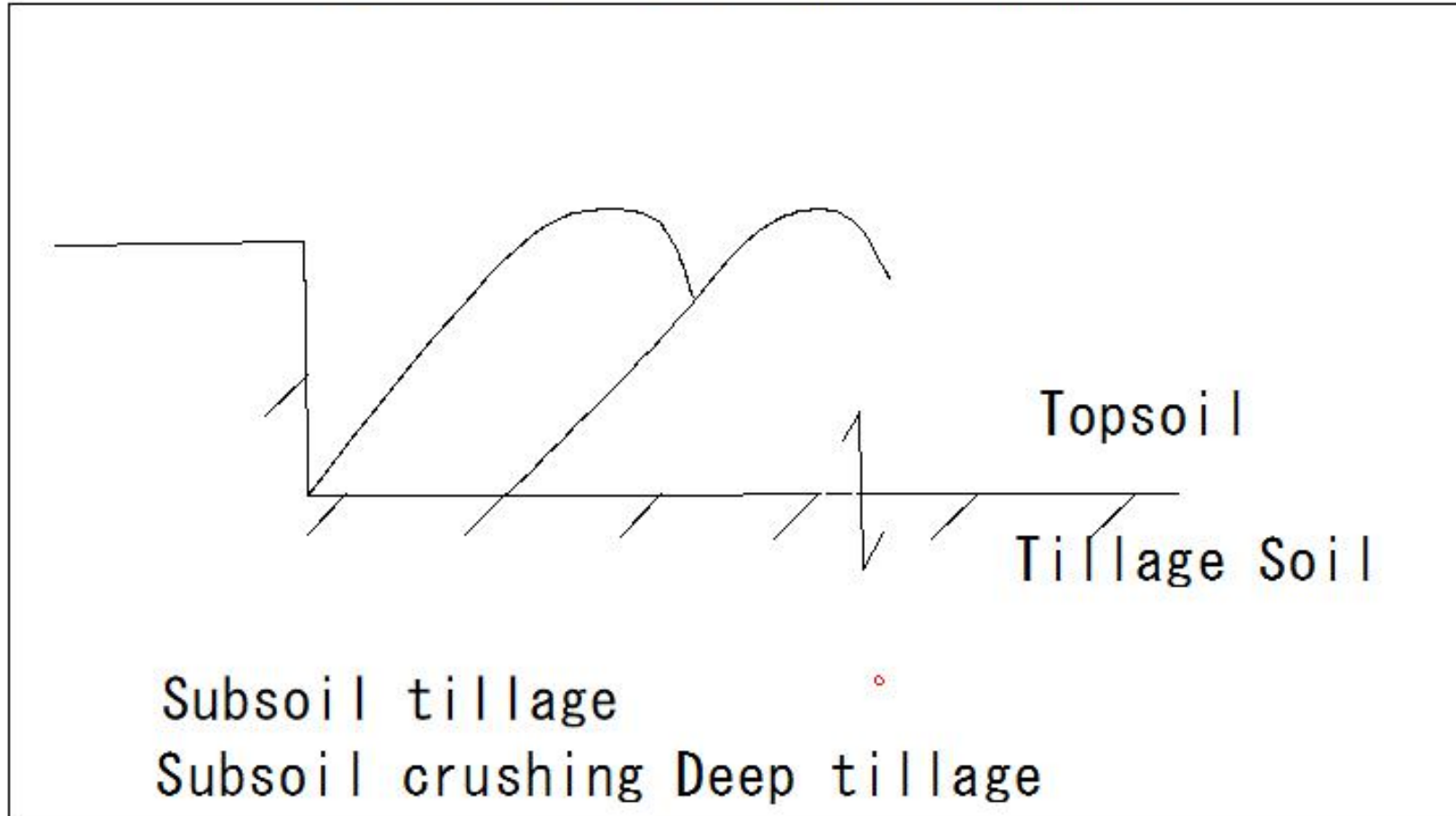
(1377) Subsoil Improvement 1

(1377) Subsoil Improvement 1



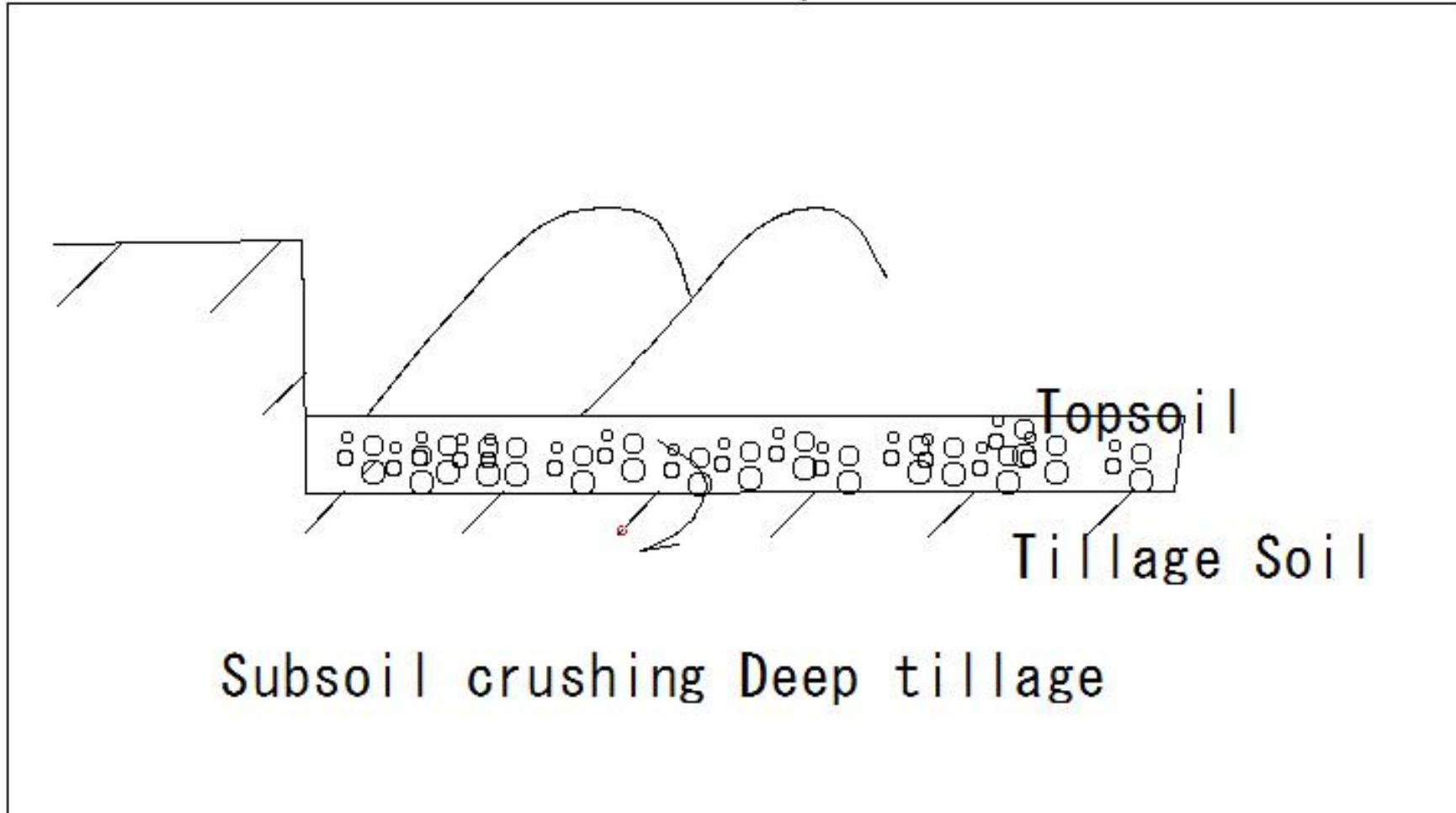
(1378) Subsoil Improvement 2

(1378) Subsoil Improvement 2



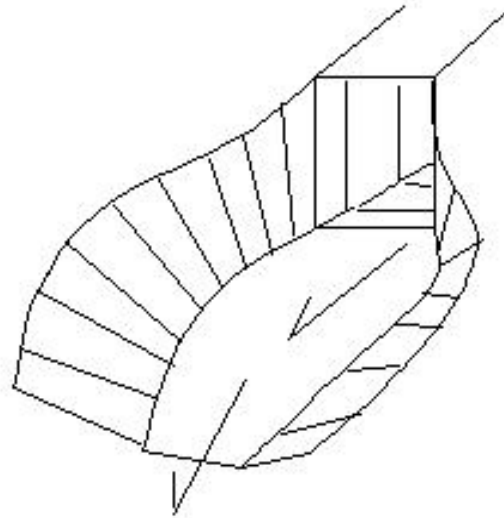
(1379) Subsoil Improvement 3

(1379) Subsoil Improvement 3



(1380) Channel Transition

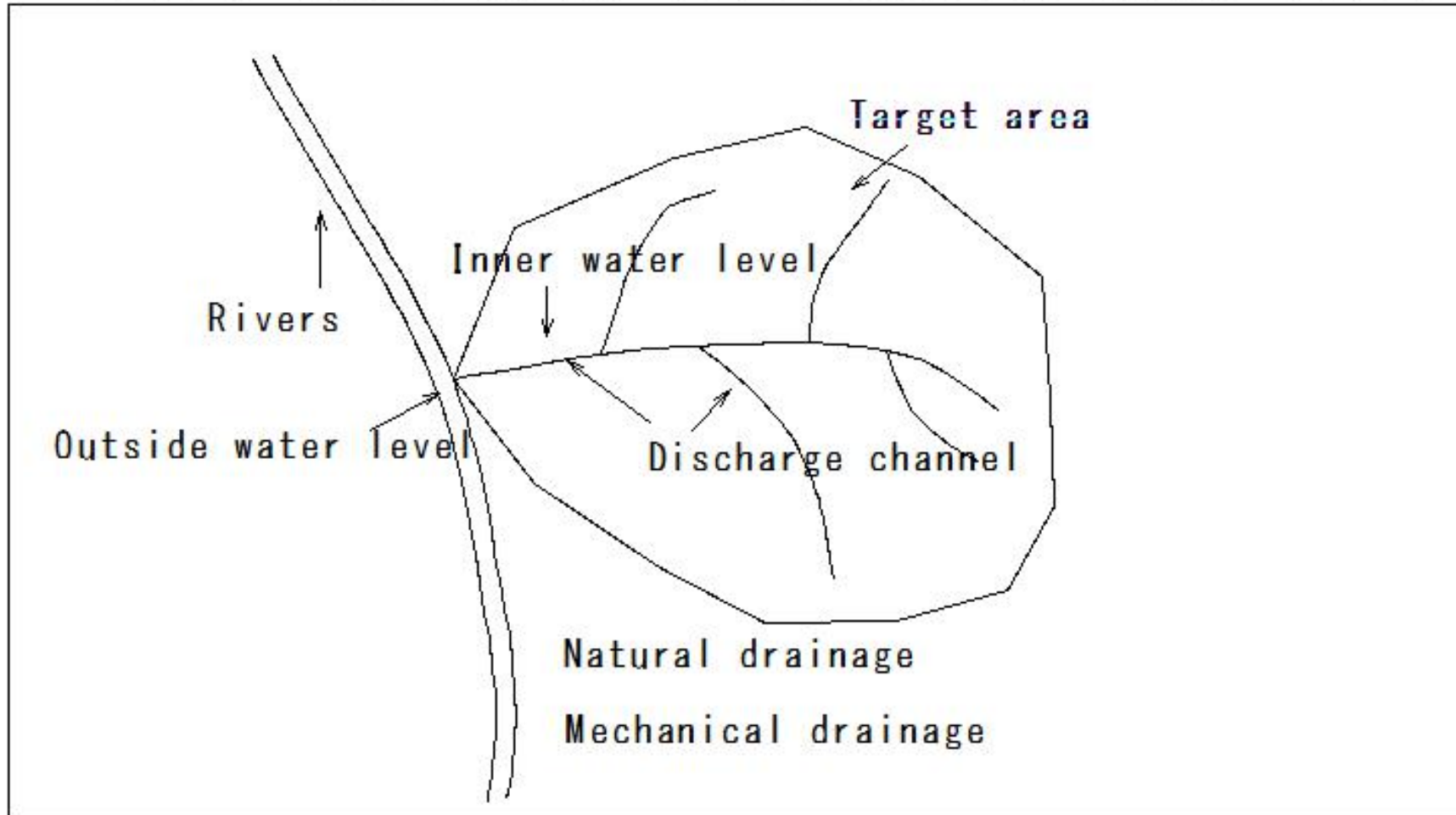
(1380) Channel Transition



Waterway^o cross section is different

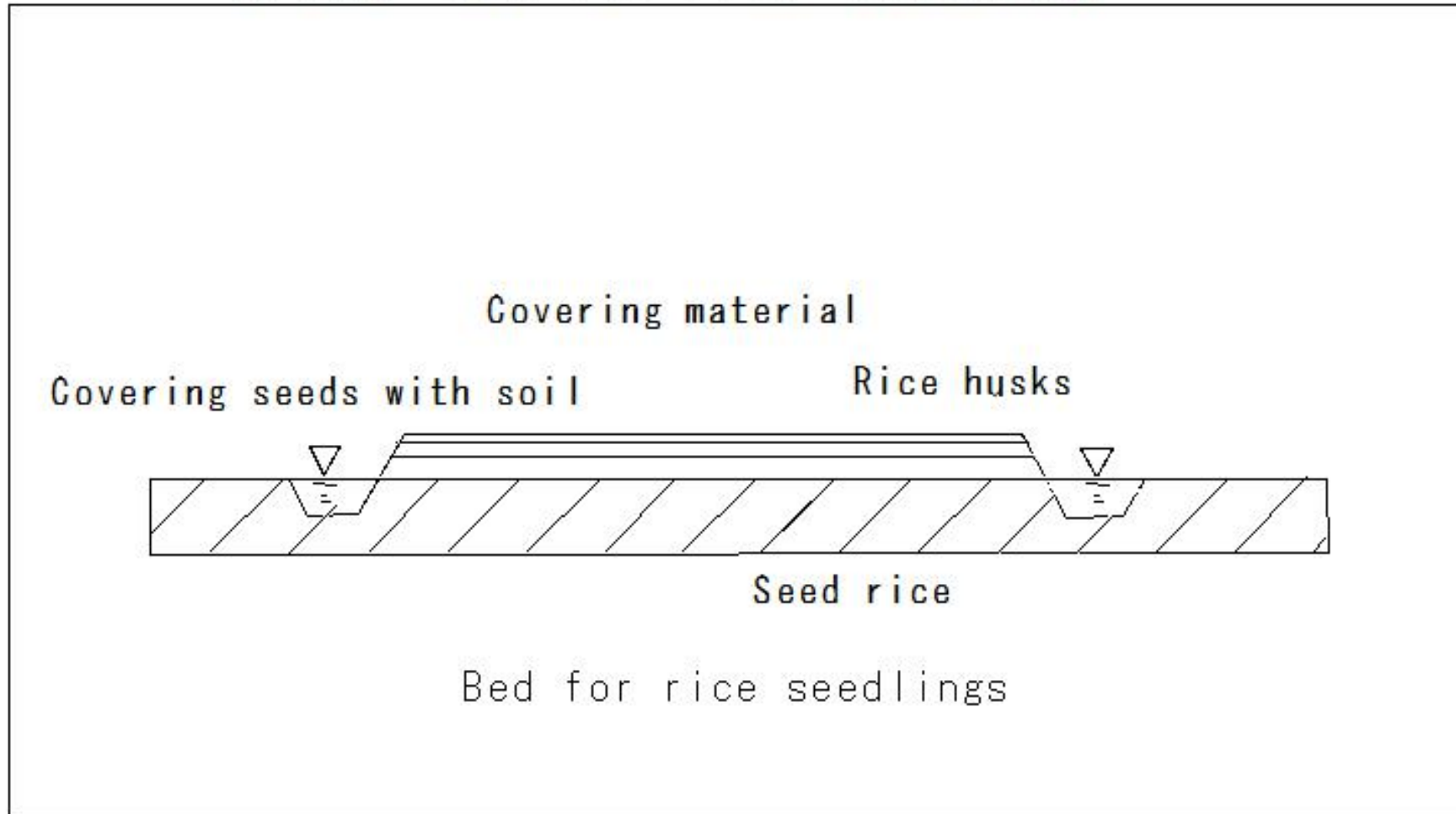
(1381) Inner water level Outside water level

