



SJ01-9



SJ01-15



SJ03-2



SJ04-2



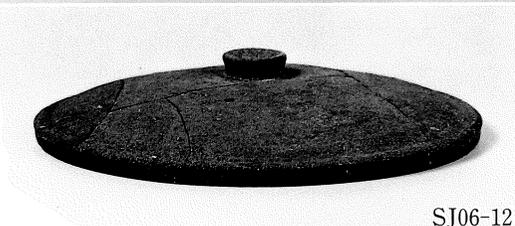
SJ04-3



SJ06-5



SJ06-7



SJ06-12



SJ08-3



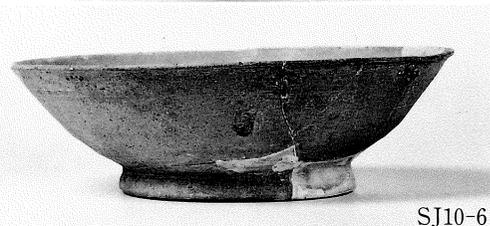
SJ08-4



SJ08-5



SJ08-7



SJ10-6



SJ08-9



SJ08-10



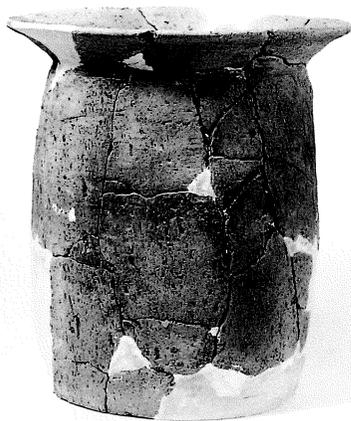
SJ08-11



SJ08-12



SJ10-1



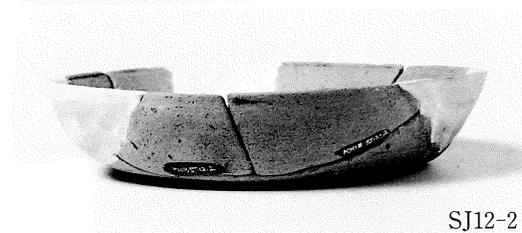
SJ11-6



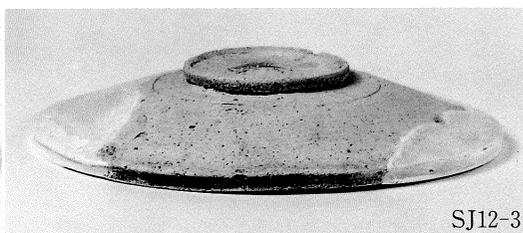
SJ11-7



SJ11-8



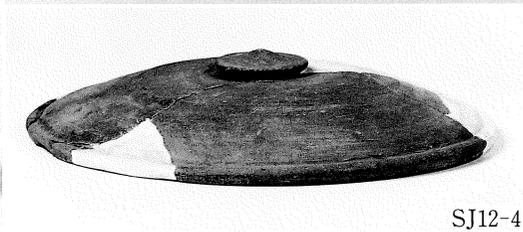
SJ12-2



SJ12-3



SJ13-3



SJ12-4



SJ13-8



SJ13-10



SJ13-11



SJ13-13



SJ13-15



SJ19-1



SJ19-2



SJ19-4



SJ19-5



SJ20-4



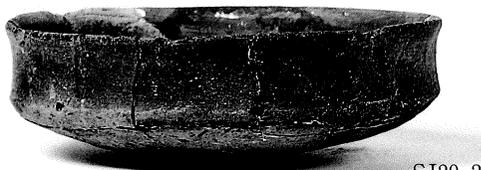
SJ21-1



SJ23-1



SJ24-2