(1381) Inner water level Outside water level



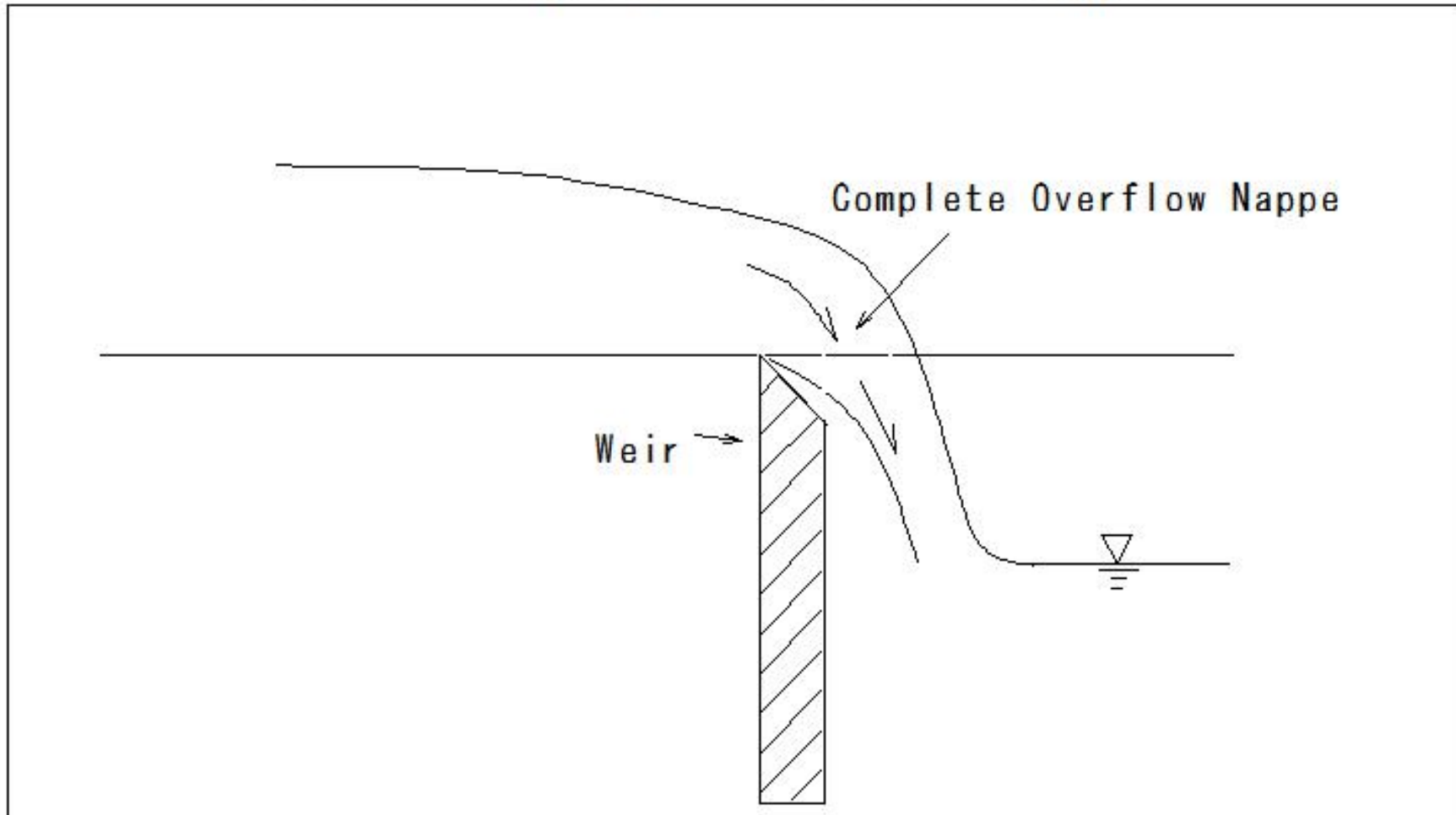
(1382) Bed for rice seedlings

(1382) Bed for rice seedlings



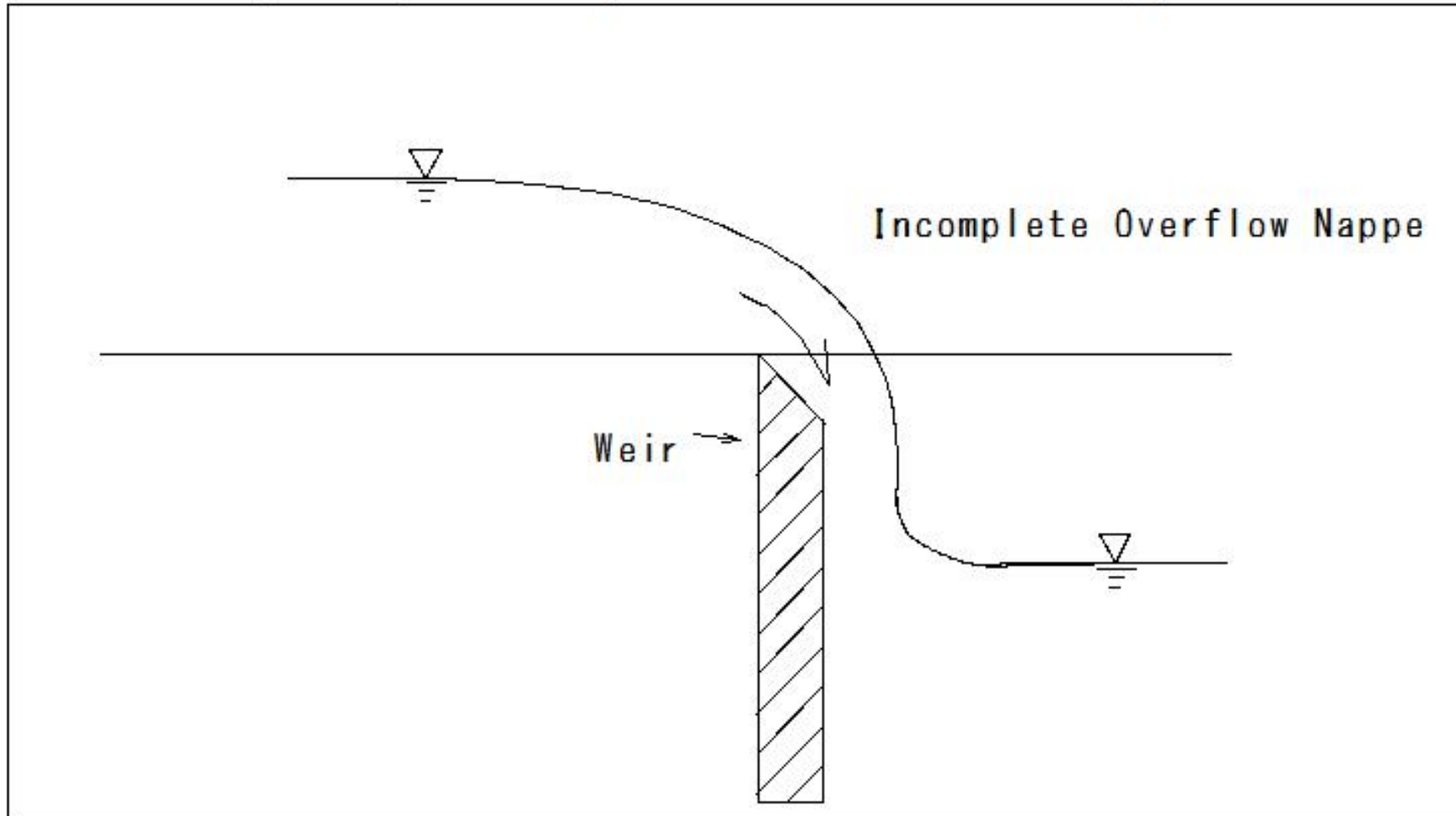
(1383) Complete Overflow Nappe

(1383) Complete Overflow Nappe



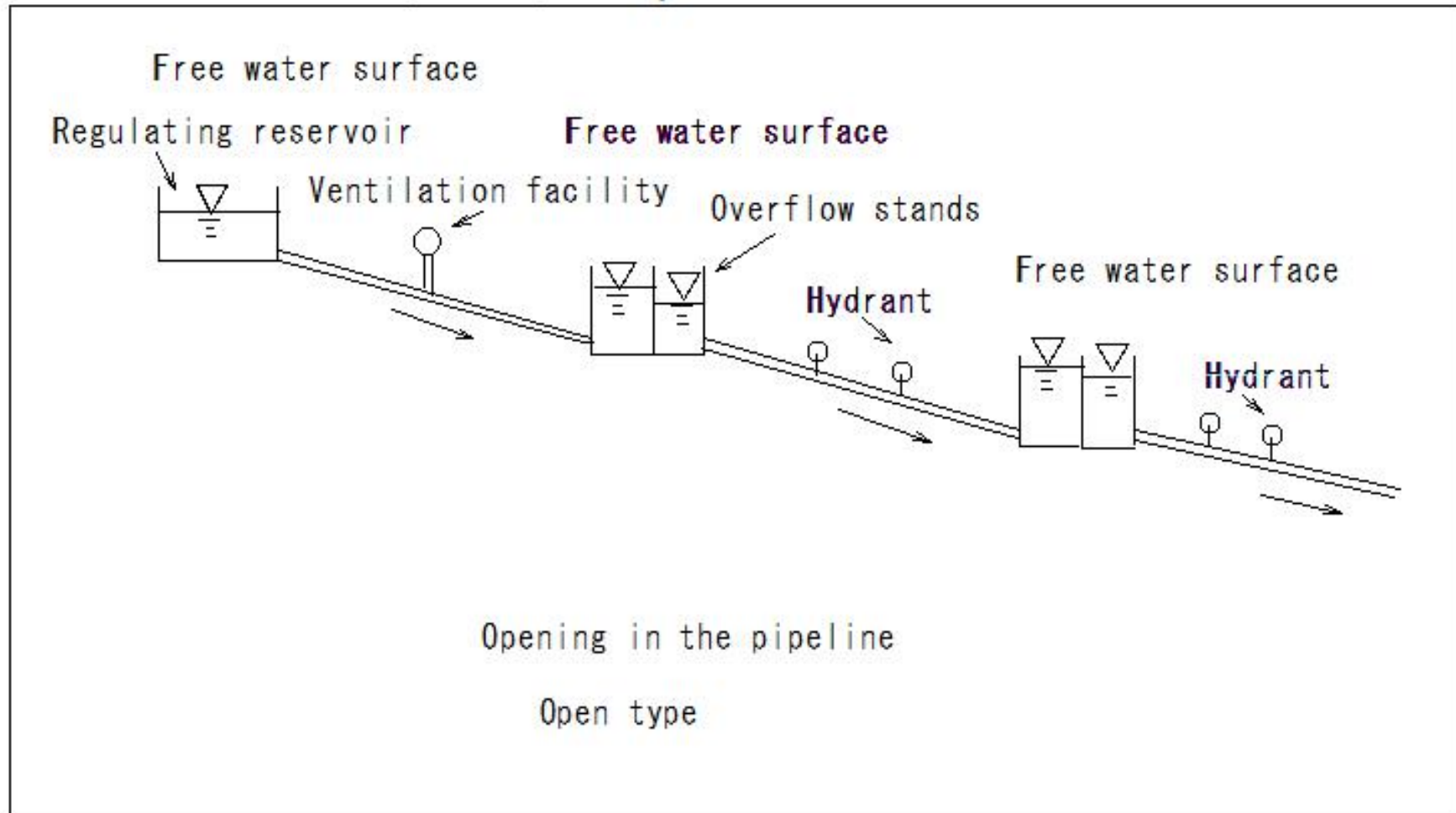
(1384) Incomplete Overflow Nappe

(1384) Incomplete Overflow Nappe



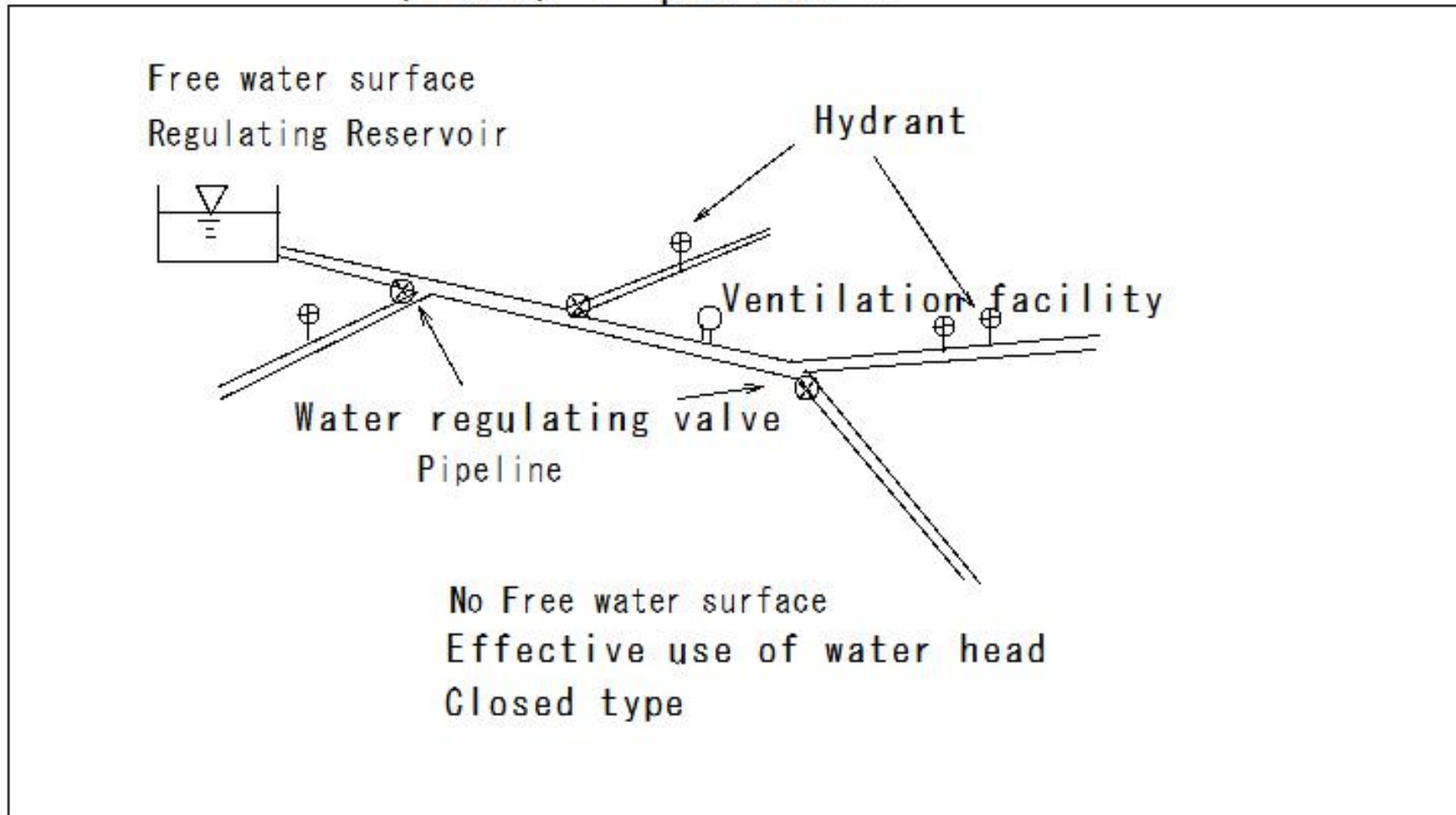
(1385) Pipeline 1

(1385) Pipeline 1



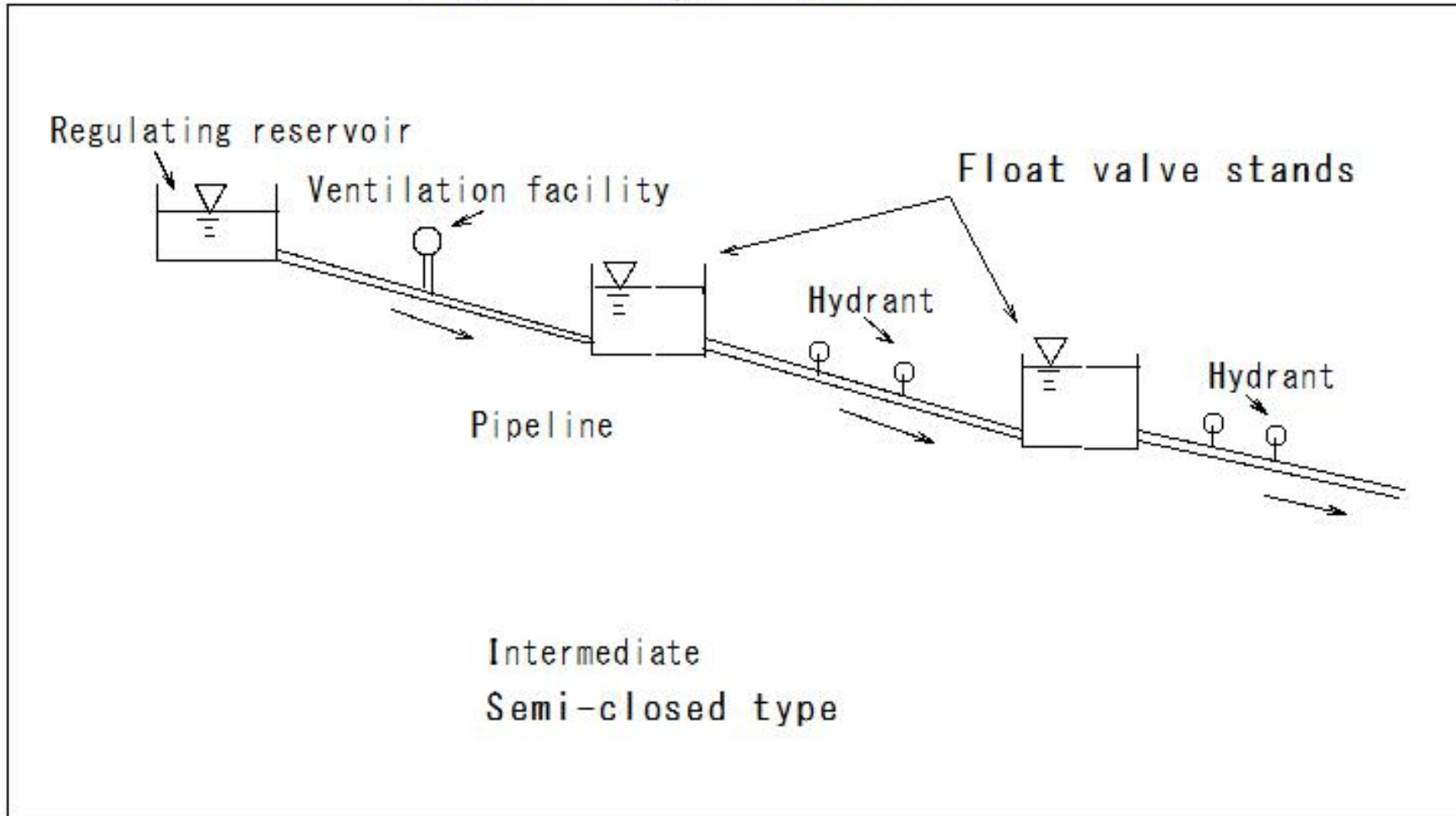
(1386) Pipeline 2

(1386) Pipeline 2



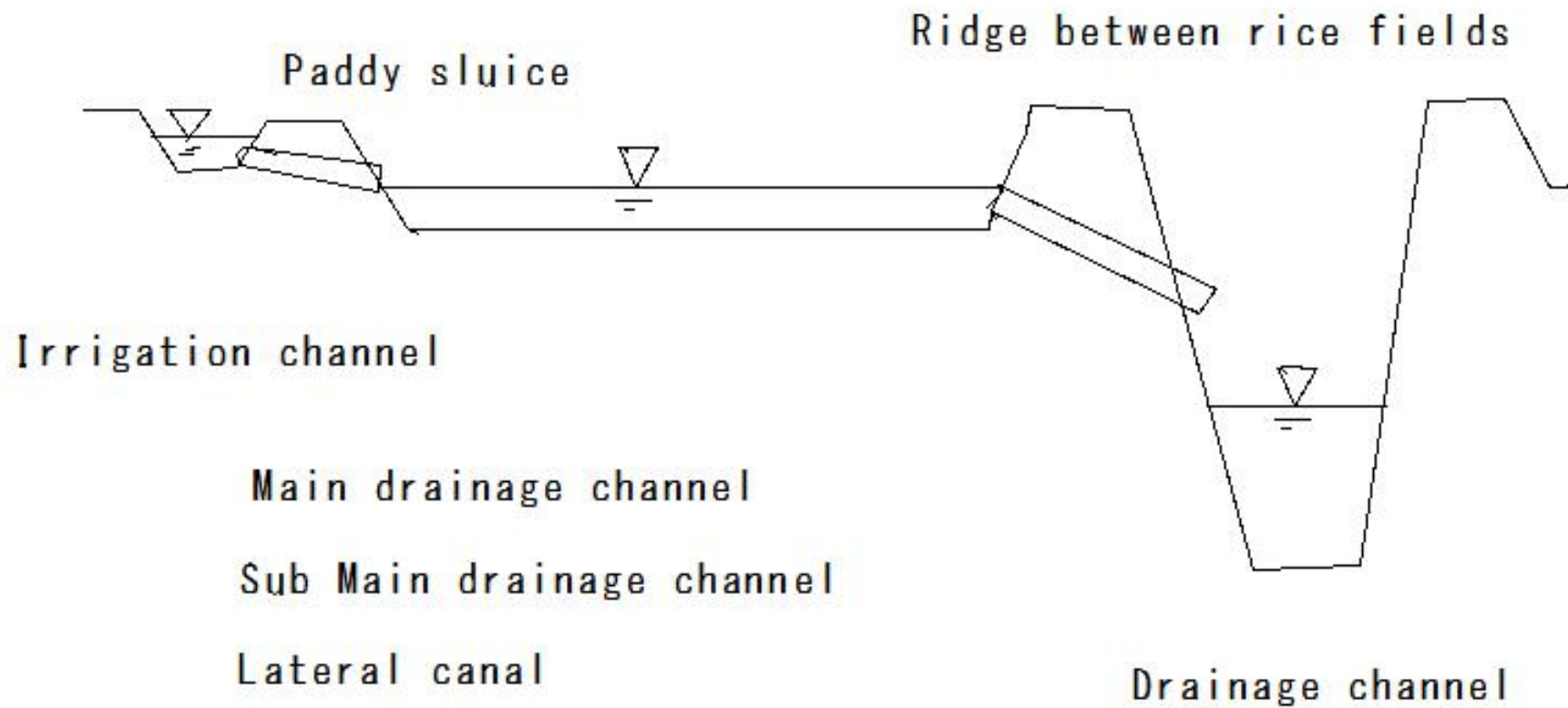
(1387) Pipeline 3

(1387) Pipeline 3



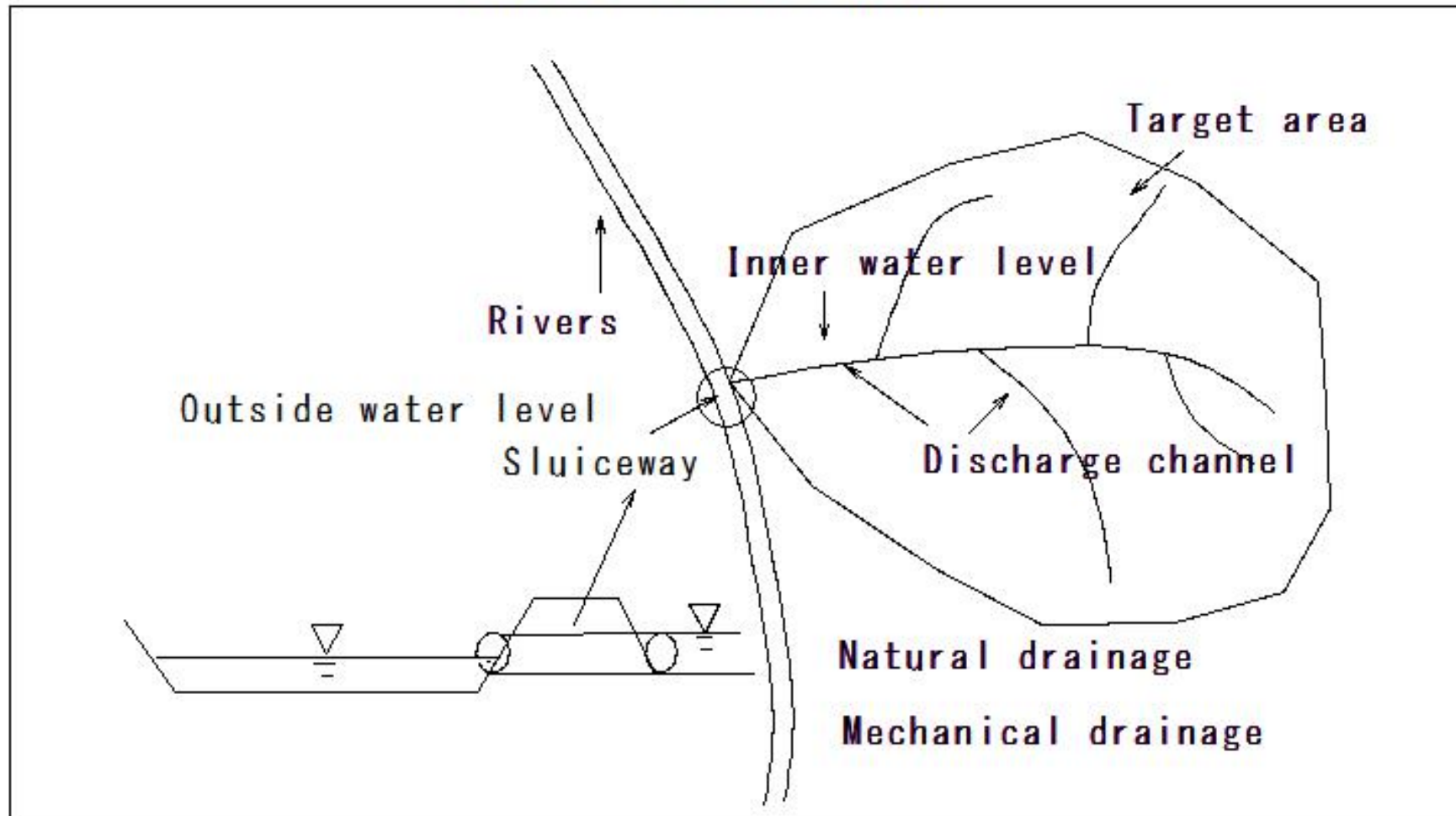
(1388) Drainage channel

(1388) Drainage channel



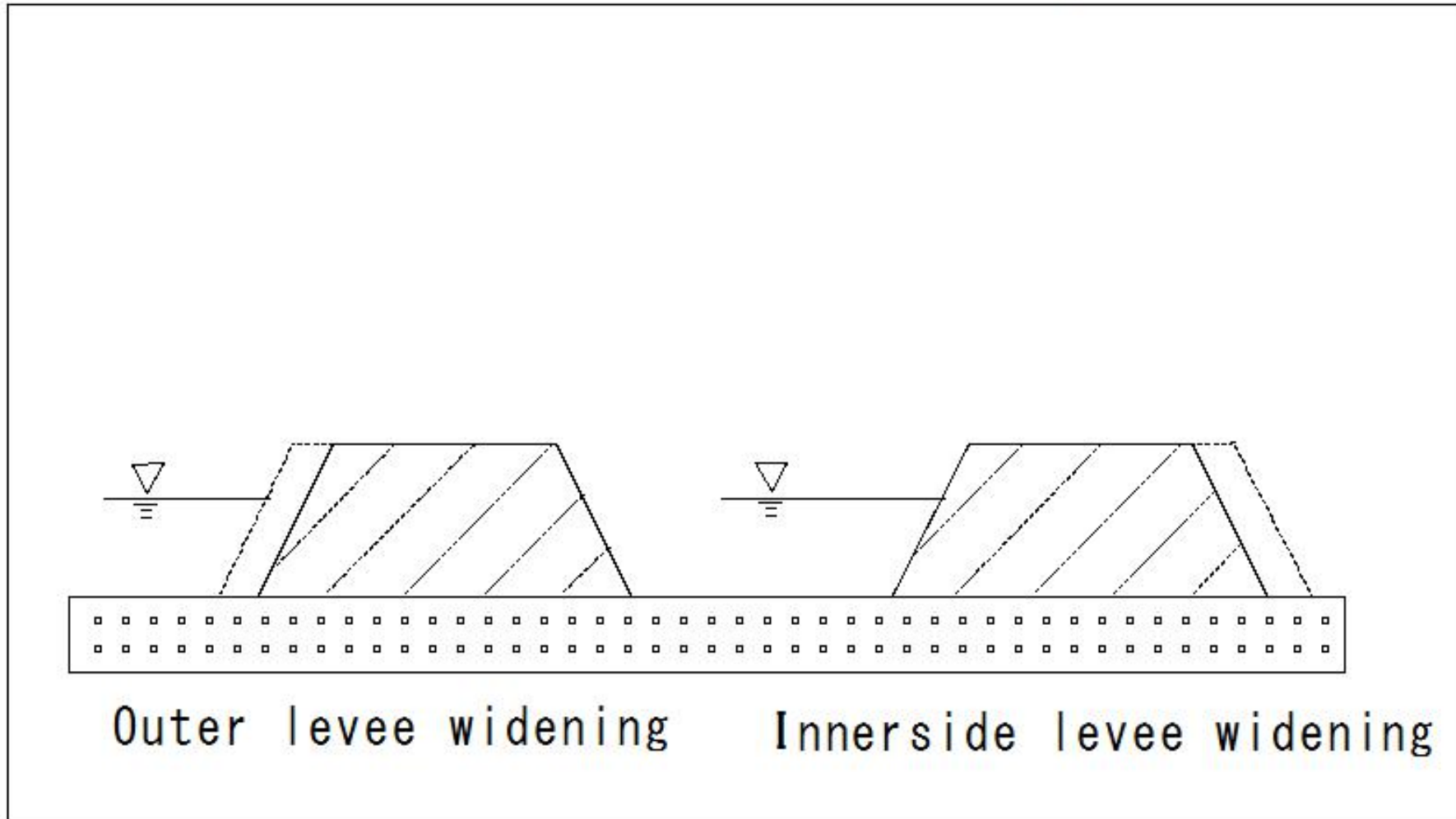
(1389) sluiceway

(1389) sluiceway



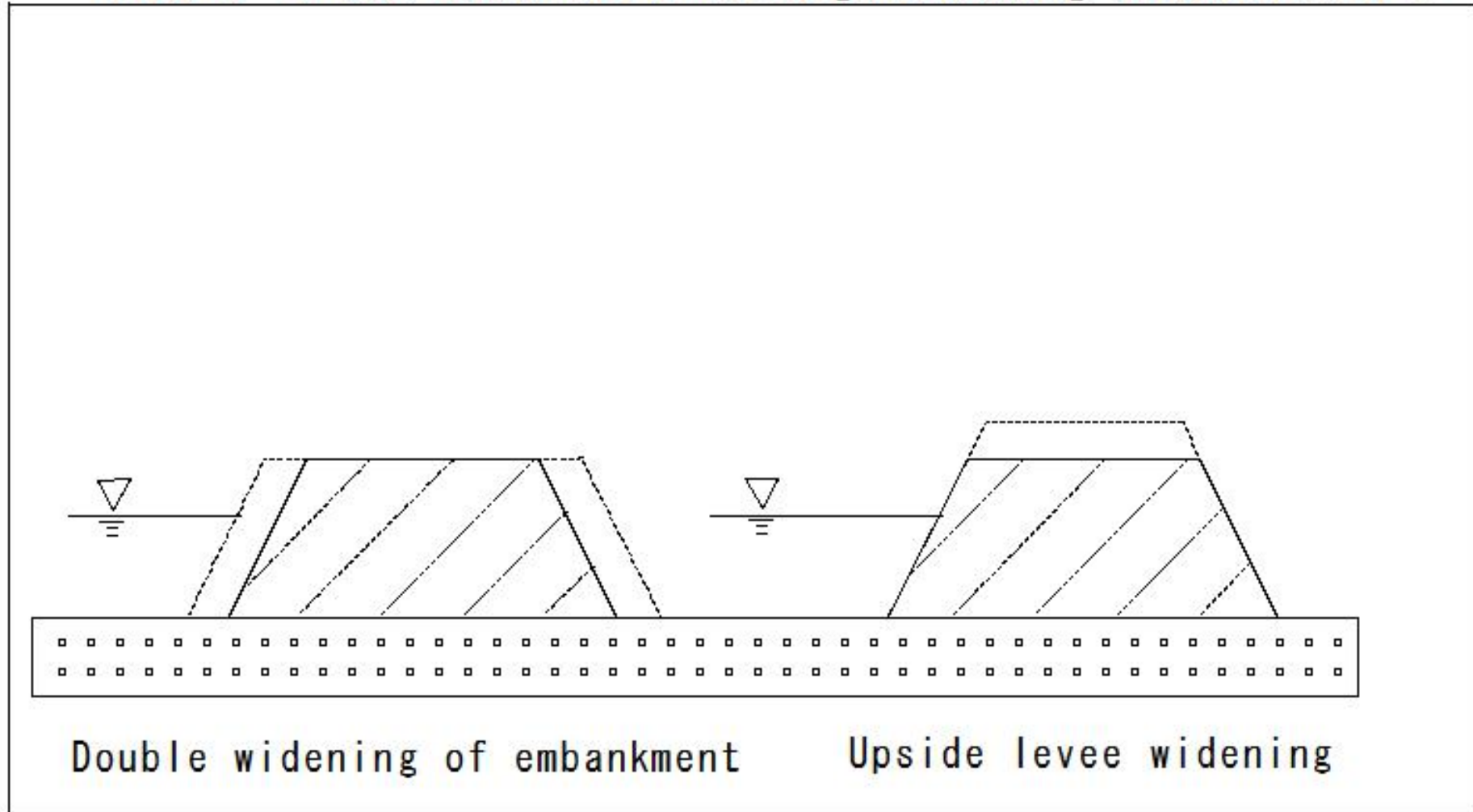
(1390) Cross section widening(Existing embankment) 1

(1390) Cross section widening(Existing embankment) 1



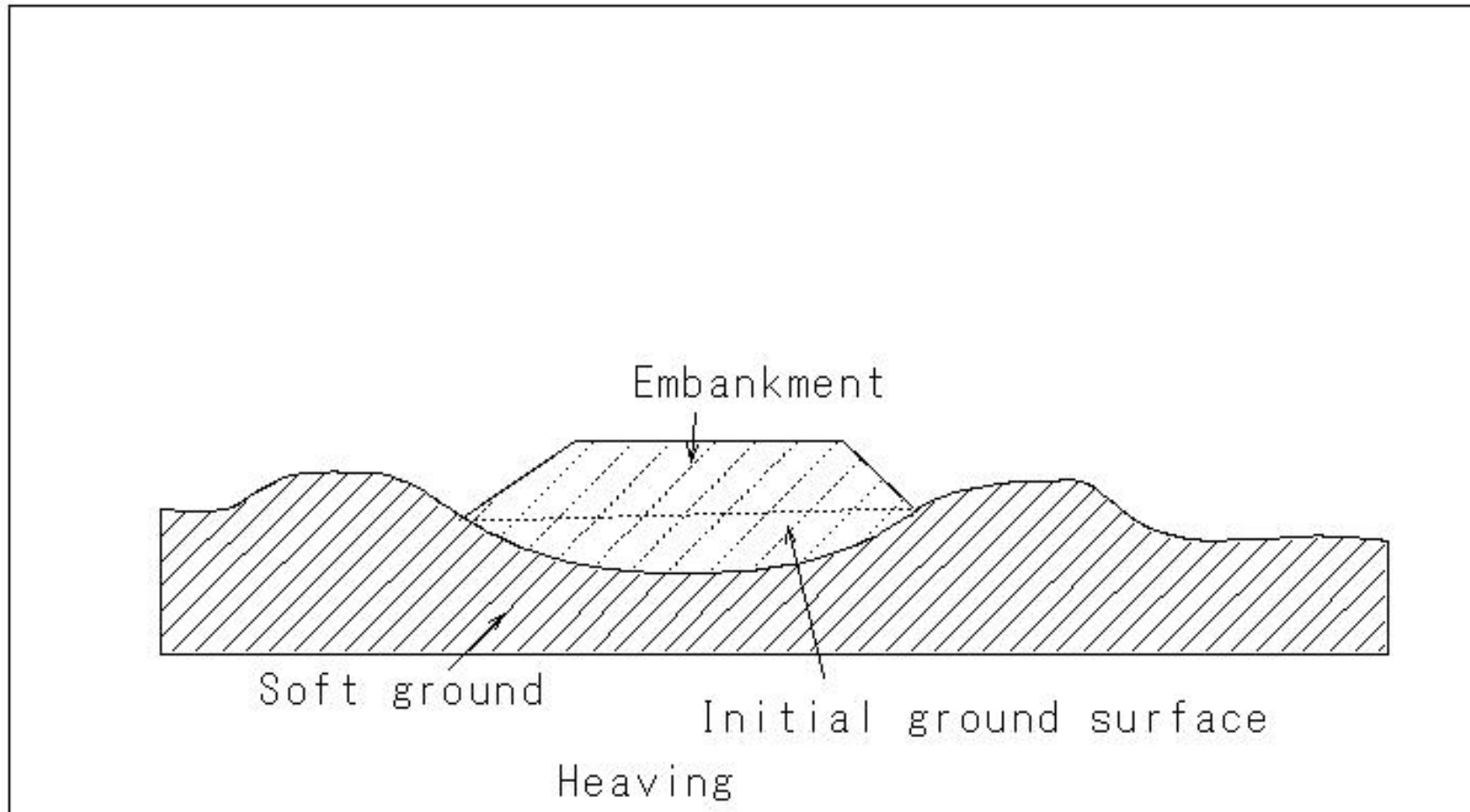
(1391) Cross section widening(Existing embankment) 2