SJ29-2



SJ29-5



SJ29-6



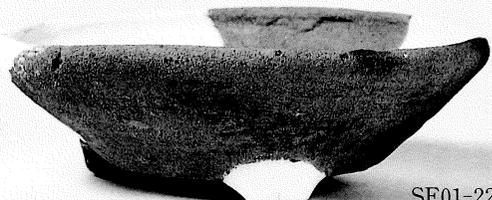
SJ29-7



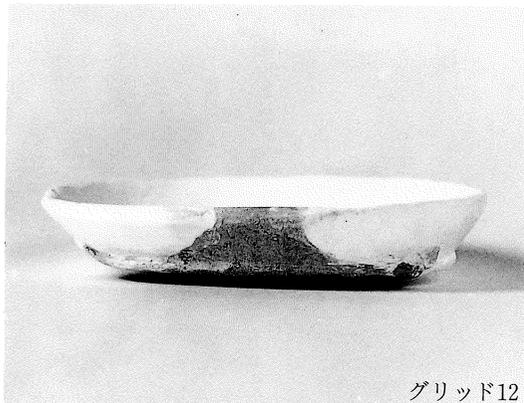
SE03-1



SE01-19



SE01-22



グリッド12



SK82-2



SD22-30



SE08-1



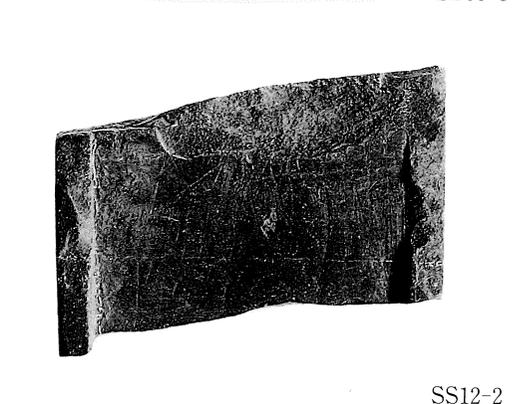
SE06-5



SE06-3



SK92



SS12-2



SE03-6



SE03-4



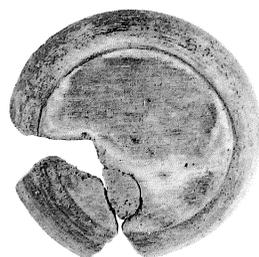
SE03-3



SE03-7



SE03-5

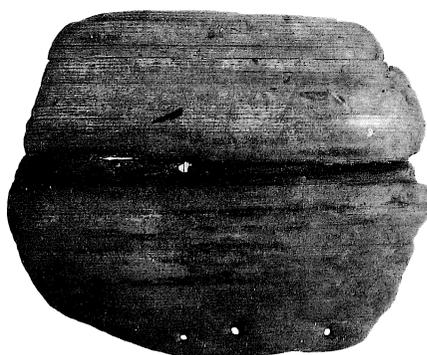


SK185

木器碗



SE03-11



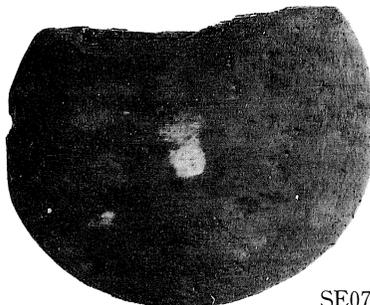
SE03-12



SS02-19



SE10-1



SE07-11

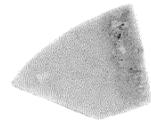
曲物



SS01-3



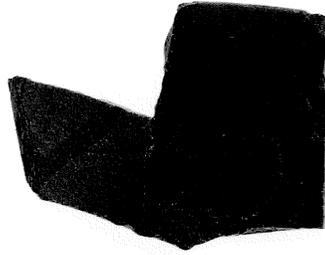
SS13-2



SS08-2



SK264-2



SS08-1



グリッド-3

白磁・青磁碗 (内面)



SS01-3



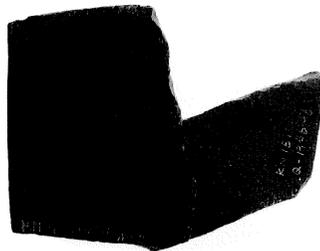
SS13-2



SS08-2



SK264

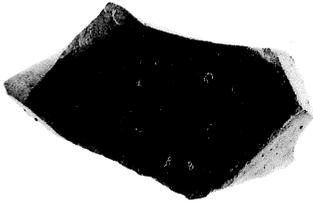


SS08-1



グリッド-3

白磁・青磁碗 (外面)



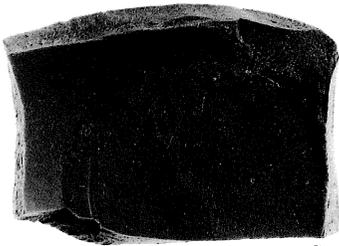
SS01-2



SD04-7



SK100-5



SD30-1



表採-4



SD22-25

青磁碗 (内面)



SS01-2



SD04-7



SK100



SD30-1



表採-4

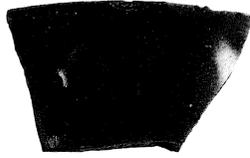


SD22-25

青磁碗 (底部)