(1391) Cross section widening(Existing embankment) 2



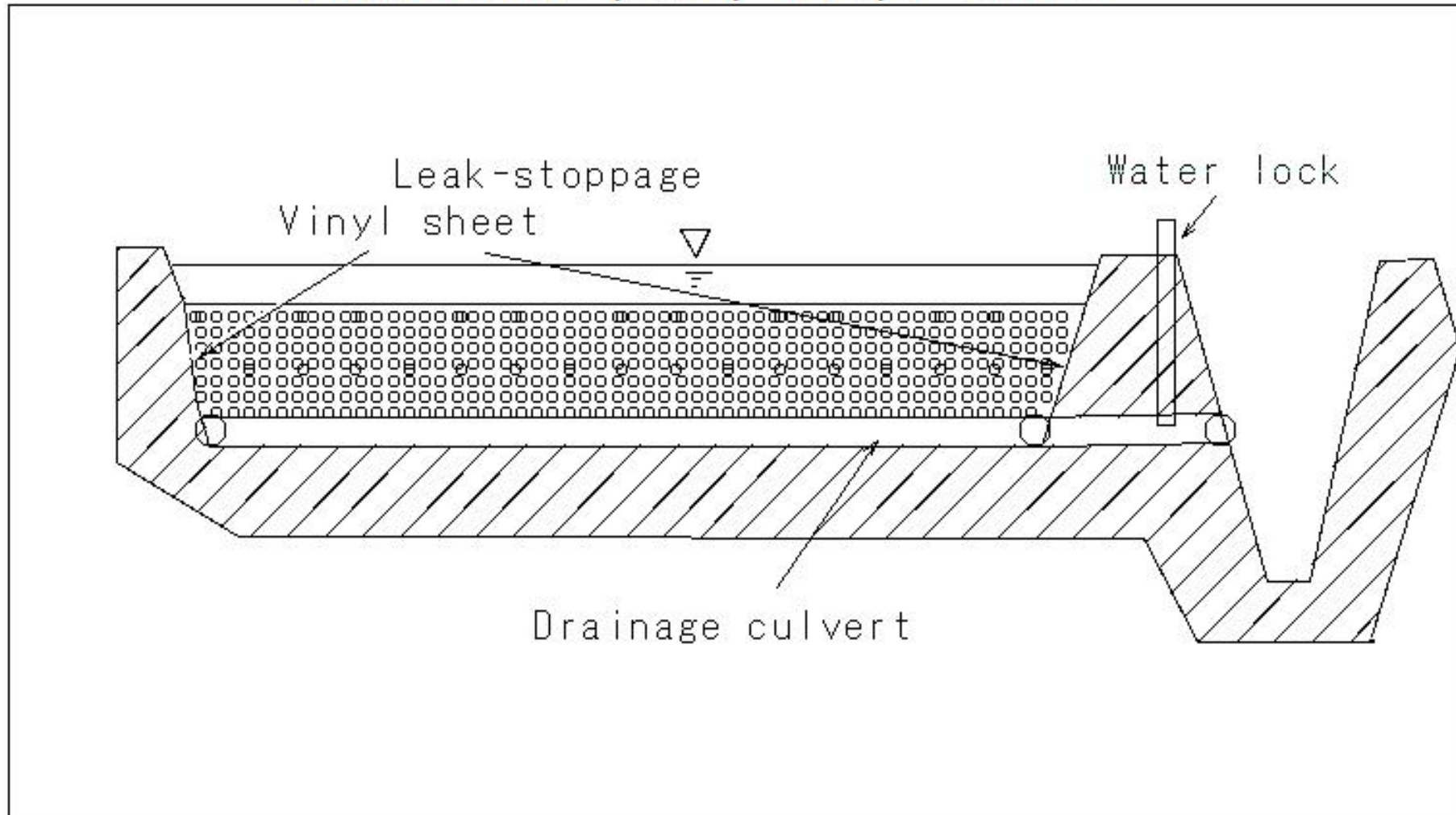
(1392) Heaving

(1392) Heaving



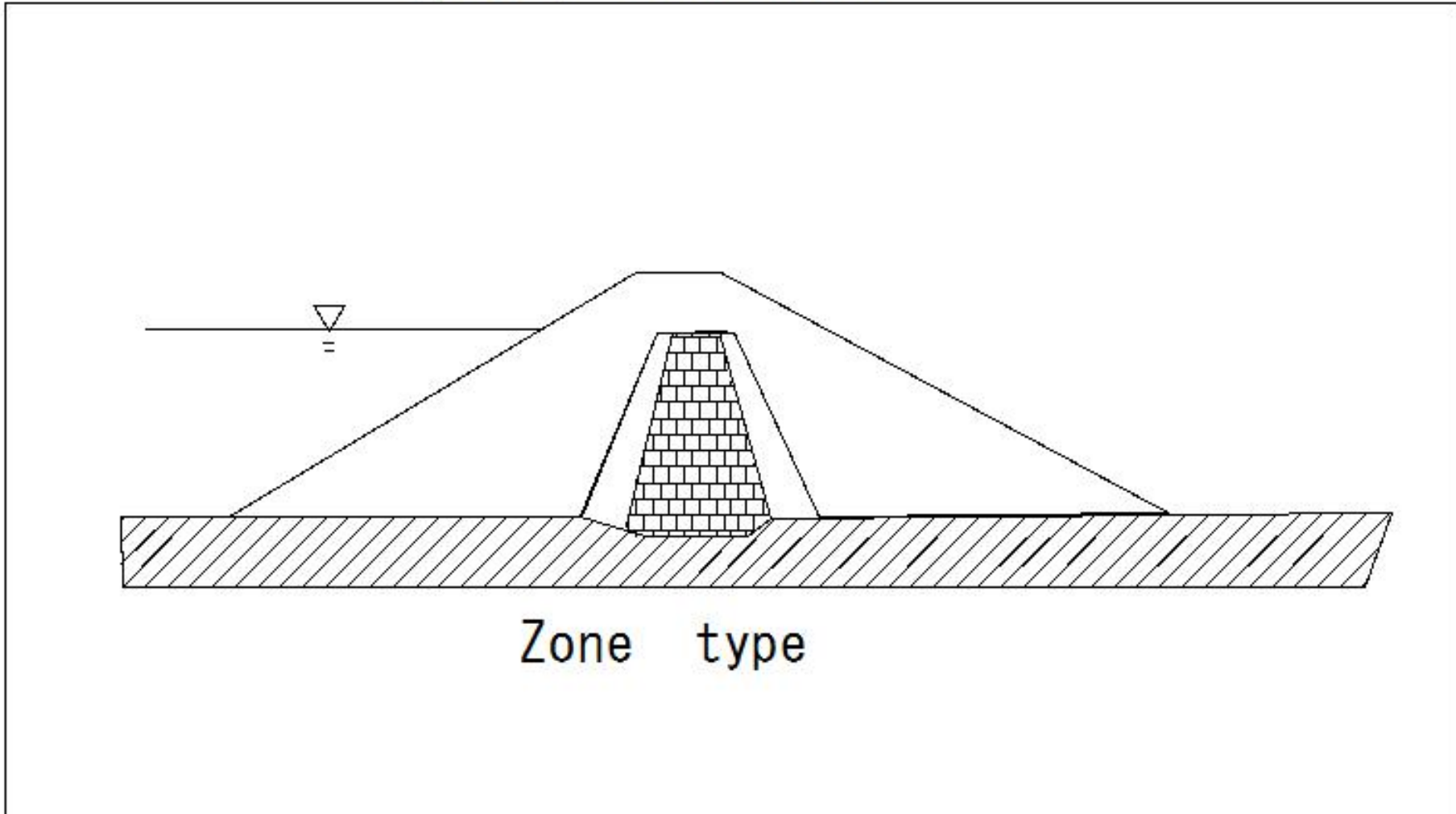
(1393) Rice paddy vinyl sheet

(1393) Rice paddy vinyl sheet



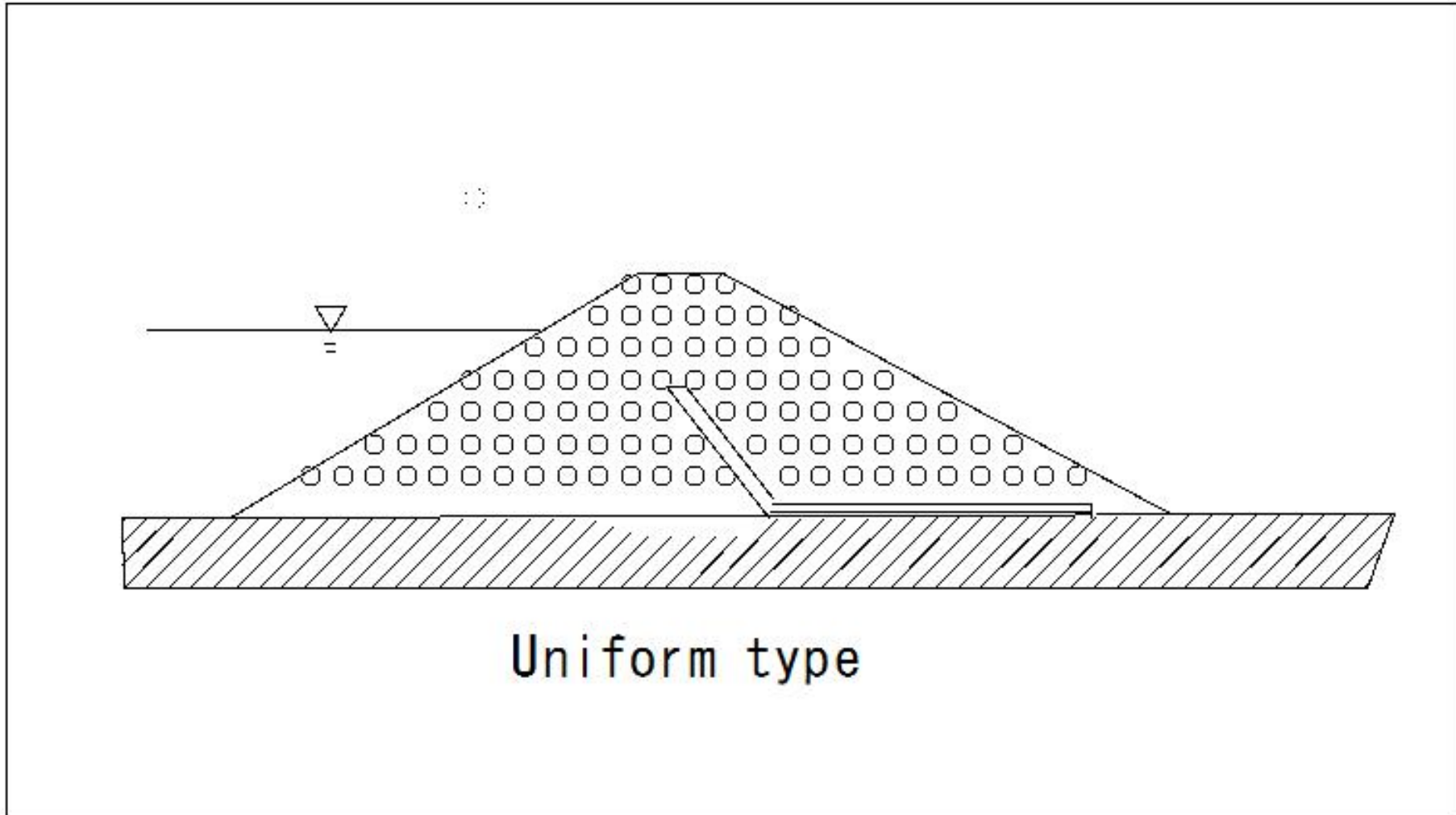
(1394) Fill dam 1

(1394) Fill dam 1



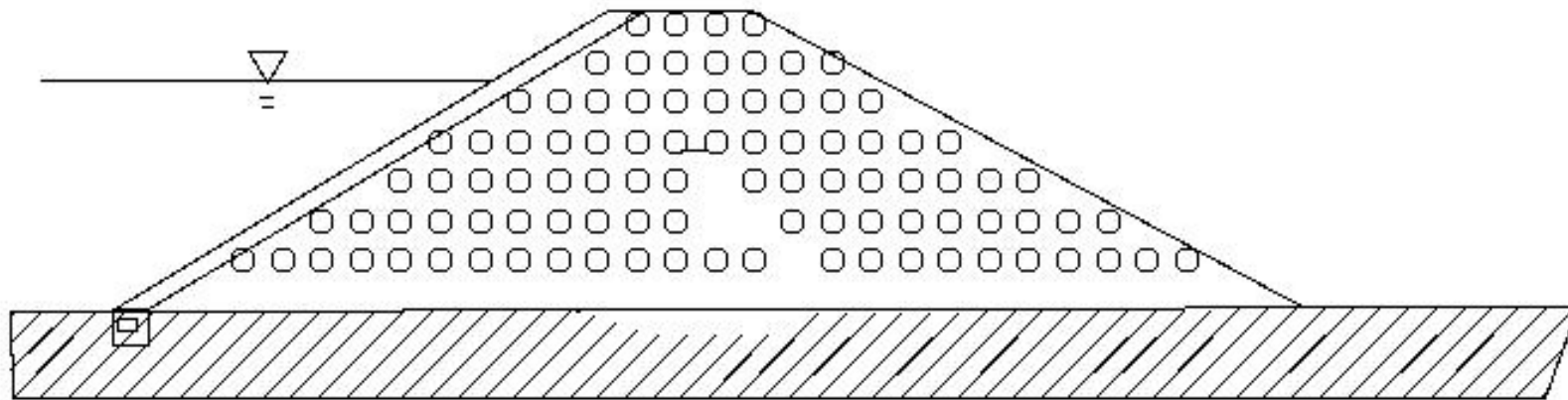
(1395) Fill dam 2

(1395) Fill dam 2



(1396) Fill dam 3

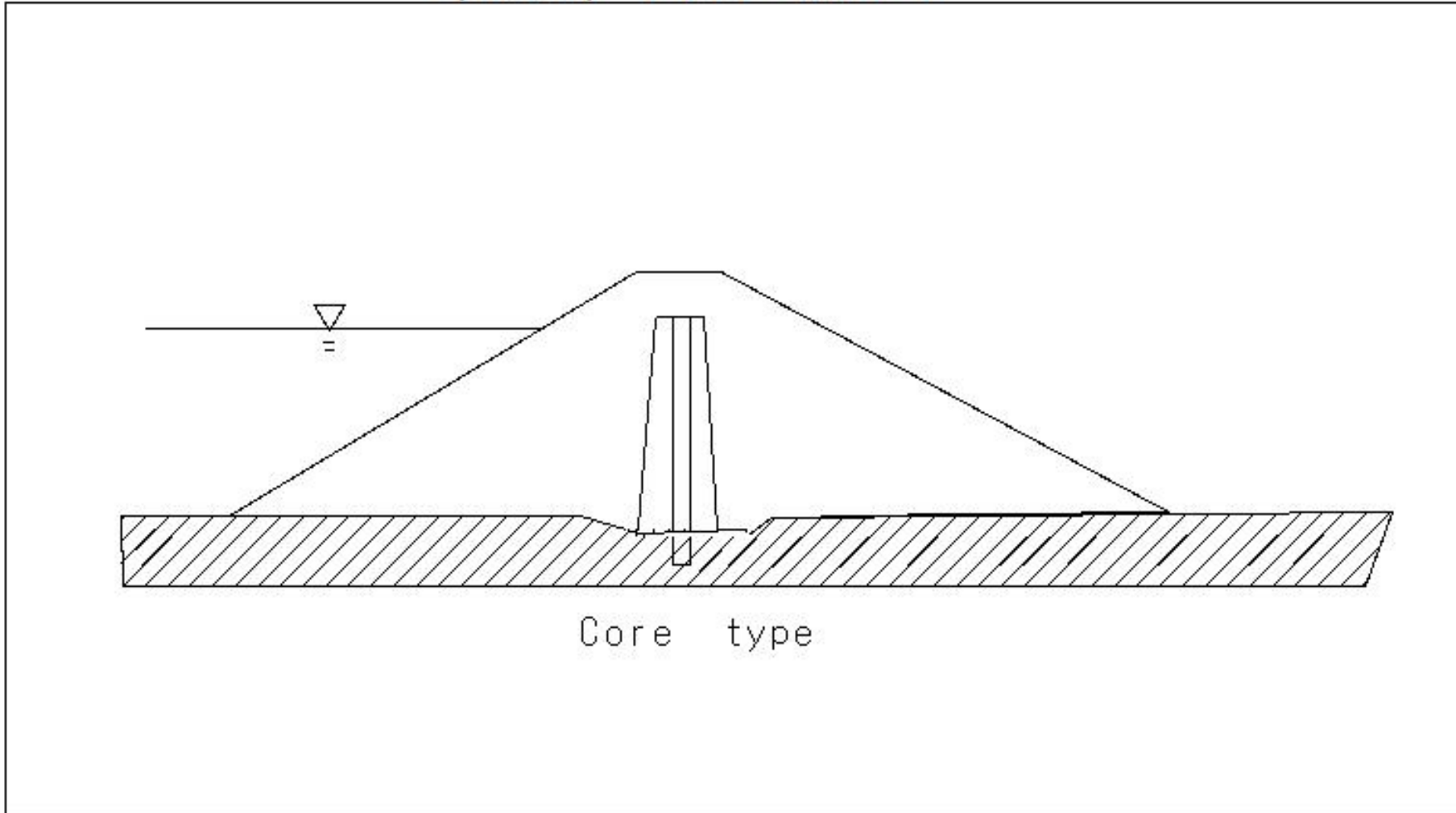
(1396) Fill dam 3



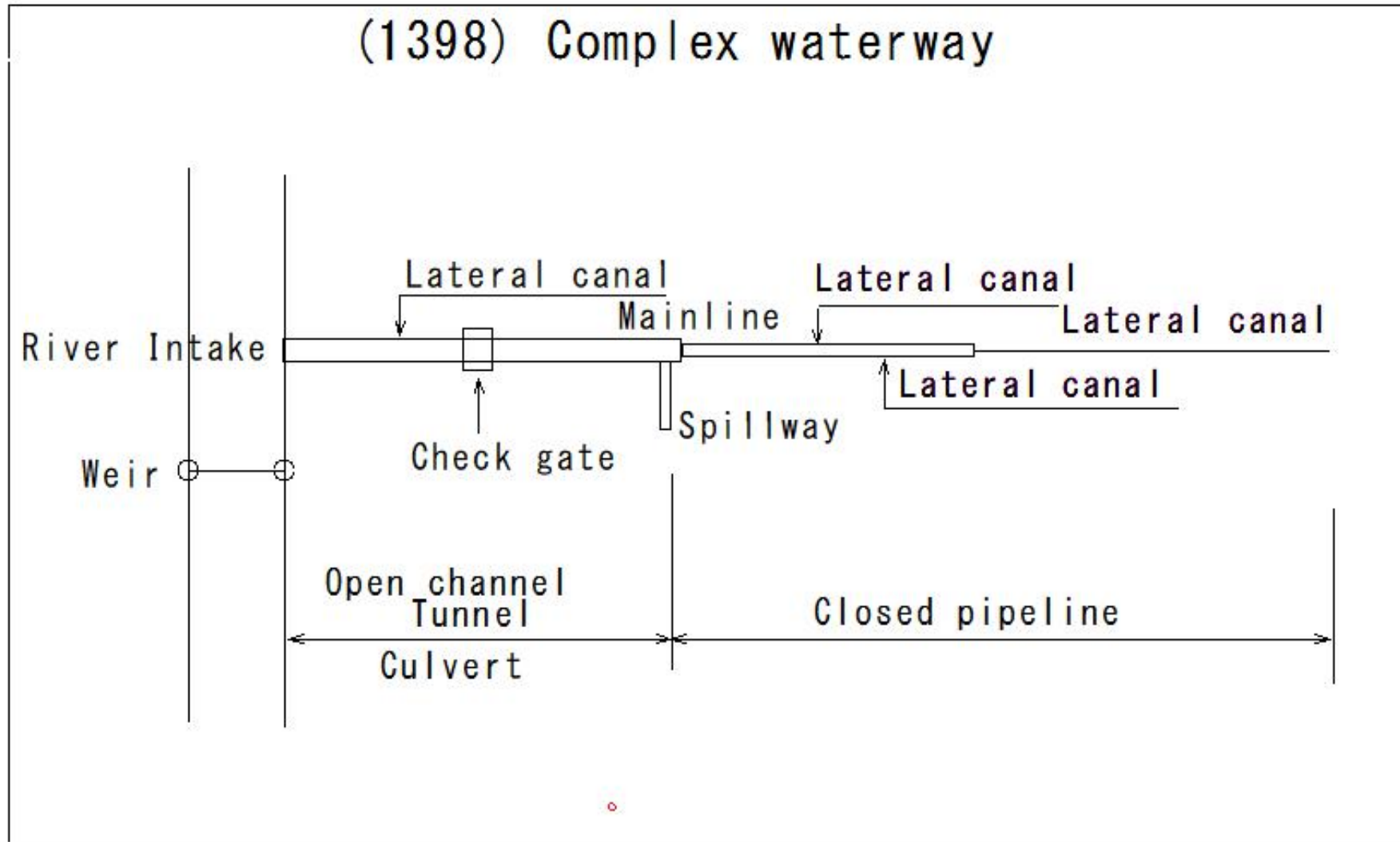
Uniform type

(1397) Fill dam 4

(1397) Fill dam 4

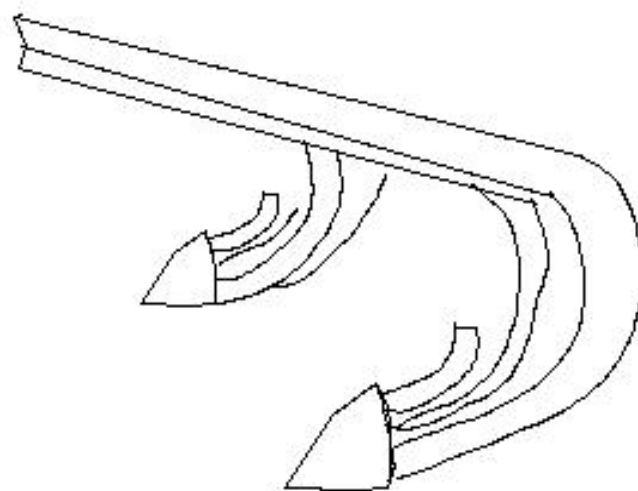


(1398) Complex waterway



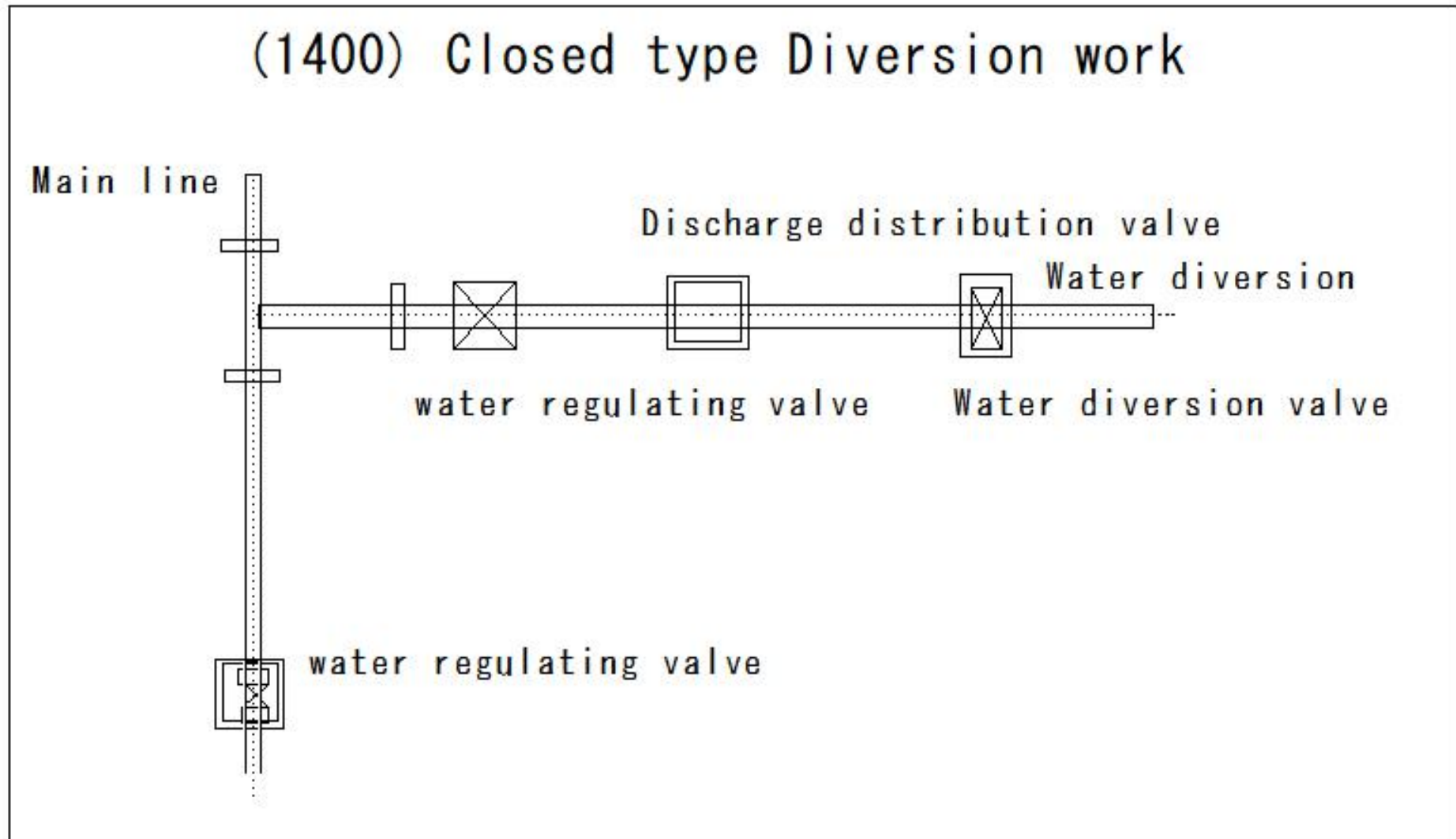
(1399) Plowing

(1399) Plowing

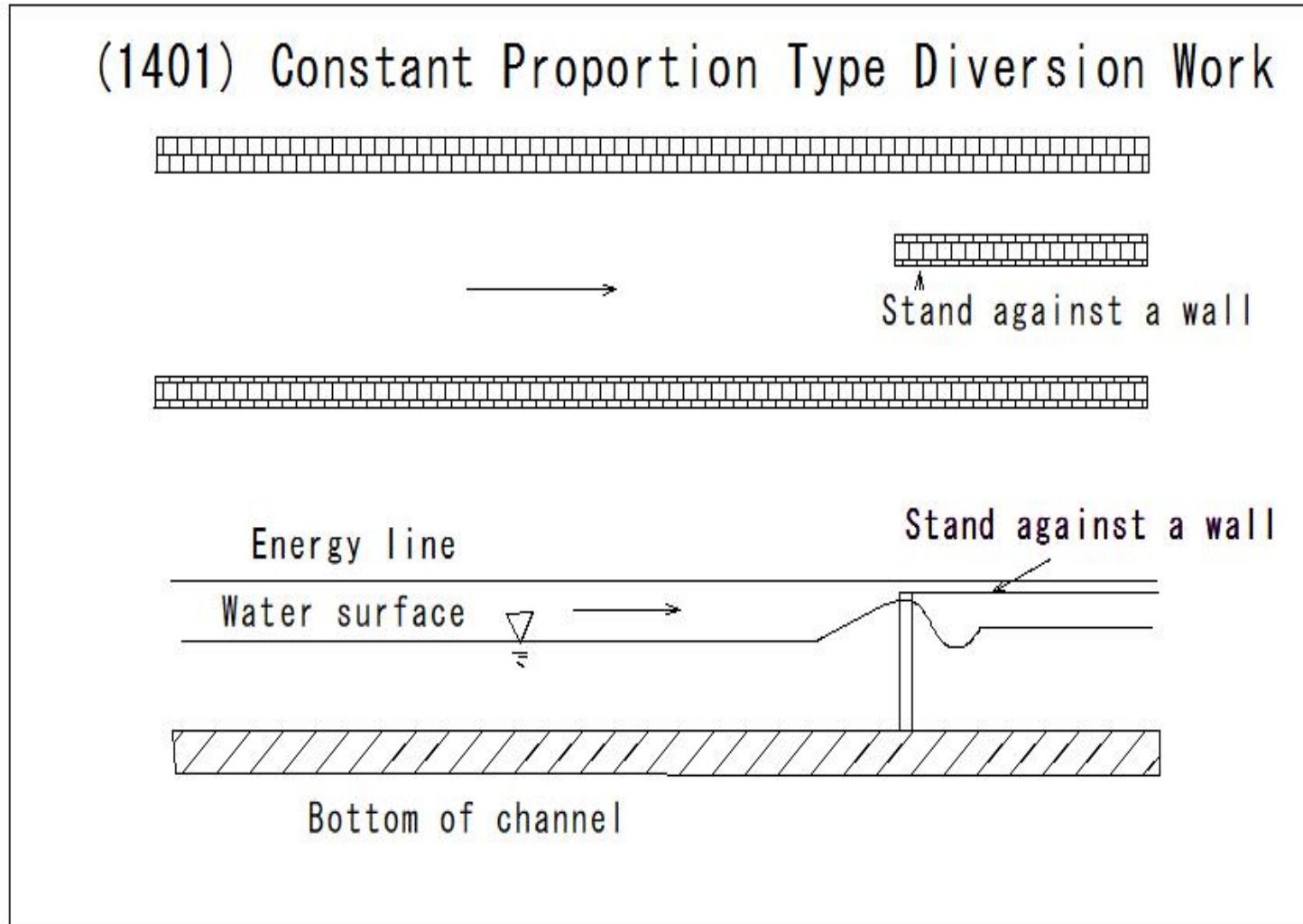


Reversing Throwing Crushing

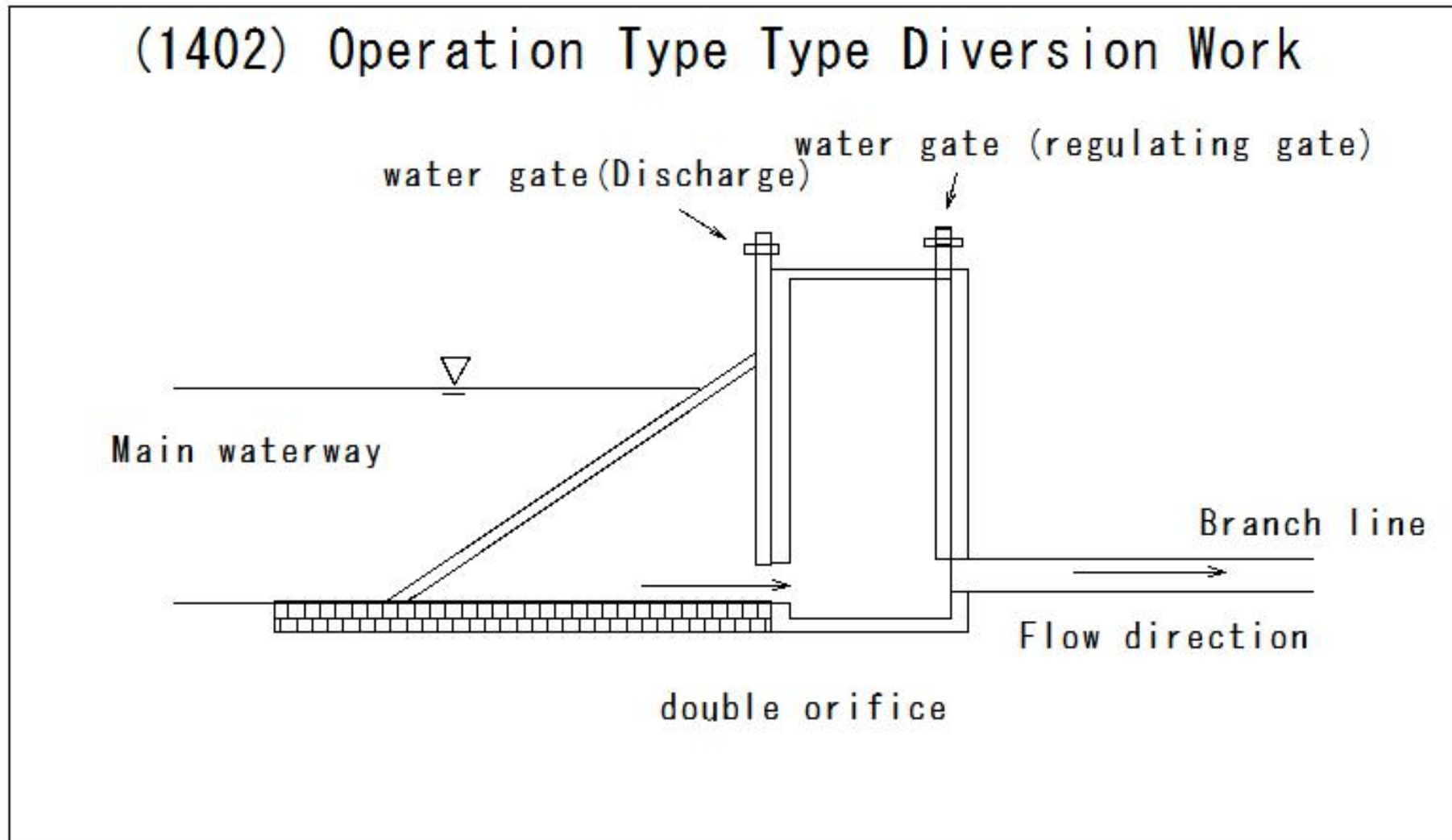
(1400) Closed type Diversion work



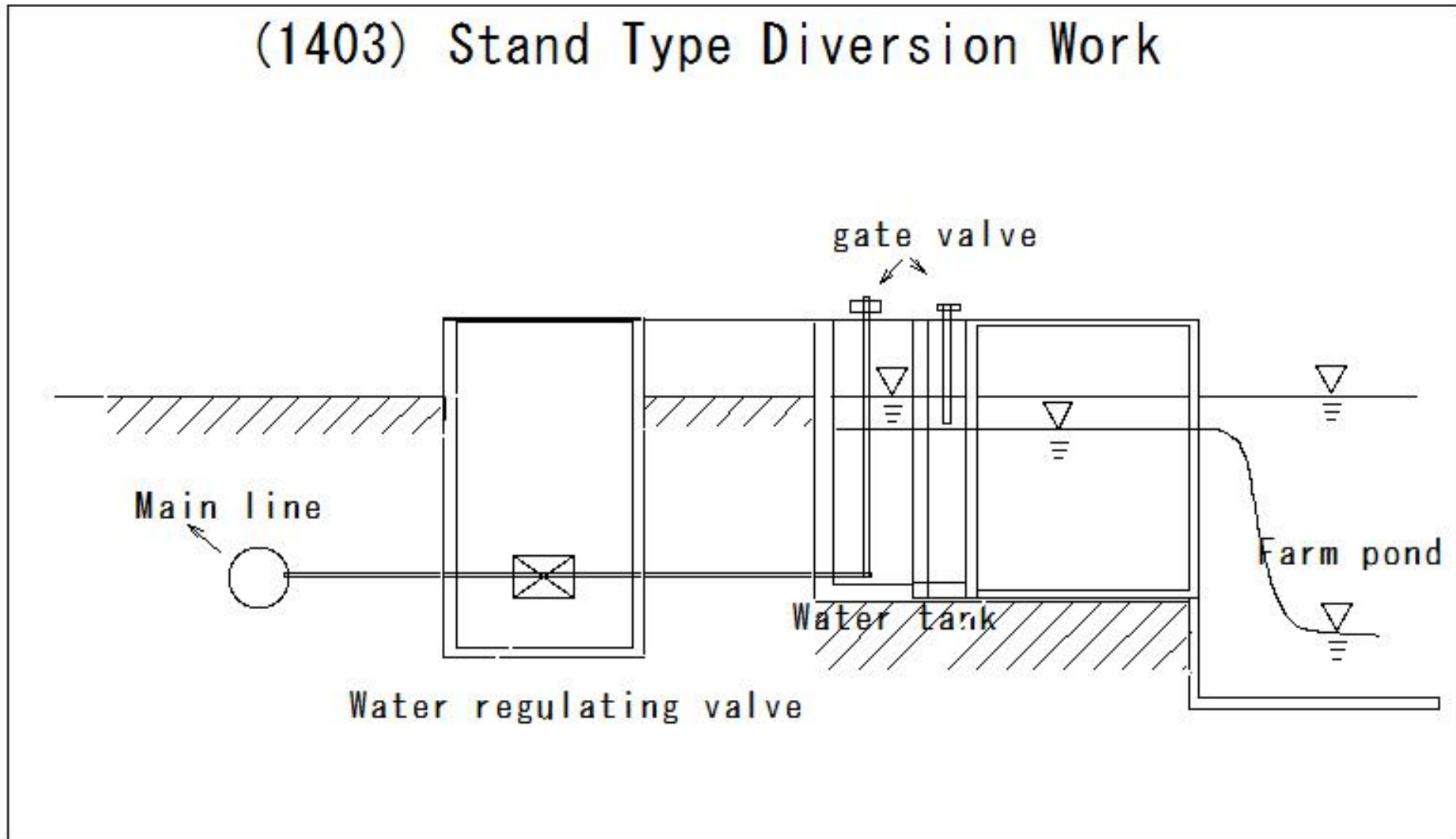
(1401) Constant Proportion Type Diversion Work



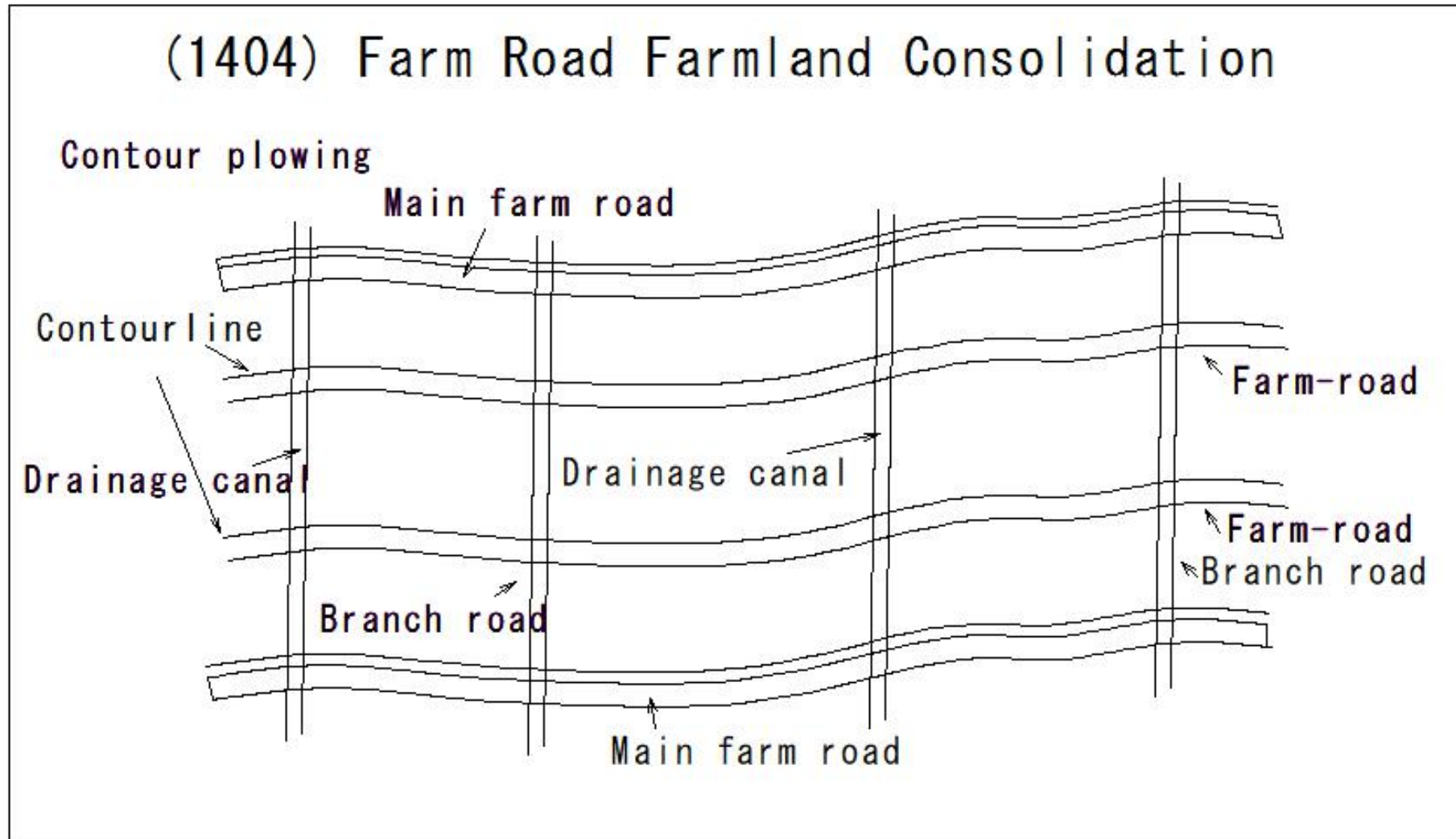
(1402) Operation Type Type Diversion Work



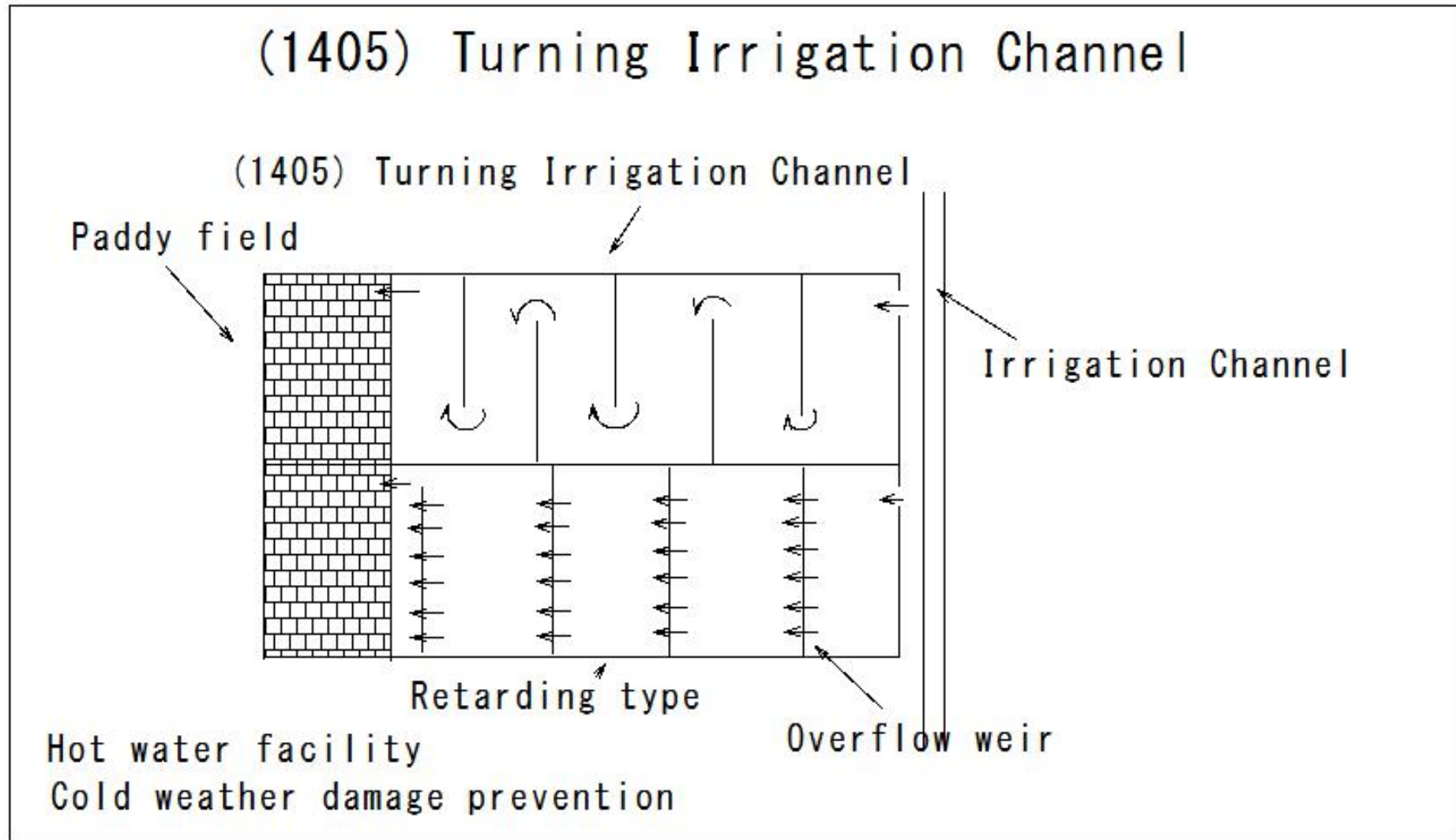
(1403) Stand Type Diversion Work



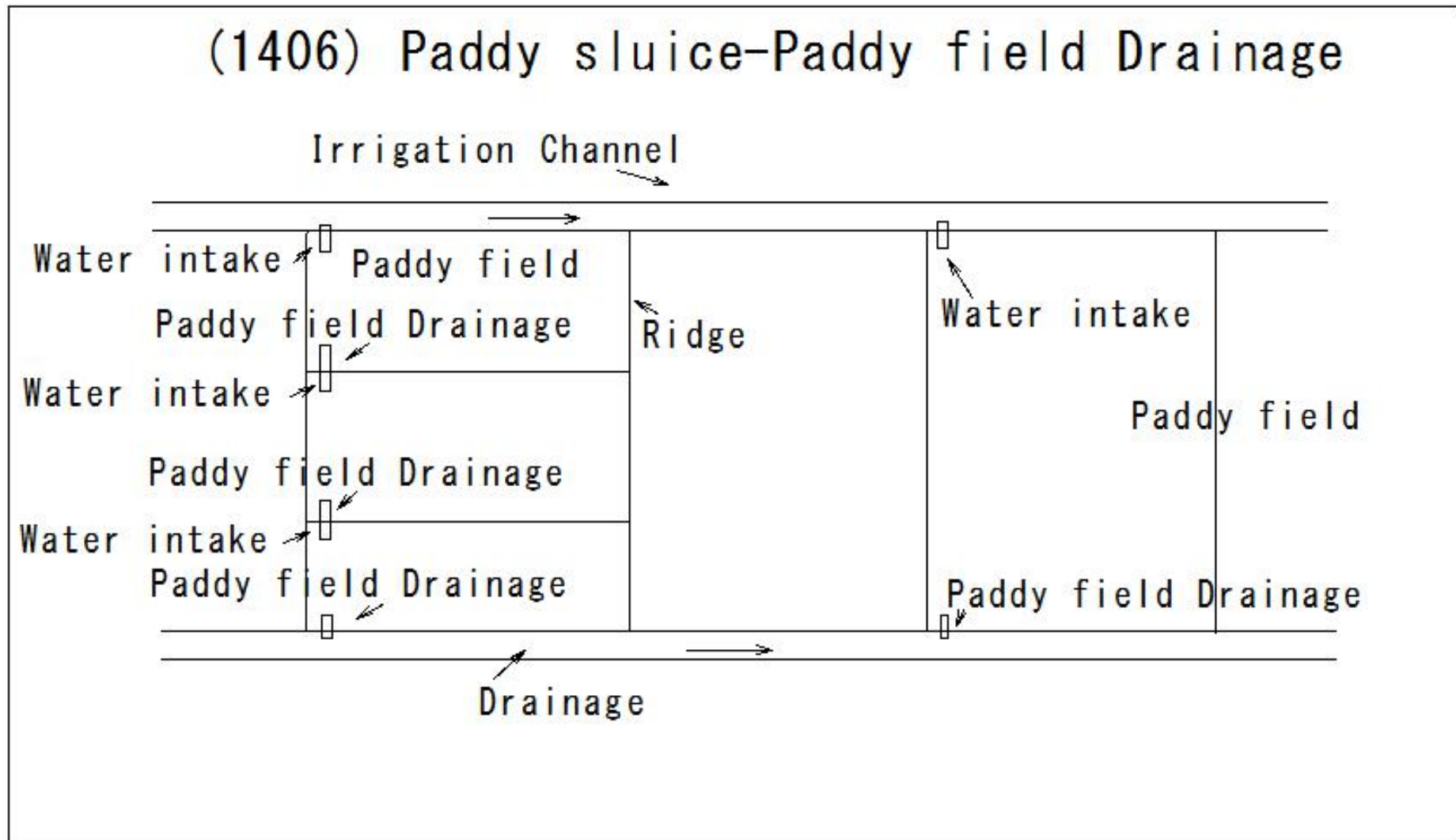
(1404) Farm Road Farmland Consolidation



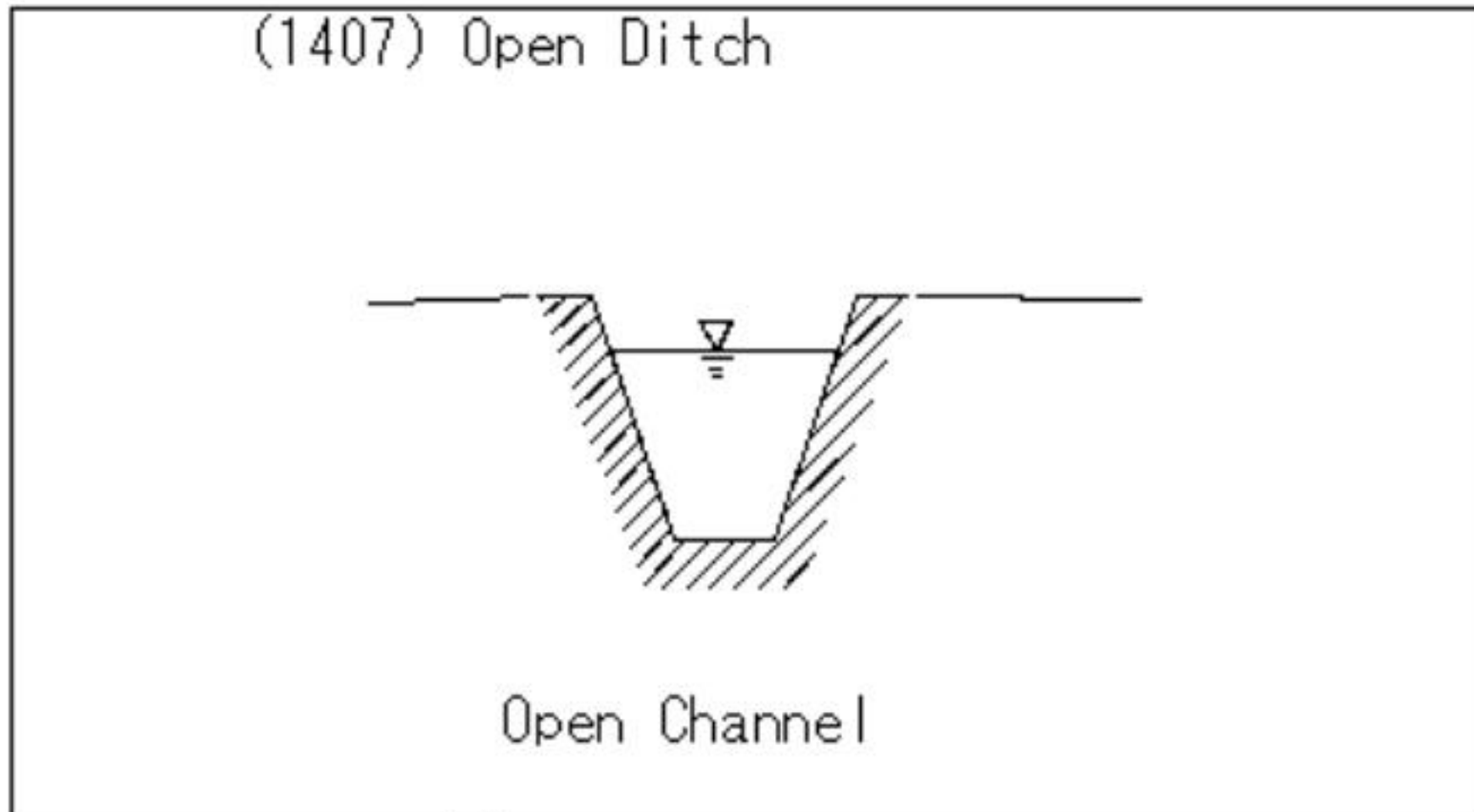
(1405) Turning Irrigation Channel



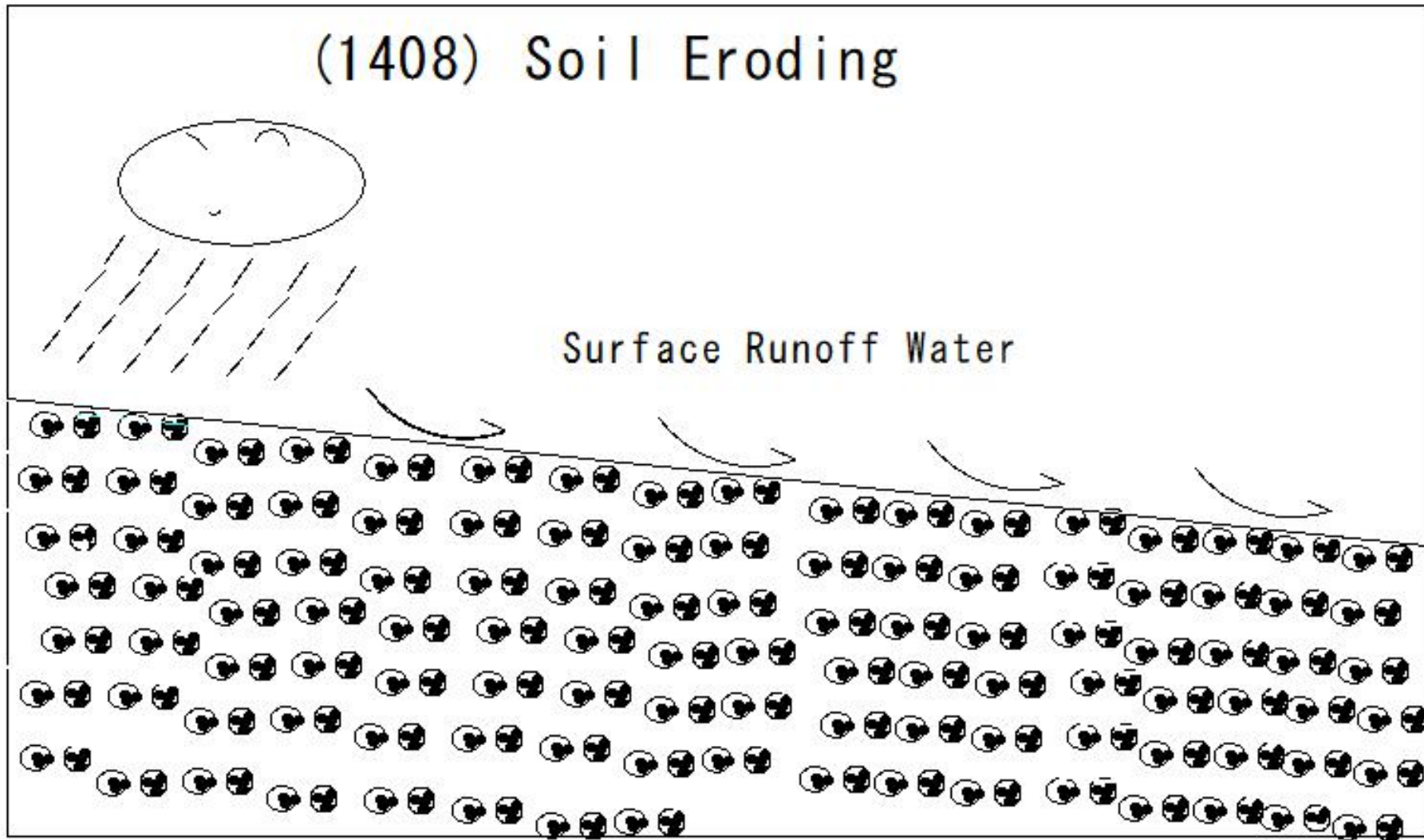
(1406) Paddy sluice-Paddy field Drainage



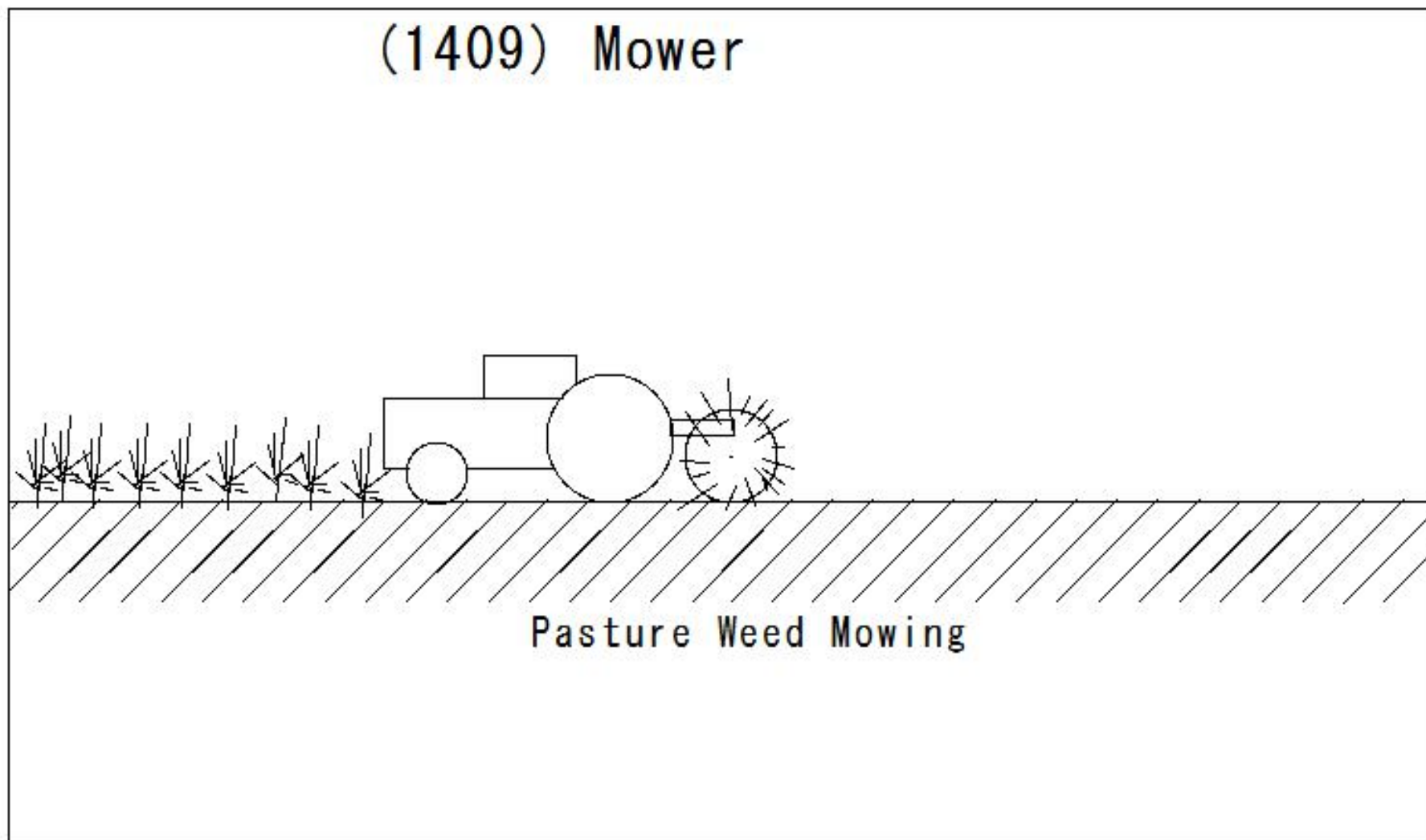
(1407) Open Ditch



(1408) Soil Eroding

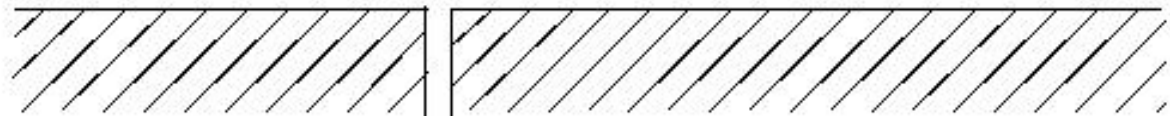


(1409) Mower



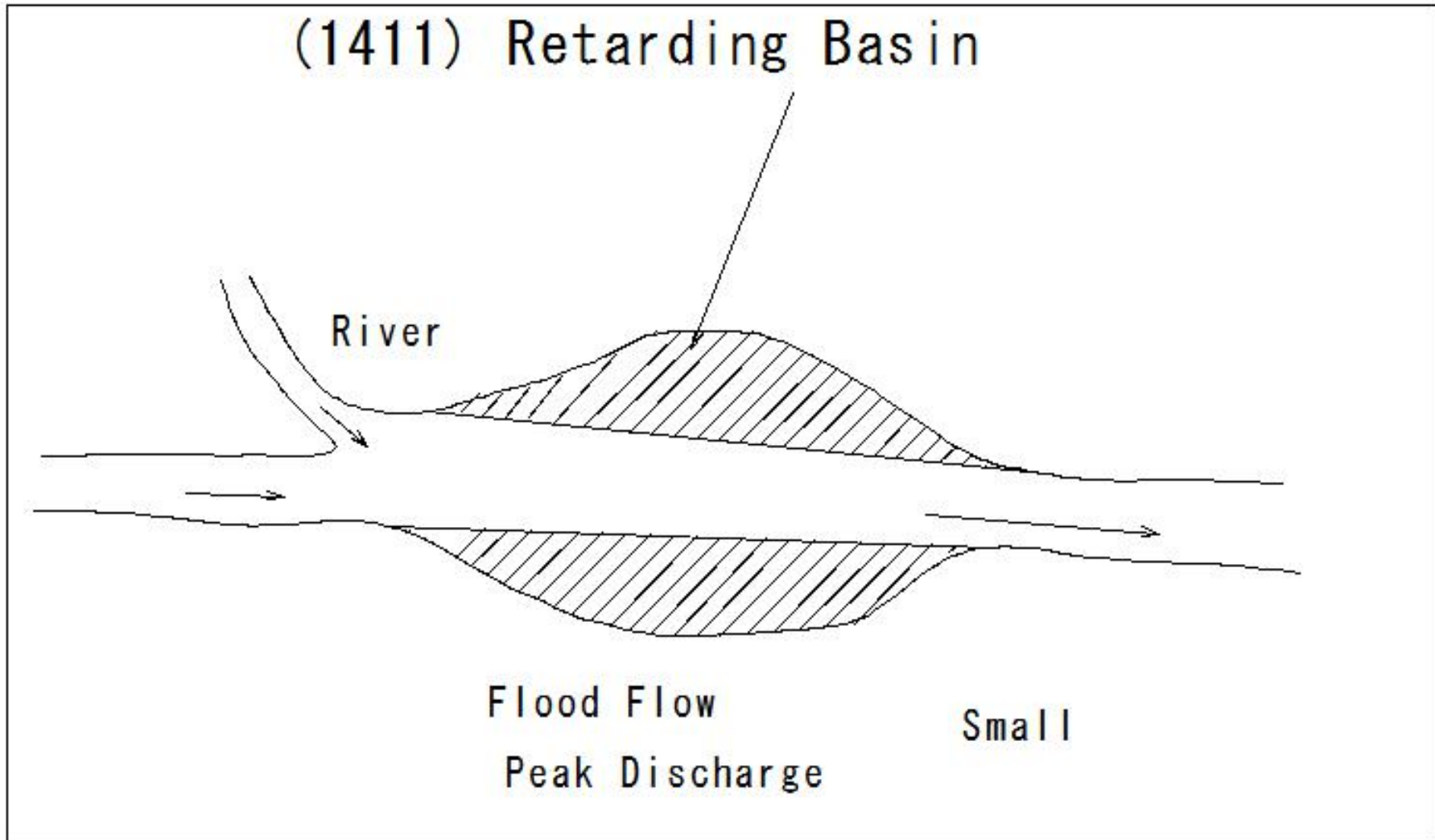
(1410) Mold Drain

(1410) Mold Drain

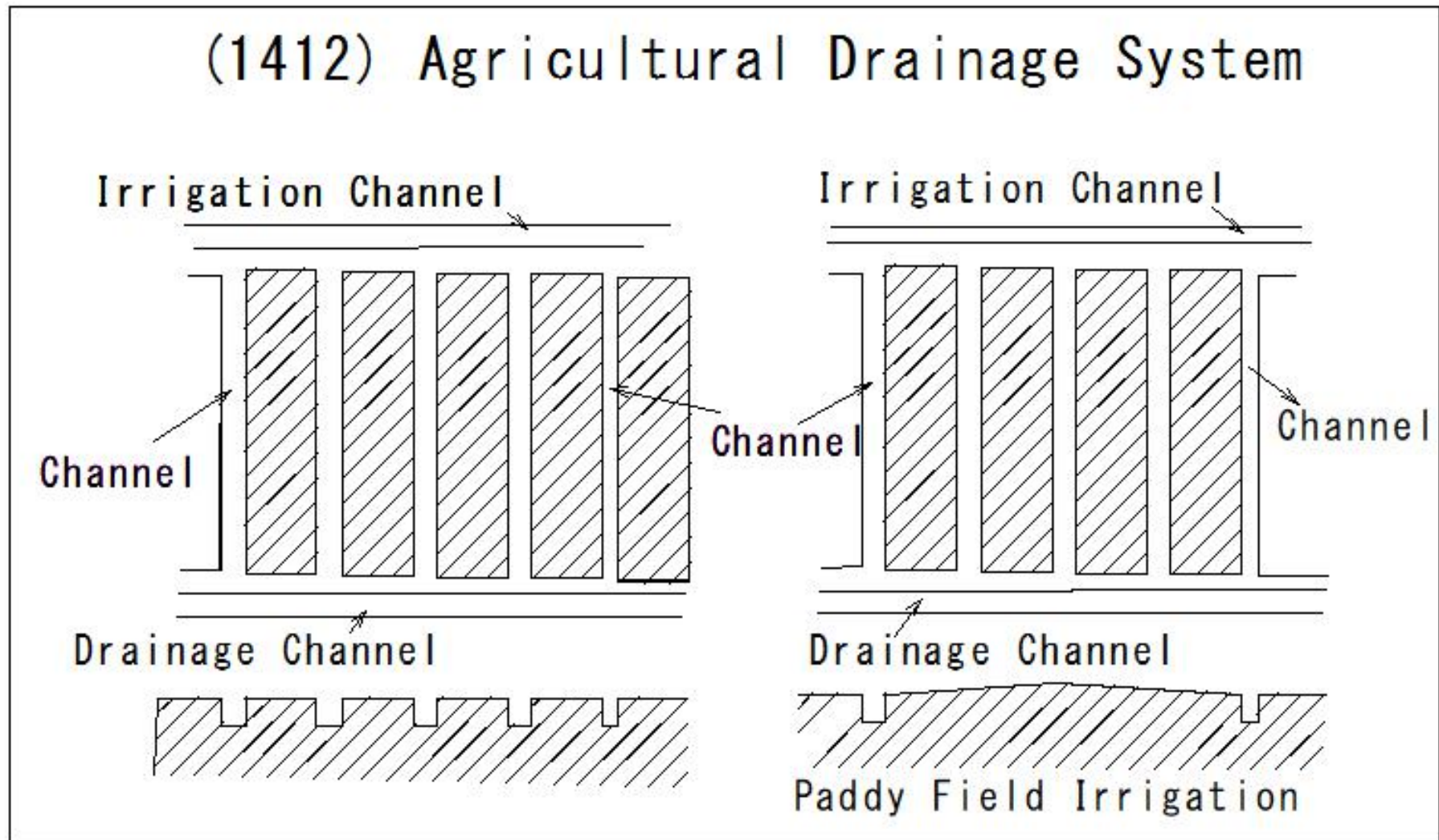


hole Water Flow Restoration
Underground Drainage

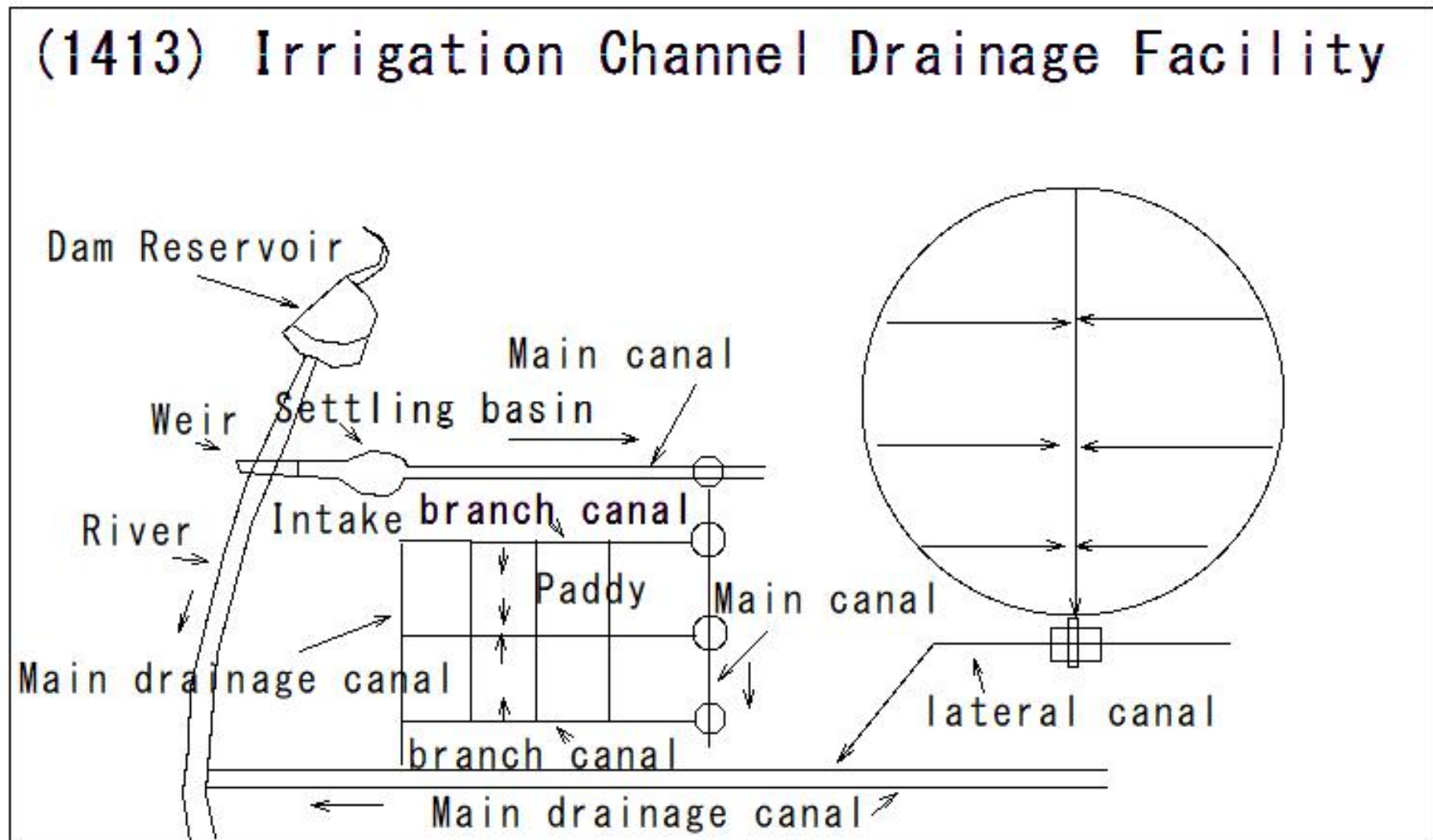
(1411) Retarding Basin



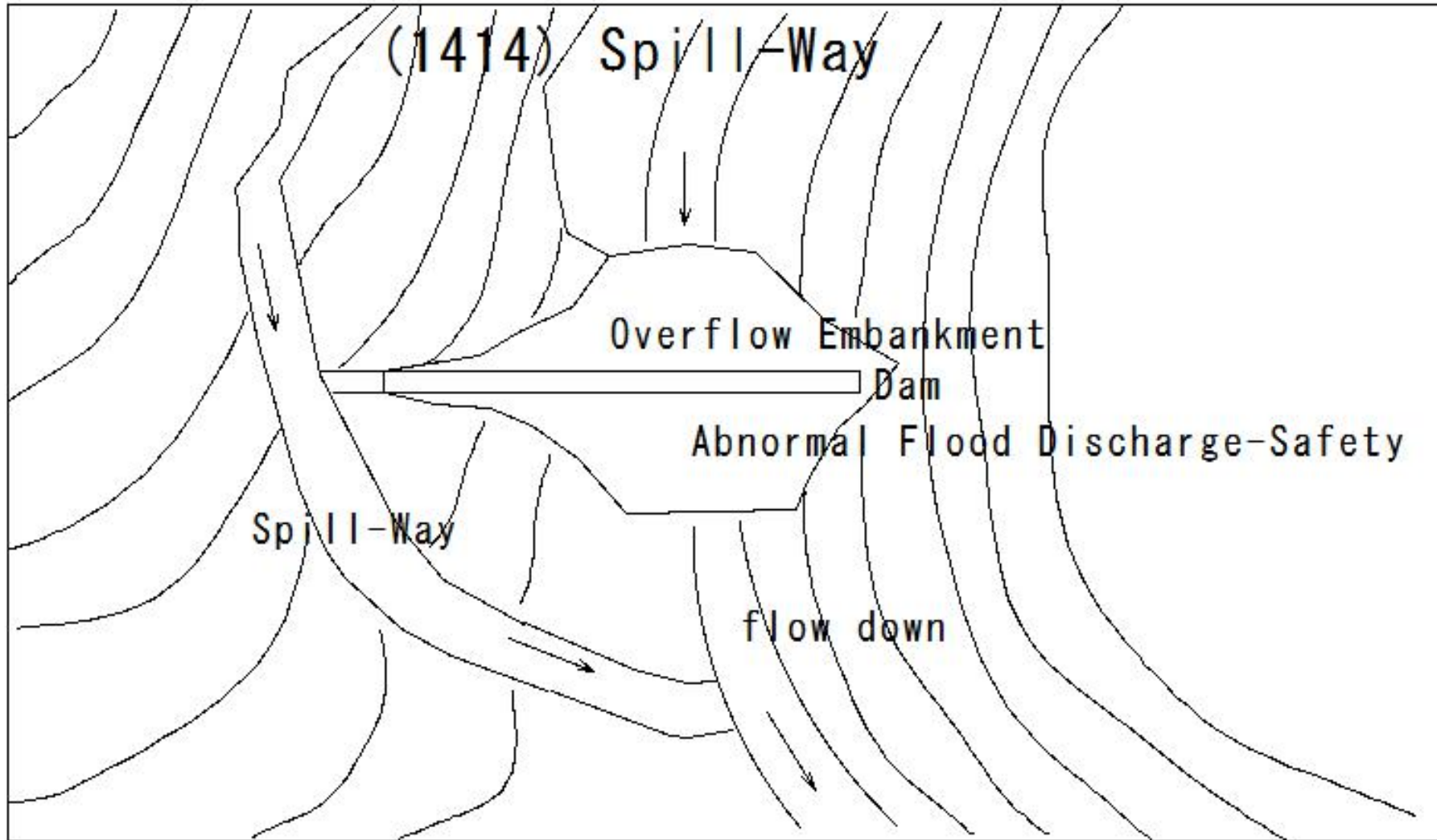
(1412) Agricultural Drainage System



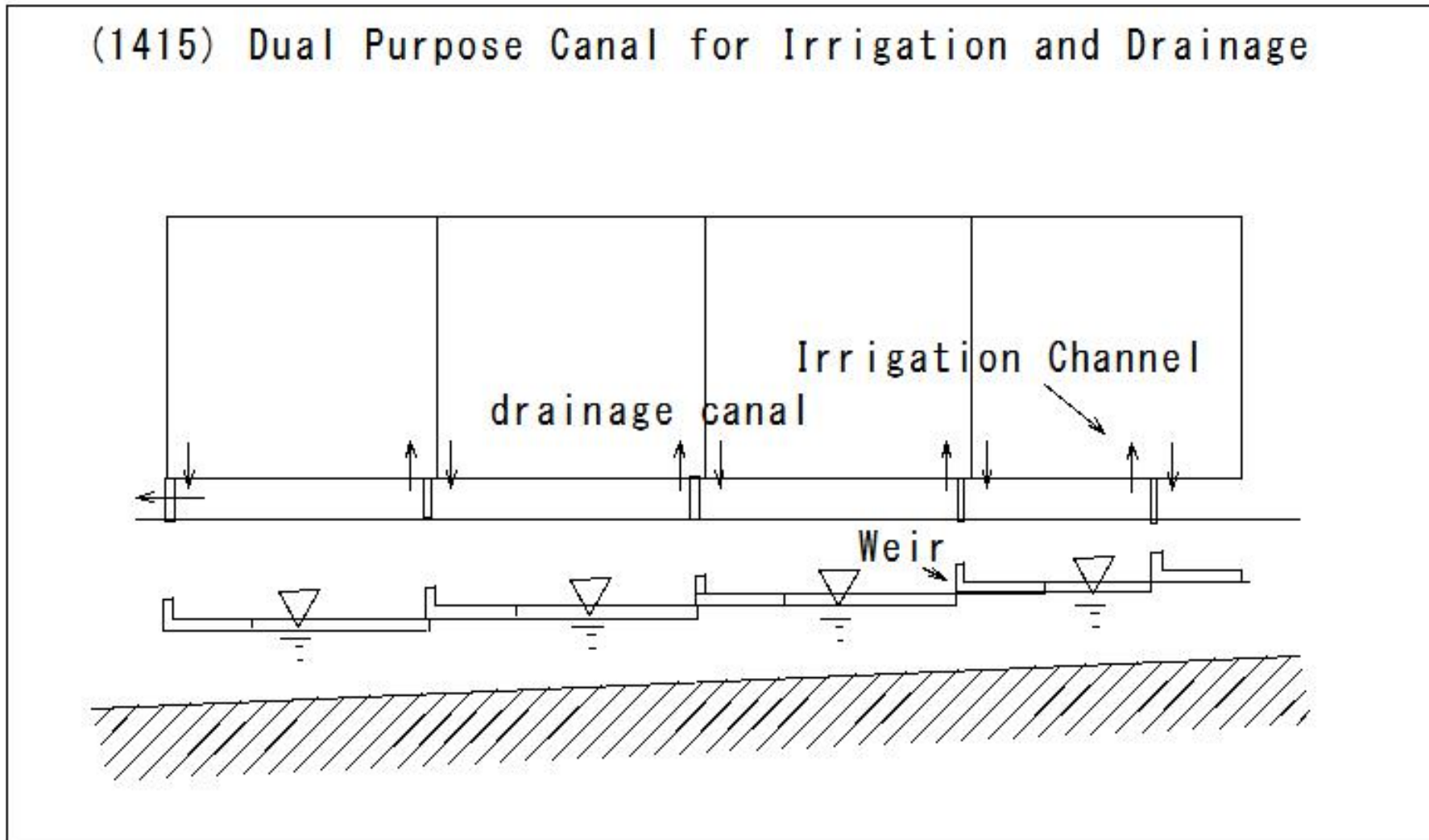
(1413) Irrigation Channel Drainage Facility



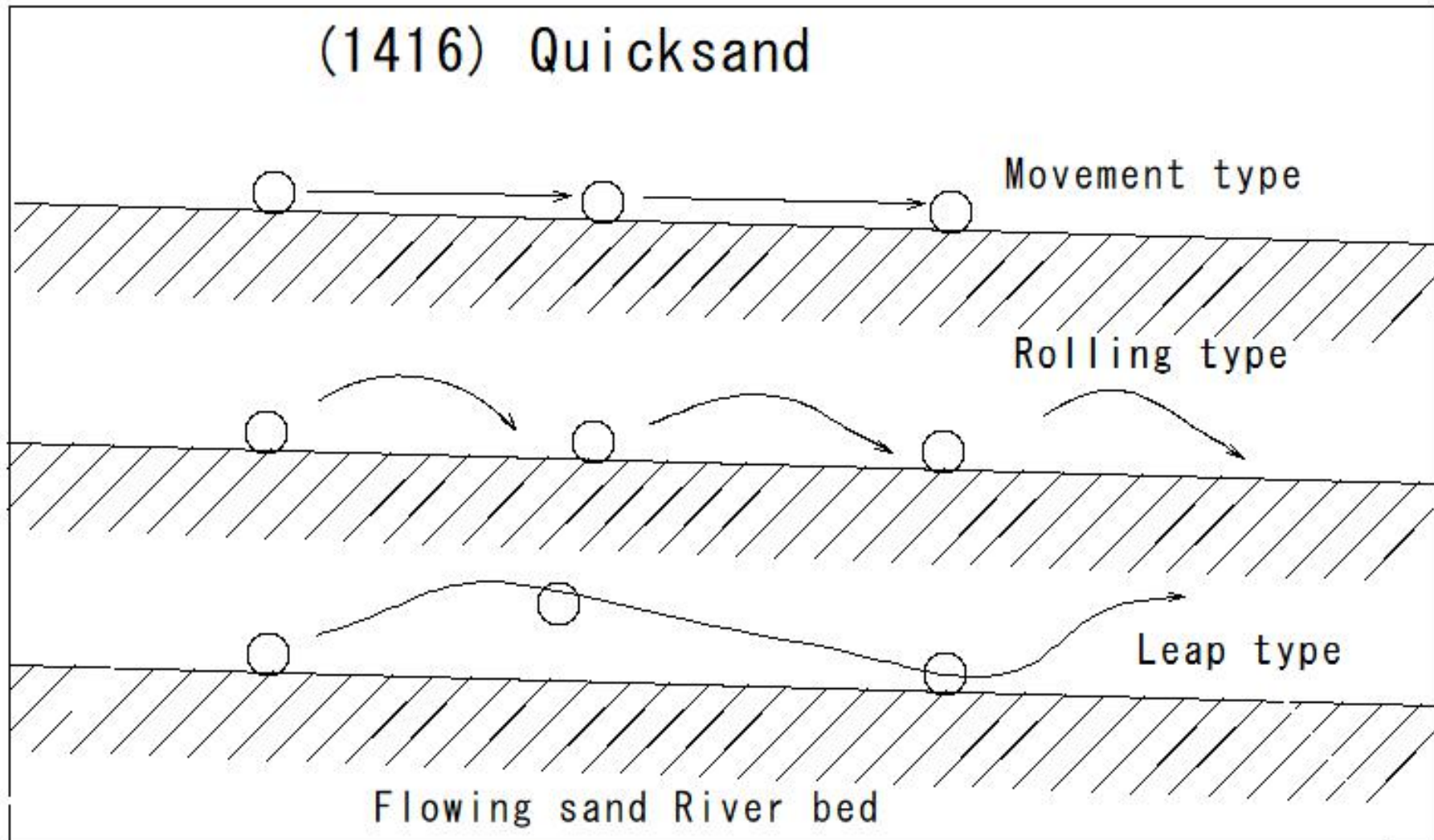
(1414) Spill-Way



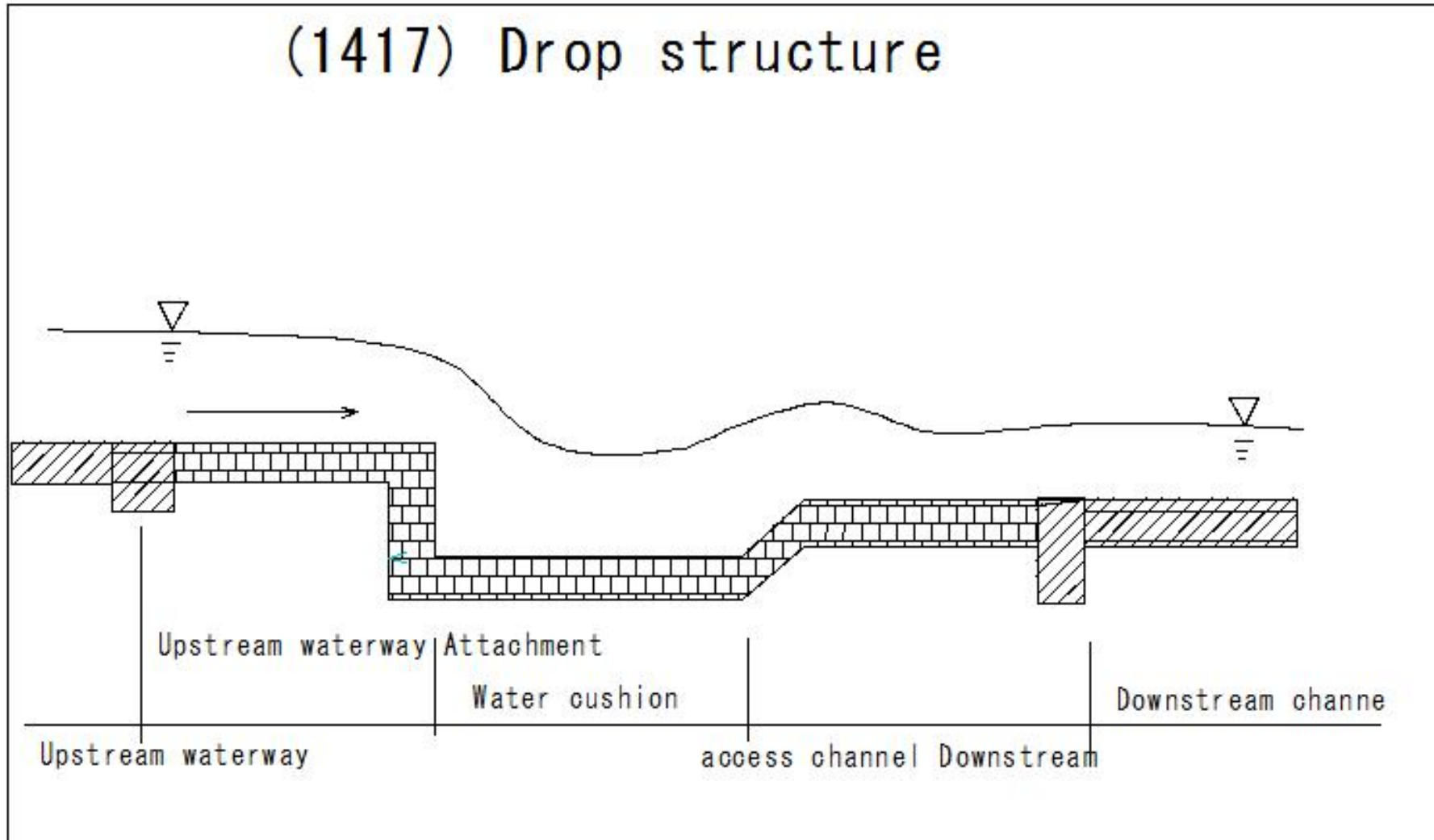
(1415) Dual Purpose Canal for Irrigation and Drainage



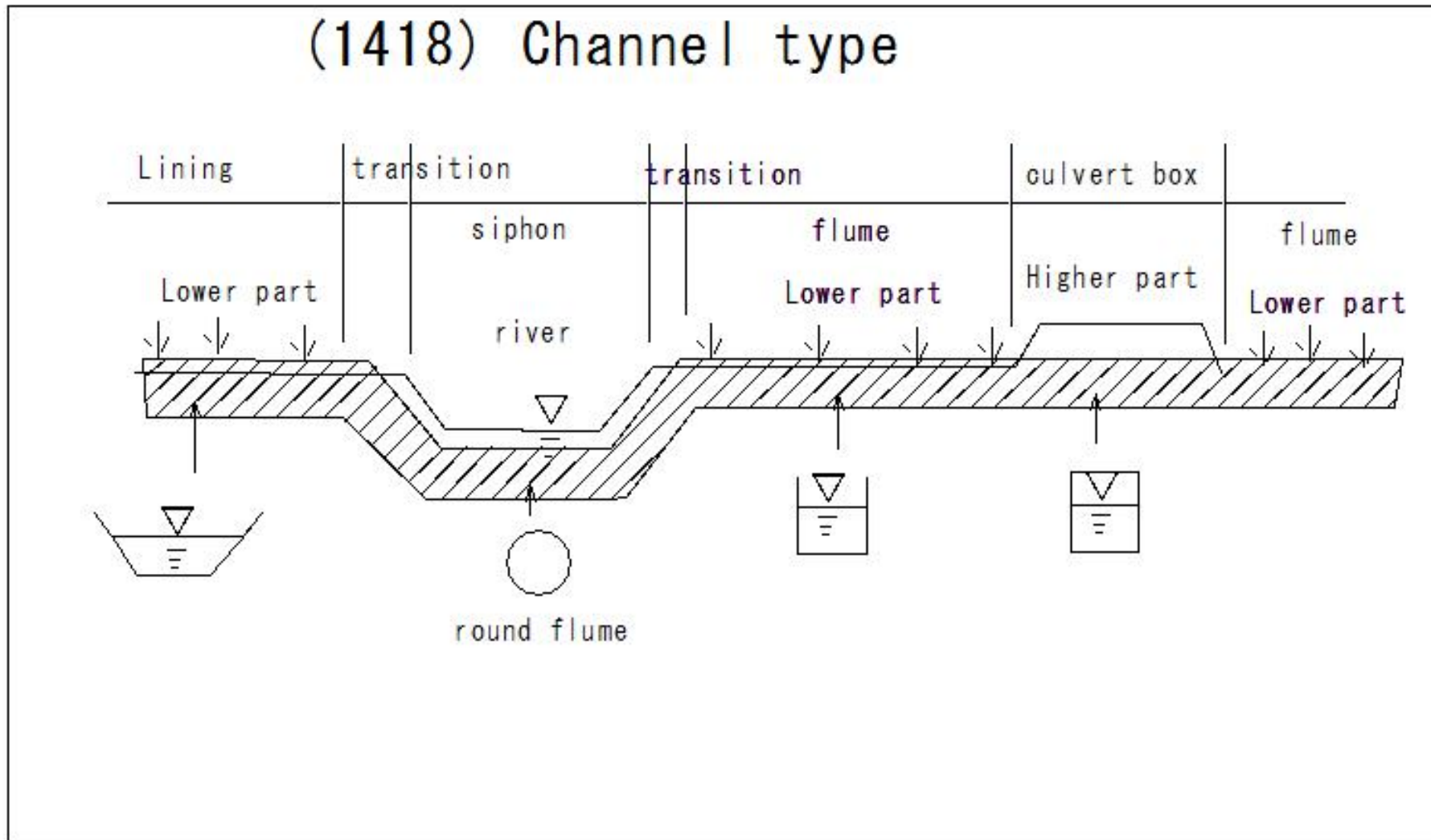
(1416) Quicksand



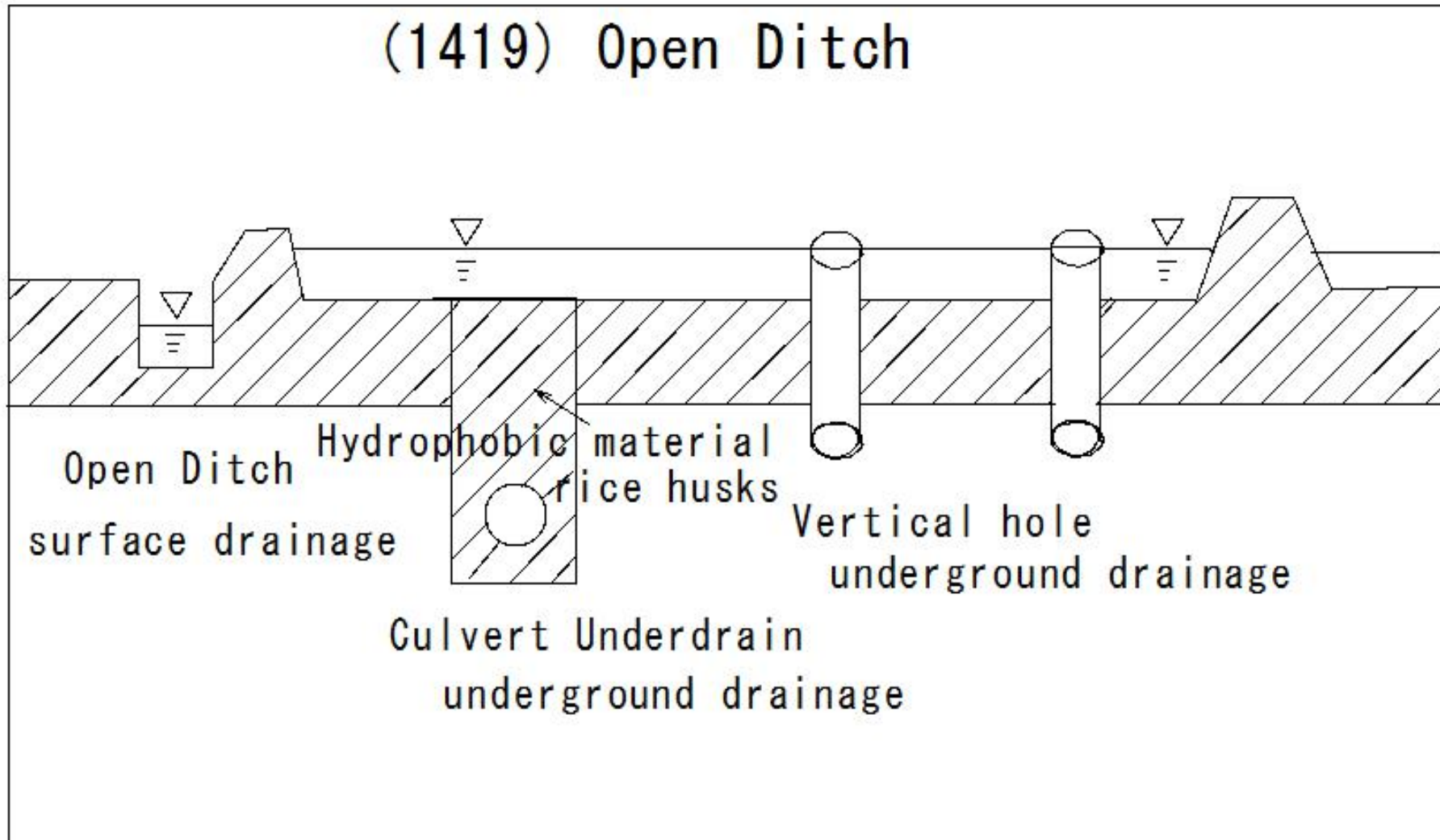
(1417) Drop structure



(1418) Channel type

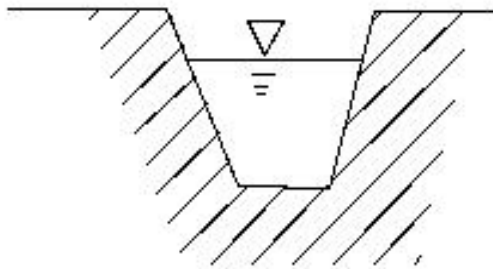


(1419) Open Ditch



(1420) Open Ditch(2)

(1420) Open Ditch(2)



lack of depth

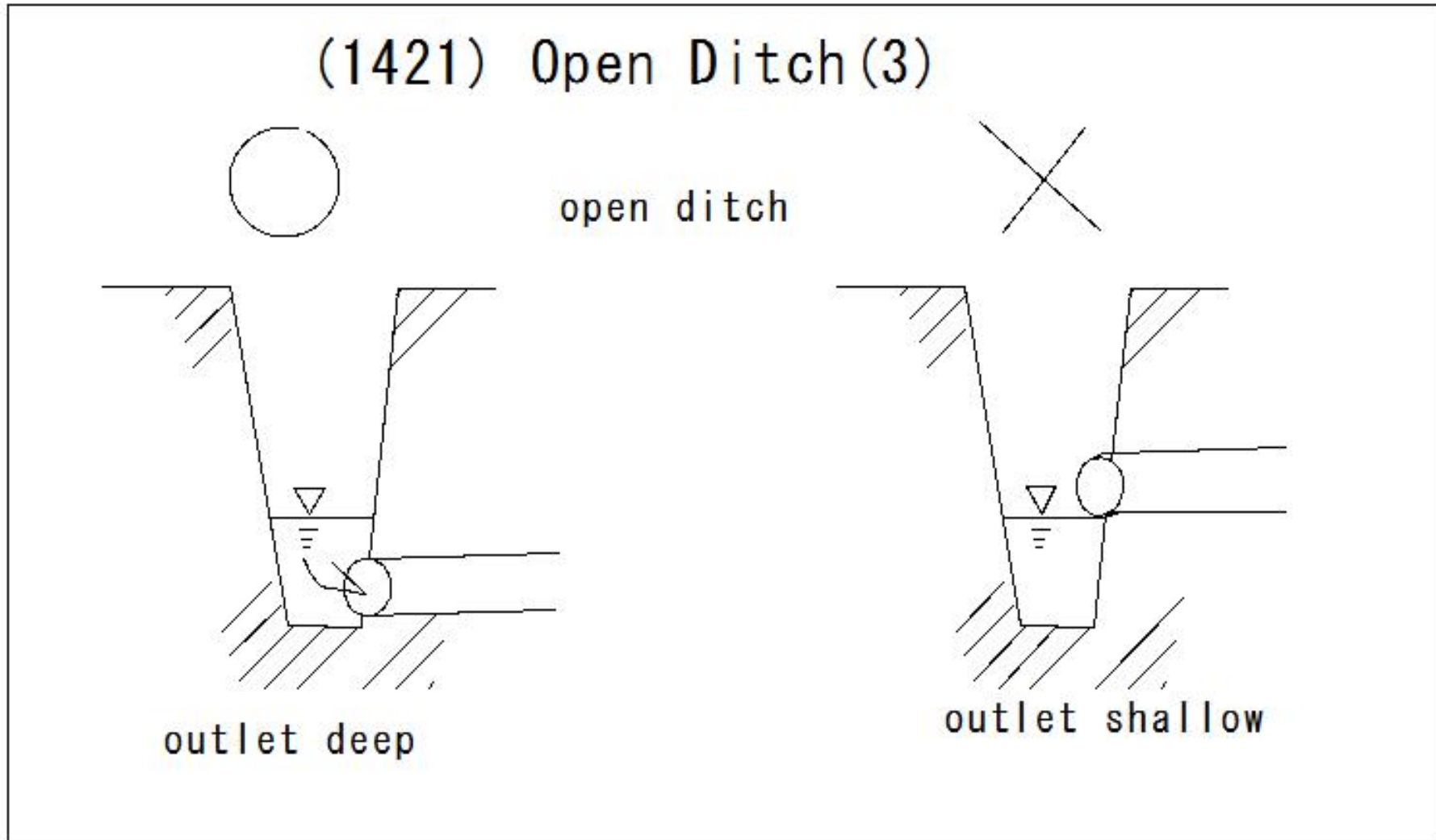
Reverse gradient

Shallow part

Deep part

Water does not drain

(1421) Open Ditch(3)



1001 Agricultural Civil Engineering Words (Illustration) in Africa 1001~	Classification
1002 (1002) plough	Tool
1003 (1003) plough	Tool
1004 (1004) plough	Tool
1005 (1005) hoe	Tool
1006 (1006) furnace	Tool
1007 (1007) furnace	Tool
1008 (1008) broad-brimmed cooking pot for rice	Tool
1009 (1009) bamboo basket for steaming food	Tool
1010 (1010) fire blow bamboo	Tool
1011 (1011) fan	Tool
1012 (1012) fire shovel	Tool
1013 (1013) charcoal extinguisher	Tool
1014 (1014) portable clay cooking stove	Tool
1015 (1015) charcoal	Tool
1016 (1016) towel	Tool
1017 (1017) knife	Tool
1018 (1018) cutting board	Tool
1019 (1019) water jar	Tool
1020 (1020) dried bonito shaver	Tool
1021 (1021) dried bonito	Tool
1022 (1022) mortar wooden pestle	Tool
1023 (1023) dipper wooden spoon	Tool
1024 (1024) grater	Tool
1025 (1025) barrel	Tool
1026 (1026) pot earthenware pot	Tool

1027 (1027) bamboo whisk	Tool
1028 (1028) ice refrigerator	Tool
1029 (1029) fly-net cupboard 1	Tool
1030 (1030) fly-net cupboard 2	Tool
1031 (1031) large pot hung over the hearth	Tool
1032 (1032) trivet (set up in a hibachi to support a kettle)	Tool
1033 (1033) earthenware baking	Tool
1034 (1034) wooden container for cooked rice	Tool
1035 (1035) box set	Tool
1036 (1036) low dining table	Tool
1037 (1037) firewood gathering	Tool
1038 (1038) buying paper scraps	Tool
1039 (1039) ash removal	Tool
1040 (1040) well pulley	Tool
1041 (1041) draw water from a well with a bucket	Tool
1042 (1042) hand pump	Tool
1043 (1043) washboard basin	Tool
1044 (1044) bath	Tool
1045 (1045) tub seat	Tool
1046 (1046) sponge cucumber	Tool
1047 (1047) toilet bowl	Tool
1048 (1048) hand wash basin	Tool
1049 (1049) oil lamp	Tool
1050 (1050) candlestick	Tool
1051 (1051) charcoal iron	Tool
1052 (1052) clothes hanger	Tool

1053 (1053) clothing storage box	Tool
1054 (1054) wicker trunk	Tool
1055 (1055) nightclothes	Tool
1056 (1056) box pillow	Tool
1057 (1057) abacus	Tool
1058 (1058) wrapping cloth	Tool
1059 (1059) wrapping cloth	Tool
1060 (1060) broom	Tool
1061 (1061) broom	Tool
1062 (1062) cleaning cloth	Tool
1063 (1063) bucket	Tool
1064 (1064) mousetrap	Tool
1065 (1065) wooden sandals	Tool
1066 (1066) Japanese umbrella	Tool
1067 (1067) cook's apron	Tool
1068 (1068) shopping basket	Tool
1069 (1069) ice water pillow	Tool
1070 (1070) mosquito strung	Tool
1071 (1071) mosquito repellent	Tool
1072 (1072) reed screen	Tool
1073 (1073) reed blind	Tool
1074 (1074) fly flapper	Tool
1075 (1075) charcoal brazier	Tool
1076 (1076) foot-warmer frame	Tool
1077 (1077) warmer	Tool
1078 (1078) hot water bottle	Tool

1079 (1079) potbelly stove	Tool
1080 (1080) hoe plow	Tool
1081 (1081) hatchet	Tool
1082 (1082) sickle	Tool
1083 (1083) winnow	Tool
1084 (1084) winnower	Tool
1085 (1085) hand threshing	Tool
1086 (1086) hand threshing	Tool
1087 (1087) grain threshing machine	Tool
1088 (1088) matting	Tool
1089 (1089) trout	Tool
1090 (1090) (straw) bagel	Tool
1091 (1091) stone mill	Tool
1092 (1092) mortar mallet	Tool
1093 (1093) pack frame	Tool
1094 (1094) pack frame	Tool
1095 (1095) large hand drawn cart	Tool
1096 (1096) rear car	Tool
1097 (1097) hulling rice	Tool
1098 (1098) polished rice	Tool
1099 (1099) manure	Tool
1100 (1100) manure	Tool
1101 (1101) straw damper	Tool
1102 (1102) straw damper	Tool
1103 (1103) straw damper	Tool
1104 (1104) round fan	Tool

1105 (1105) folding fan	Tool
1106 (1106) firewood	Tool
1107 (1107) brushwood	Tool
1108 (1108) charcoal briquette	Tool
1109 (1109) reduce wood to charcoal	Tool
1110 (1110) briquette	Tool
1111 (1111) small round charcoal briquette	Tool
1112 (1112) coal	Tool
1113 (1113) wind-bell	Tool
1114 (1114) pillow	Tool
1115 (1115) fishing	Tool
1116 (1116) fish spear	Tool
1117 (1117) clam basket	Tool
1118 (1118) fishing net	Tool
1119 (1119) basket used for carrying fish	Tool
1120 (1120) beam balance	Tool
1121 (1121) tool for marking	Tool
1122 (1122) saw	Tool
1123 (1123) chisel	Tool
1124 (1124) hammer	Tool
1125 (1125) wooden hammer	Tool
1126 (1126) straw basket	Tool
1127 (1127) spinning wheel	Tool
1128 (1128) babies basket	Tool
1129 (1129) manure	Tool
1130 (1130) compost manure	Tool

1131 (1131) green manure crop	Tool
1132 (1132) fertilizer made	Tool
1133 (1133) ash	Tool
1134 (1134) fork	Tool
1135 (1135) water wheel	Water
1136 (1136) forest water	Water
1137 (1137) deforestation	Water
1138 (1138) water flow	Water
1139 (1139) groundwater 1	Water
1140 (1140) groundwater 2	Water
1141 (1141) groundwater 3	Water
1142 (1142) river	Water
1143 (1143) oil storage	Water
1144 (1144) green forests dam	Water
1145 (1145) groundwater	Water
1146 (1146) water purifier 1	Water
1147 (1147) water purifier 2	Water
1148 (1148) softened water and hard water	Water
1149 (1149) canal and weir	Water
1150 (1150) drinking water and well	Water
1151 (1151) drinking water and well	Water
1152 (1152) drinking water and well	Water
1153 (1153) flood control 1	Water
1154 (1154) flood control 2	Water
1155 (1155) flood control 3	Water
1156 (1156) power generation	Water

1157 (1157) micro hydro power generation	Water
1158 (1158) Japanese traditional paper	Water
1159 (1159) wooden frame stone fish	Water
1160 (1160) shallows	Water
1161 (1161) fish way	Water
1162 (1162) rainwater utilization system 1	Water
1163 (1163) rainwater utilization system 2	Water
1164 (1164) tidal flat	Water
1165 (1165) soil	Soil
1166 (1166) soil profile	Soil
1167 (1167) rock- soil	Soil
1168 (1168) soil classification system	Soil
1169 (1169) aggregated soil	Soil
1170 (1170) soil structure	Soil
1171 (1171) soil acidic and alkaline	Soil
1172 (1172) microbial	Soil
1173 (1173) rhizobular	Soil
1174 (1174) leguminous plant	Soil
1175 (1175) soil animal	Soil
1176 (1176) earthworm	Soil
1177 (1177) photosynthesis	Soil
1178 (1178) fertilizer	Soil
1179 (1179) fertilizer:3 elements	Soil
1180 (1180) hills and fields soil	Soil
1181 (1181) repeated cultivation damage	Soil
1182 (1182) agricultural chemicals	Soil

1183 (1183) organic farming	Soil
1184 (1184) field soil	Soil
1185 (1185) paddy soil	Soil
1186 (1186) field soil and paddy soil	Soil
1187 (1187) paddy field –no continuous cropping disorder	Soil
1188 (1188) paddy field	Soil
1189 (1189) organic fertilizer	Soil
1190 (1190) compost	Soil
1191 (1191) manure applied before sowing before sowing planting	Soil
1192 (1192) additional fertilization	Soil
1193 (1193) plow a field or the soil	Soil
1194 (1194) deep plowing	Soil
1195 (1195) intercultivation	Soil
1196 (1196) Mulching	Soil
1197 (1197) soil conditioner	Soil
1198 (1198) (volcanic ash+pumice stone+volcanic glass–sedimentary soil	Soil
1199 (1199) sand dunes	Soil
1200 (1200) soil and compost	Soil
1201 (1201) hydroponics	Soil
1202 (1202) hydroponics 2	Soil
1203 (1203) dune	Soil
1204 (1204) Wetland	Soil
1205 (1205) Rice growth	Agriculture
1206 (1206) rice seeds	Agriculture
1207 (1207) seed selection with salt solution	Agriculture
1208 (1208) seed selection with salt solution	Agriculture

1209 (1209) seed selection with wind	Agriculture
1210 (1210) Rice germination	Agriculture
1211 (1211) sprouting seedling	Agriculture
1212 (1212) Germination Rice seed	Agriculture
1213 (1213) mature seedling	Agriculture
1214 (1214) rice field structure	Agriculture
1215 (1215) Rice growth and Water management	Agriculture
1216 (1216) irrigate rice paddy 1	Irrigation
1217 (1217) irrigate rice paddy 2	Irrigation
1218 (1218) irrigate rice paddy 3	Irrigation
1219 (1219) Protect rice fields from flood damage	Irrigation
1220 (1220) Improve drainage	Irrigation
1221 (1221) Organic rice cultivation	Agriculture
1222 (1222) Organic rice cultivation	Agriculture
1223 (1223) Pest control	Agriculture
1224 (1224) Soil Protect Global environment	Environment
1225 (1225) Soil flows when the forest disappears	Forest
1226 (1226) burnt farming slash-and-burn agriculture	Forest
1227 (1227) Naked soil without plants and forest	Forest
1228 (1228) Forest is created, soil is also created	Forest
1229 (1229) Too much compost-manure-nutrients	Agriculture
1230 (1230) Dioxin	Environment
1231 (1231) Compost kitchen waste turn garbage into compost	Agriculture
1232 (1232) Desertisation	Environment
1233 (1233) Global warming	Environment
1234 (1234) Cut down trees-The river becomes muddy	Environment

1235 (1235) Acid rain	Environment
1236 (1236) Old paddy field	Irrigation
1237 (1237) Recent paddy fields	Irrigation
1238 (1238) Large agricultural machine and the earth	Agriculture
1239 (1239) Agriculture protects the environment	Agriculture
1240 (1240) Paddy field (rice)	Agriculture
1241 (1241) Agriculture and forestry	Agriculture
1242 (1242) The planet earth	Soil
1243 (1243) World Soil Map	Soil
1244 (1244) Environmental problems of soil 1	Soil
1245 (1245) Environmental problems of soil 2	Soil
1246 (1246) A lot of plants	Soil
1247 (1247) No plants	Soil
1248 (1248) Factors for yield	Agriculture
1249 (1249) Fertilizer	Agriculture
1250 (1250) The amount of soil that decreases due to rain	Soil
1251 (1251) The Earth break down 1	Soil
1252 (1252) The Earth break down 2	Soil
1253 (1253) The Earth break down 3	Environment
1254 (1254) How to prevent heat and wind	Environment
1255 (1255) The Earth that disappears 1	Environment
1256 (1256) The Earth that disappears 2	Environment
1257 (1257) The Earth that disappears 3	Environment
1258 (1258) The Earth that disappears 4	Environment
1259 (1259) Protect The Earth–Operation Green 1	Environment
1260 (1260) Protect The Earth–Operation Green 2	Environment

1261 (1261) Protect The Earth–Operation Green 3	Environment
1262 (1262) Protect The Earth–Operation Green 4	Environment
1263 (1263) Protect The Earth–Operation Green 5	Environment
1264 (1264) Protect The Earth–Operation Green 6	Environment
1265 (1265) Protect The Earth–Operation Green 7	Environment
1266 (1266) Save The Earth–Operation to collect water 1	Irrigation
1267 (1267) Save The Earth–Operation to collect water 2	Irrigation
1268 (1268) Save The Earth–Operation to collect water 3	Irrigation
1269 (1269) Save The Earth–Operation to collect water 4	Irrigation
1270 (1270) Save The Earth–Operation to collect water 5	Irrigation
1271 (1271) Save The Earth–Operation to collect water 6	Irrigation
1272 (1272) Save The Earth–Operation to collect water 7	Irrigation
1273 (1273) Save The Earth–Operation to collect water 8	Irrigation
1274 (1274) Protect The Earth–Operation Green 8	Irrigation
1275 (1275) Protect The Earth–Operation Green 9	Irrigation
1276 (1276) Protect The Earth–Operation Green 10	Irrigation
1277 (1277) Protect The Earth–Operation Green 11	Irrigation
1278 (1278) Protect The Earth–Operation Green 12	Irrigation
1279 (1279) Rotation of crops 1	Agriculture
1280 (1280) Rotation of crops 2	Agriculture
1281 (1281) The Earth	Environment
1282 (1282) Desertification 1	Environment
1283 (1283) Desertification 2–Climate change	Environment
1284 (1284) Desertification 3–Human activity	Environment
1285 (1285) Desertification 4–Overfed livestock	Environment
1286 (1286) Desertification 5–Cut down too many trees	Environment

1287 (1287) Desertification 6–Over cultivation	Environment
1288 (1288) Desertification 7–Wind erosion	Environment
1289 (1289) Desertification 8–Water erosion	Environment
1290 (1290) Desertification 9–Salt damage	Environment
1291 (1291) Desertification 10–Poverty–Population growth	Environment
1292 (1292) Desertification 11–Wind Erosion	Environment
1293 (1293) Desertification 12 –Water erosion	Environment
1294 (1294) Desertification 13–Salt damage	Environment
1295 (1295) Desertification 14–Measures against salt damage	Environment
1296 (1296) Desertification 15–Prevention of desertification	Environment
1297 (1297) Desertification 16–Low fence	Environment
1298 (1298) Desertification 17–What kind of trees to plant ?	Environment
1299 (1299) Desertification 18–Effective use of limited rainwater	Environment
1300 (1300) Desertification 19–Spread seeds	Environment
1301 (1301) Desertification 20–A drop of water	Environment
1302 (1302) Desertification 21–How to improve saline soil	Environment
1303 (1303) Desertification 22–Scrape and remove saline soil	Environment
1304 (1304) Desertification 23–Plant crop that absorbs salt	Environment
1305 (1305) Desertification 24–Leaching Wash off the salt (plenty of water)	Environment
1306 (1306) Desertification 25–Underdrainage	Environment
1307 (1307) Desertification 26–Underdrain drainage system	Environment
1308 (1308) Desertification 27–Plant crop (resistant to drying and tolerant	Environment
1309 (1309) Desertification 28–Sustainable agriculture	Environment
1310 (1310) Irrigation Underdrain 1	Irrigation
1311 (1311) Irrigation Underdrain 2	Irrigation
1312 (1312) Irrigation Skip Furrow Irrigation	Irrigation

1313 (1313) Surface Irrigation Skip Furrow Irrigation	Irrigation
1314 (1314) Surface Irrigation Border	Irrigation
1315 (1315) Surface Irrigation Contour Ridge	Irrigation
1316 (1316) Surface Irrigation Division Method	Irrigation
1317 (1317) Surface Irrigation Basin	Irrigation
1318 (1318) Overflow Irrigation	Irrigation
1319 (1319) Overflow Irrigation Watercourses	Irrigation
1320 (1320) Overflow Irrigation Tributary waterway	Irrigation
1321 (1321) Border irrigation	Irrigation
1322 (1322) Field reclamation Original Field	Irrigation
1323 (1323) Field reclamation Improvement Original Field	Irrigation
1324 (1324) Field reclamation Stairs Field	Irrigation
1325 (1325) Field reclamation Full section cutting method	Irrigation
1326 (1326) Field reclamation Slope Field	Irrigation
1327 (1327) Paddy field Plot-to-plot irrigation	Irrigation
1328 (1328) Paddy field Continuous irrigation	Irrigation
1329 (1329) Flush irrigation	Irrigation
1330 (1330) Agricultural water channel/Farm road	Irrigation
1331 (1331) Agricultural water channel/Farm road Pavement	Irrigation
1332 (1332) Agricultural water channel/Farm road Pavement Concrete Slab	Irrigation
1333 (1333) Raindrop Erosion	Irrigation
1334 (1334) Irrigation facility	Irrigation
1335 (1335) Evapotranspiration	Irrigation
1336 (1336) Cultivated plot	Irrigation
1337 (1337) Cultivated plot Field	Irrigation
1338 (1338) Soil layer improvement	Irrigation

1339 (1339) Subsoil mixed layer cultivation	Irrigation
1340 (1340) Intercepting drain	Irrigation
1341	Irrigation
1342 (1342) Water level control facility	Irrigation
1343 (1343) Hydrological cycle	Irrigation
1344 (1344) Prevention of water erosion	Irrigation
1345 (1345) Desalination Saltwater replacement	Irrigation
1346 (1346) Flood irrigation	Irrigation
1347 (1347) Direct seeding in flooded	Irrigation
1348 (1348) Groundwater	Irrigation
1349 (1349) Groundwater level	Irrigation
1350 (1350) Underground dam	Irrigation
1351 (1351) Replacement method Excavation replacement	Irrigation
1352 (1352) Replacement method Forced replacement	Irrigation
1353 (1353) Regulating Reservoir	Irrigation
1354 (1354) Terrace catchment channel	Irrigation
1355 (1355) Contour cultivation	Irrigation
1356 (1356) Division weir; Intake weir	Irrigation
1357 (1357) Division weir; Intake weir 1	Irrigation
1358 (1358) Division weir; Intake weir 2	Irrigation
1359 (1359) Consolidation works 1	Irrigation
1360 (1360) Consolidation works 2	Irrigation
1361 (1361) Consolidation works 3	Irrigation
1362 (1362) Consolidation works 4	Irrigation
1363 (1363) Consolidation works 5	Irrigation
1364 (1364) Example of use Geo-textile	Irrigation

1365 (1365) Example of use Geo-textile 2	Irrigation
1366 (1366) Example of use Geo-textile 3	Irrigation
1367 (1367) Example of use Geo-textile 4	Irrigation
1368 (1368) Sedimentation Tank	Irrigation
1369 (1369) Soil structure 1	Soil
1370 (1370) Soil structure 2	Soil
1371 (1371) Soil structure 3	Soil
1372 (1372) Binding of soil particles 1	Soil
1373 (1373) Binding of soil particles 2	Soil
1374 (1374) Binding of soil particles 3	Soil
1375 (1375) Binding of soil particles 4	Soil
1376 (1376) Soil Horizon	Soil
1377 (1377) Subsoil Improvement 1	Irrigation
1378 (1378) Subsoil Improvement 2	Irrigation
1379 (1379) Subsoil Improvement 3	Irrigation
1380 (1380) Channel Transition	Irrigation
1381 (1381) Inner water level Outside water level	Irrigation
1382 (1382) Bed for rice seedlings	Irrigation
1383 (1383) Complete Overflow Nappe	Irrigation
1384 (1384) Incomplete Overflow Nappe	Irrigation
1385 (1385) Pipeline 1	Irrigation
1386 (1386) Pipeline 2	Irrigation
1387 (1387) Pipeline 3	Irrigation
1388 (1388) Drainage channel	Irrigation
1389 (1389) sluiceway	Irrigation
1390 (1390) Cross section widening(Existing embankment) 1	Irrigation

1391 (1391) Cross section widening(Existing embankment) 2	Irrigation
1392 (1392) Heaving	Irrigation
1393 (1393) Rice paddy vinyl sheet	Irrigation
1394 (1394) Fill dam 1	Irrigation
1395 (1395) Fill dam 2	Irrigation
1396 (1396) Fill dam 3	Irrigation
1397 (1397) Fill dam 4	Irrigation
1398 (1398) Complex waterway	Irrigation
1399 (1399) Plowing	Irrigation
1400 (1400) Closed type Diversion work	Irrigation
1401 (1401) Constant Proportion Type Diversion Work	Irrigation
1402 (1402) Operation Type Type Diversion Work	Irrigation
1403 (1403) Stand Type Diversion Work	Irrigation
1404 (1404) Farm Road Farmland Consolidation	Irrigation
1405 (1405) Turning Irrigation Channel	Irrigation
1406 (1406) Paddy sluice-Paddy field Drainage	Irrigation
1407 (1407) Open Ditch	Irrigation
1408 (1408) Soil Eroding	Irrigation
1409 (1409) Mower	Irrigation
1410 (1410) Mold Drain	Irrigation
1411 (1411) Retarding Basin	Irrigation
1412 (1412) Agricultural Drainage System	Irrigation
1413 (1413) Irrigation Channel Drainage Facility	Irrigation
1414 (1414) Spill-Way	Irrigation
1415 (1415) Dual Purpose Canal for Irrigation and Drainage	Irrigation
1416 (1416) Quicksand	Irrigation

1417 (1417) Drop structure

1418 (1418) Channel type

1419

1420 (1420) Open Ditch(2)

1421 (1421) Open Ditch(3)

Irrigation

Irrigation

Irrigation

Irrigation

Irrigation

1001	Agricultural Civil Engineering Words (Illustration) in Africa	1001 ~	Classification
1205	(1205) Rice growth		Agriculture
1206	(1206) rice seeds		Agriculture
1207	(1207) seed selection with salt solution		Agriculture
1208	(1208) seed selection with salt solution		Agriculture
1209	(1209) seed selection with wind		Agriculture
1210	(1210) Rice germination		Agriculture
1211	(1211) sprouting seedling		Agriculture
1212	(1212) Germination Rice seed		Agriculture
1213	(1213) mature seedling		Agriculture
1214	(1214) rice field structure		Agriculture
1215	(1215) Rice growth and Water management		Agriculture
1221	(1221) Organic rice cultivation		Agriculture
1222	(1222) Organic rice cultivation		Agriculture
1223	(1223) Pest control		Agriculture
1229	(1229) Too much compost-manure-nutrients		Agriculture
1231	(1231) Compost kitchen waste turn garbage into compost		Agriculture
1238	(1238) Large agricultural machine and the earth		Agriculture
1239	(1239) Agriculture protects the environment		Agriculture
1240	(1240) Paddy field (rice)		Agriculture
1241	(1241) Agriculture and forestry		Agriculture
1248	(1248) Factors for yield		Agriculture
1249	(1249) Fertilizer		Agriculture
1279	(1279) Rotation of crops 1		Agriculture
1280	(1280) Rotation of crops 2		Agriculture
1224	(1224) Soil Protect Global environment		Environment

1230 (1230) Dioxin	Environment
1232 (1232) Desertisation	Environment
1233 (1233) Global warming	Environment
1234 (1234) Cut down trees–The river becomes muddy	Environment
1235 (1235) Acid rain	Environment
1253 (1253) The Earth break down 3	Environment
1254 (1254) How to prevent heat and wind	Environment
1255 (1255) The Earth that disappears 1	Environment
1256 (1256) The Earth that disappears 2	Environment
1257 (1257) The Earth that disappears 3	Environment
1258 (1258) The Earth that disappears 4	Environment
1259 (1259) Protect The Earth–Operation Green 1	Environment
1260 (1260) Protect The Earth–Operation Green 2	Environment
1261 (1261) Protect The Earth–Operation Green 3	Environment
1262 (1262) Protect The Earth–Operation Green 4	Environment
1263 (1263) Protect The Earth–Operation Green 5	Environment
1264 (1264) Protect The Earth–Operation Green 6	Environment
1265 (1265) Protect The Earth–Operation Green 7	Environment
1281 (1281) The Earth	Environment
1282 (1282) Desertification 1	Environment
1283 (1283) Desertification 2–Climate change	Environment
1284 (1284) Desertification 3–Human activity	Environment
1285 (1285) Desertification 4–Overfed livestock	Environment
1286 (1286) Desertification 5–Cut down too many trees	Environment
1287 (1287) Desertification 6–Over cultivation	Environment
1288 (1288) Desertification 7–Wind erosion	Environment

1289 (1289) Desertification 8–Water erosion	Environment
1290 (1290) Desertification 9–Salt damage	Environment
1291 (1291) Desertification 10–Poverty–Population growth	Environment
1292 (1292) Desertification 11–Wind Erosion	Environment
1293 (1293) Desertification 12 –Water erosion	Environment
1294 (1294) Desertification 13–Salt damage	Environment
1295 (1295) Desertification 14–Measures against salt damage	Environment
1296 (1296) Desertification 15–Prevention of desertification	Environment
1297 (1297) Desertification 16–Low fence	Environment
1298 (1298) Desertification 17–What kind of trees to plant ?	Environment
1299 (1299) Desertification 18–Effective use of limited rainwater	Environment
1300 (1300) Desertification 19–Spread seeds	Environment
1301 (1301) Desertification 20–A drop of water	Environment
1302 (1302) Desertification 21–How to improve saline soil	Environment
1303 (1303) Desertification 22–Scrape and remove saline soil	Environment
1304 (1304) Desertification 23–Plant crop that absorbs salt	Environment
1305 (1305) Desertification 24–Leaching Wash off the salt (plenty of water)	Environment
1306 (1306) Desertification 25–Underdrainage	Environment
1307 (1307) Desertification 26–Underdrain drainage system	Environment
1308 (1308) Desertification 27–Plant crop (resistant to drying and tolerant	Environment
1309 (1309) Desertification 28–Sustainable agriculture	Environment
1225 (1225) Soil flows when the forest disappears	Forest
1226 (1226) burnt farming slash–and–burn agriculture	Forest
1227 (1227) Naked soil without plants and forest	Forest
1228 (1228) Forest is created, soil is also created	Forest
1216 (1216) irrigate rice paddy 1	Irrigation

1217 (1217) irrigate rice paddy 2	Irrigation
1218 (1218) irrigate rice paddy 3	Irrigation
1219 (1219) Protect rice fields from flood damage	Irrigation
1220 (1220) Improve drainage	Irrigation
1236 (1236) Old paddy field	Irrigation
1237 (1237) Recent paddy fields	Irrigation
1266 (1266) Save The Earth-Operation to collect water 1	Irrigation
1267 (1267) Save The Earth-Operation to collect water 2	Irrigation
1268 (1268) Save The Earth-Operation to collect water 3	Irrigation
1269 (1269) Save The Earth-Operation to collect water 4	Irrigation
1270 (1270) Save The Earth-Operation to collect water 5	Irrigation
1271 (1271) Save The Earth-Operation to collect water 6	Irrigation
1272 (1272) Save The Earth-Operation to collect water 7	Irrigation
1273 (1273) Save The Earth-Operation to collect water 8	Irrigation
1274 (1274) Protect The Earth-Operation Green 8	Irrigation
1275 (1275) Protect The Earth-Operation Green 9	Irrigation
1276 (1276) Protect The Earth-Operation Green 10	Irrigation
1277 (1277) Protect The Earth-Operation Green 11	Irrigation
1278 (1278) Protect The Earth-Operation Green 12	Irrigation
1310 (1310) Irrigation Underdrain 1	Irrigation
1311 (1311) Irrigation Underdrain 2	Irrigation
1312 (1312) Irrigation Skip Furrow Irrigation	Irrigation
1313 (1313) Surface Irrigation Skip Furrow Irrigation	Irrigation
1314 (1314) Surface Irrigation Border	Irrigation
1315 (1315) Surface Irrigation Contour Ridge	Irrigation
1316 (1316) Surface Irrigation Division Method	Irrigation

1317 (1317) Surface Irrigation Basin	Irrigation
1318 (1318) Overflow Irrigation	Irrigation
1319 (1319) Overflow Irrigation Watercourses	Irrigation
1320 (1320) Overflow Irrigation Tributary waterway	Irrigation
1321 (1321) Border irrigation	Irrigation
1322 (1322) Field reclamation Original Field	Irrigation
1323 (1323) Field reclamation Improvement Original Field	Irrigation
1324 (1324) Field reclamation Stairs Field	Irrigation
1325 (1325) Field reclamation Full section cutting method	Irrigation
1326 (1326) Field reclamation Slope Field	Irrigation
1327 (1327) Paddy field Plot-to-plot irrigation	Irrigation
1328 (1328) Paddy field Continuous irrigation	Irrigation
1329 (1329) Flush irrigation	Irrigation
1330 (1330) Agricultural water channel/Farm road	Irrigation
1331 (1331) Agricultural water channel/Farm road Pavement	Irrigation
1332 (1332) Agricultural water channel/Farm road Pavement Concrete Slab	Irrigation
1333 (1333) Raindrop Erosion	Irrigation
1334 (1334) Irrigation facility	Irrigation
1335 (1335) Evapotranspiration	Irrigation
1336 (1336) Cultivated plot	Irrigation
1337 (1337) Cultivated plot Field	Irrigation
1338 (1338) Soil layer improvement	Irrigation
1339 (1339) Subsoil mixed layer cultivation	Irrigation
1340 (1340) Intercepting drain	Irrigation
1341 (1341) Water lock	Irrigation
1342 (1342) Water level control facility	Irrigation

1343 (1343) Hydrological cycle	Irrigation
1344 (1344) Prevention of water erosion	Irrigation
1345 (1345) Desalination Saltwater replacement	Irrigation
1346 (1346) Flood irrigation	Irrigation
1347 (1347) Direct seeding in flooded	Irrigation
1348 (1348) Groundwater	Irrigation
1349 (1349) Groundwater level	Irrigation
1350 (1350) Underground dam	Irrigation
1351 (1351) Replacement method Excavation replacement	Irrigation
1352 (1352) Replacement method Forced replacement	Irrigation
1353 (1353) Regulating Reservoir	Irrigation
1354 (1354) Terrace catchment channel	Irrigation
1355 (1355) Contour cultivation	Irrigation
1356 (1356) Division weir; Intake weir	Irrigation
1357 (1357) Division weir; Intake weir 1	Irrigation
1358 (1358) Division weir; Intake weir 2	Irrigation
1359 (1359) Consolidation works 1	Irrigation
1360 (1360) Consolidation works 2	Irrigation
1361 (1361) Consolidation works 3	Irrigation
1362 (1362) Consolidation works 4	Irrigation
1363 (1363) Consolidation works 5	Irrigation
1364 (1364) Example of use Geo-textile	Irrigation
1365 (1365) Example of use Geo-textile 2	Irrigation
1366 (1366) Example of use Geo-textile 3	Irrigation
1367 (1367) Example of use Geo-textile 4	Irrigation
1368 (1368) Sedimentation Tank	Irrigation

1377 (1377) Subsoil Improvement 1	Irrigation
1378 (1378) Subsoil Improvement 2	Irrigation
1379 (1379) Subsoil Improvement 3	Irrigation
1380 (1380) Channel Transition	Irrigation
1381 (1381) Inner water level Outside water level	Irrigation
1382 (1382) Bed for rice seedlings	Irrigation
1383 (1383) Complete Overflow Nappe	Irrigation
1384 (1384) Incomplete Overflow Nappe	Irrigation
1385 (1385) Pipeline 1	Irrigation
1386 (1386) Pipeline 2	Irrigation
1387 (1387) Pipeline 3	Irrigation
1388 (1388) Drainage channel	Irrigation
1389 (1389) sluiceway	Irrigation
1390 (1390) Cross section widening(Existing embankment) 1	Irrigation
1391 (1391) Cross section widening(Existing embankment) 2	Irrigation
1392 (1392) Heaving	Irrigation
1393 (1393) Rice paddy vinyl sheet	Irrigation
1394 (1394) Fill dam 1	Irrigation
1395 (1395) Fill dam 2	Irrigation
1396 (1396) Fill dam 3	Irrigation
1397 (1397) Fill dam 4	Irrigation
1398 (1398) Complex waterway	Irrigation
1399 (1399) Plowing	Irrigation
1400 (1400) Closed type Diversion work	Irrigation
1401 (1401) Constant Proportion Type Diversion Work	Irrigation
1402 (1402) Operation Type Type Diversion Work	Irrigation

1403 (1403) Stand Type Diversion Work	Irrigation
1404 (1404) Farm Road Farmland Consolidation	Irrigation
1405 (1405) Turning Irrigation Channel	Irrigation
1406 (1406) Paddy sluice-Paddy field Drainage	Irrigation
1407 (1407) Open Ditch	Irrigation
1408 (1408) Soil Eroding	Irrigation
1409 (1409) Mower	Irrigation
1410 (1410) Mold Drain	Irrigation
1411 (1411) Retarding Basin	Irrigation
1412 (1412) Agricultural Drainage System	Irrigation
1413 (1413) Irrigation Channel Drainage Facility	Irrigation
1414 (1414) Spill-Way	Irrigation
1415 (1415) Dual Purpose Canal for Irrigation and Drainage	Irrigation
1416 (1416) Quicksand	Irrigation
1417 (1417) Drop structure	Irrigation
1418 (1418) Channel type	Irrigation
1419 (1419) Open Ditch	Irrigation
1420 (1420) Open Ditch(2)	Irrigation
1421 (1421) Open Ditch(3)	Irrigation
1165 (1165) soil	Soil
1166 (1166) soil profile	Soil
1167 (1167) rock- soil	Soil
1168 (1168) soil classification system	Soil
1169 (1169) aggregated soil	Soil
1170 (1170) soil structure	Soil
1171 (1171) soil acidic and alkaline	Soil

1172 (1172) microbial	Soil
1173 (1173) rhizobular	Soil
1174 (1174) leguminous plant	Soil
1175 (1175) soil animal	Soil
1176 (1176) earthworm	Soil
1177 (1177) photosynthesis	Soil
1178 (1178) fertilizer	Soil
1179 (1179) fertilizer:3 elements	Soil
1180 (1180) hills and fields soil	Soil
1181 (1181) repeated cultivation damage	Soil
1182 (1182) agricultural chemicals	Soil
1183 (1183) organic farming	Soil
1184 (1184) field soil	Soil
1185 (1185) paddy soil	Soil
1186 (1186) field soil and paddy soil	Soil
1187 (1187) paddy field -no continuous cropping disorder	Soil
1188 (1188) paddy field	Soil
1189 (1189) organic fertilizer	Soil
1190 (1190) compost	Soil
1191 (1191) manure applied before sowing before sowing planting	Soil
1192 (1192) additional fertilization	Soil
1193 (1193) plow a field or the soil	Soil
1194 (1194) deep plowing	Soil
1195 (1195) intercultivation	Soil
1196 (1196) Mulching	Soil
1197 (1197) soil conditioner	Soil

1198 (1198) (volcanic ash+pumice stone+volcanic glass-sedimentary soil	Soil
1199 (1199) sand dunes	Soil
1200 (1200) soil and compost	Soil
1201 (1201) hydroponics	Soil
1202 (1202) hydroponics 2	Soil
1203 (1203) dune	Soil
1204 (1204) Wetland	Soil
1242 (1242) The planet earth	Soil
1243 (1243) World Soil Map	Soil
1244 (1244) Environmental problems of soil 1	Soil
1245 (1245) Environmental problems of soil 2	Soil
1246 (1246) A lot of plants	Soil
1247 (1247) No plants	Soil
1250 (1250) The amount of soil that decreases due to rain	Soil
1251 (1251) The Earth break down 1	Soil
1252 (1252) The Earth break down 2	Soil
1369 (1369) Soil structure 1	Soil
1370 (1370) Soil structure 2	Soil
1371 (1371) Soil structure 3	Soil
1372 (1372) Binding of soil particles 1	Soil
1373 (1373) Binding of soil particles 2	Soil
1374 (1374) Binding of soil particles 3	Soil
1375 (1375) Binding of soil particles 4	Soil
1376 (1376) Soil Horizon	Soil
1002 (1002) plough	Tool
1003 (1003) plough	Tool

1004 (1004) plough	Tool
1005 (1005) hoe	Tool
1006 (1006) furnace	Tool
1007 (1007) furnace	Tool
1008 (1008) broad-brimmed cooking pot for rice	Tool
1009 (1009) bamboo basket for steaming food	Tool
1010 (1010) fire blow bamboo	Tool
1011 (1011) fan	Tool
1012 (1012) fire shovel	Tool
1013 (1013) charcoal extinguisher	Tool
1014 (1014) portable clay cooking stove	Tool
1015 (1015) charcoal	Tool
1016 (1016) towel	Tool
1017 (1017) knife	Tool
1018 (1018) cutting board	Tool
1019 (1019) water jar	Tool
1020 (1020) dried bonito shaver	Tool
1021 (1021) dried bonito	Tool
1022 (1022) mortar wooden pestle	Tool
1023 (1023) dipper wooden spoon	Tool
1024 (1024) grater	Tool
1025 (1025) barrel	Tool
1026 (1026) pot earthenware pot	Tool
1027 (1027) bamboo whisk	Tool
1028 (1028) ice refrigerator	Tool
1029 (1029) fly-net cupboard 1	Tool

1030 (1030) fly-net cupboard 2	Tool
1031 (1031) large pot hung over the hearth	Tool
1032 (1032) trivet (set up in a hibachi to support a kettle)	Tool
1033 (1033) earthenware baking	Tool
1034 (1034) wooden container for cooked rice	Tool
1035 (1035) box set	Tool
1036 (1036) low dining table	Tool
1037 (1037) firewood gathering	Tool
1038 (1038) buying paper scraps	Tool
1039 (1039) ash removal	Tool
1040 (1040) well pulley	Tool
1041 (1041) draw water from a well with a bucket	Tool
1042 (1042) hand pump	Tool
1043 (1043) washboard basin	Tool
1044 (1044) bath	Tool
1045 (1045) tub seat	Tool
1046 (1046) sponge cucumber	Tool
1047 (1047) toilet bowl	Tool
1048 (1048) hand wash basin	Tool
1049 (1049) oil lamp	Tool
1050 (1050) candlestick	Tool
1051 (1051) charcoal iron	Tool
1052 (1052) clothes hanger	Tool
1053 (1053) clothing storage box	Tool
1054 (1054) wicker trunk	Tool
1055 (1055) nightclothes	Tool

1056 (1056) box pillow	Tool
1057 (1057) abacus	Tool
1058 (1058) wrapping cloth	Tool
1059 (1059) wrapping cloth	Tool
1060 (1060) broom	Tool
1061 (1061) broom	Tool
1062 (1062) cleaning cloth	Tool
1063 (1063) bucket	Tool
1064 (1064) mousetrap	Tool
1065 (1065) wooden sandals	Tool
1066 (1066) Japanese umbrella	Tool
1067 (1067) cook's apron	Tool
1068 (1068) shopping basket	Tool
1069 (1069) ice water pillow	Tool
1070 (1070) mosquito strung	Tool
1071 (1071) mosquito repellent	Tool
1072 (1072) reed screen	Tool
1073 (1073) reed blind	Tool
1074 (1074) fly flapper	Tool
1075 (1075) charcoal brazier	Tool
1076 (1076) foot-warmer frame	Tool
1077 (1077) warmer	Tool
1078 (1078) hot water bottle	Tool
1079 (1079) potbelly stove	Tool
1080 (1080) hoe plow	Tool
1081 (1081) hatchet	Tool

1082 (1082) sickle	Tool
1083 (1083) winnow	Tool
1084 (1084) winnower	Tool
1085 (1085) hand threshing	Tool
1086 (1086) hand threshing	Tool
1087 (1087) grain threshing machine	Tool
1088 (1088) matting	Tool
1089 (1089) trout	Tool
1090 (1090) (straw) bagel	Tool
1091 (1091) stone mill	Tool
1092 (1092) mortar mallet	Tool
1093 (1093) pack frame	Tool
1094 (1094) pack frame	Tool
1095 (1095) large hand drawn cart	Tool
1096 (1096) rear car	Tool
1097 (1097) hulling rice	Tool
1098 (1098) polished rice	Tool
1099 (1099) manure	Tool
1100 (1100) manure	Tool
1101 (1101) straw damper	Tool
1102 (1102) straw damper	Tool
1103 (1103) straw damper	Tool
1104 (1104) round fan	Tool
1105 (1105) folding fan	Tool
1106 (1106) firewood	Tool
1107 (1107) brushwood	Tool

1108 (1108) charcoal briquette	Tool
1109 (1109) reduce wood to charcoal	Tool
1110 (1110) briquette	Tool
1111 (1111) small round charcoal briquette	Tool
1112 (1112) coal	Tool
1113 (1113) wind-bell	Tool
1114 (1114) pillow	Tool
1115 (1115) fishing	Tool
1116 (1116) fish spear	Tool
1117 (1117) clam basket	Tool
1118 (1118) fishing net	Tool
1119 (1119) basket used for carrying fish	Tool
1120 (1120) beam balance	Tool
1121 (1121) tool for marking	Tool
1122 (1122) saw	Tool
1123 (1123) chisel	Tool
1124 (1124) hammer	Tool
1125 (1125) wooden hammer	Tool
1126 (1126) straw basket	Tool
1127 (1127) spinning wheel	Tool
1128 (1128) babies basket	Tool
1129 (1129) manure	Tool
1130 (1130) compost manure	Tool
1131 (1131) green manure crop	Tool
1132 (1132) fertilizer made	Tool
1133 (1133) ash	Tool

1134 (1134) fork	Tool
1135 (1135) water wheel	Water
1136 (1136) forest water	Water
1137 (1137) deforestation	Water
1138 (1138) water flow	Water
1139 (1139) groundwater 1	Water
1140 (1140) groundwater 2	Water
1141 (1141) groundwater 3	Water
1142 (1142) river	Water
1143 (1143) oil storage	Water
1144 (1144) green forests dam	Water
1145 (1145) groundwater	Water
1146 (1146) water purifier 1	Water
1147 (1147) water purifier 2	Water
1148 (1148) softened water and hard water	Water
1149 (1149) canal and weir	Water
1150 (1150) drinking water and well	Water
1151 (1151) drinking water and well	Water
1152 (1152) drinking water and well	Water
1153 (1153) flood control 1	Water
1154 (1154) flood control 2	Water
1155 (1155) flood control 3	Water
1156 (1156) power generation	Water
1157 (1157) micro hydro power generation	Water
1158 (1158) Japanese traditional paper	Water
1159 (1159) wooden frame stone fish	Water

1160 (1160) shallows	Water
1161 (1161) fish way	Water
1162 (1162) rainwater utilization system 1	Water
1163 (1163) rainwater utilization system 2	Water
1164 (1164) tidal flat	Water

Classification

Agricultural machinery
Agriculture
Breakwater
Bridge
Coast
Concrete
Construction
Construction machinery
Dam
Earth work
Embankment
Environment
Fishery
Forest
Foundation
Geology
Hydraulic
Irrigation
Railway
Retaining wall
Revetment
River
Road
Sewage

Soil
Structure
Survey
Tool
Topography
Tunnel
Water