SS01-1



SS13-1



グリッド-1



SD20-6



SD04-8



SE07-1

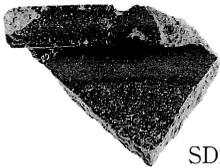


SE04-1



SS12-1

青磁椀



SD22-20



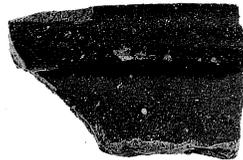
SD12-6



SK85



SS05-1



SE06-1



SD04-12



表採-12

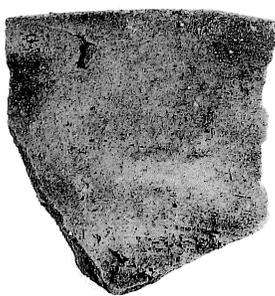


SE06-2

常滑甕



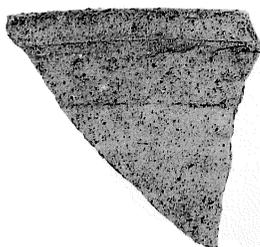
SD50-5



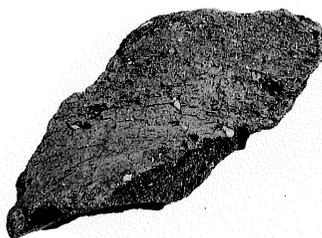
SS12-3



グリッド-4



グリッド-5



SD50-2



SS08-4

常滑片口鉢



グリッド-6



SK92



SE7-8



SD50-3

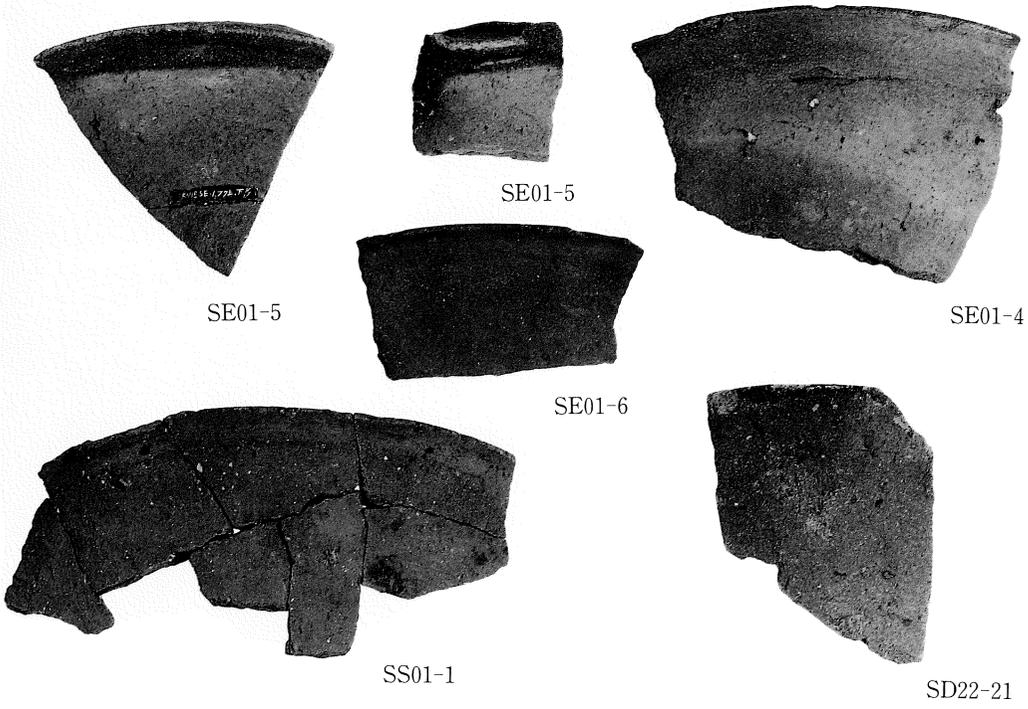


SD22-16

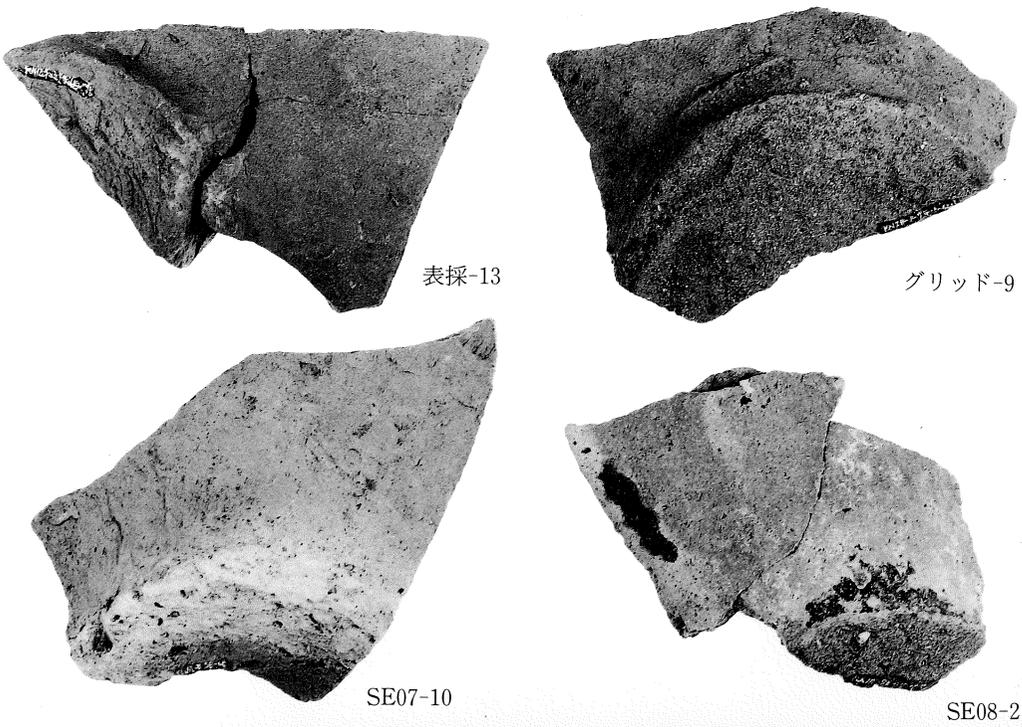


SD30-3

常滑片口鉢



常滑片口鉢



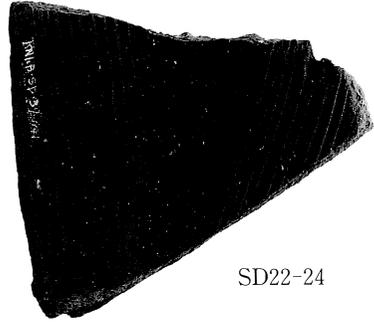
常滑片口鉢



グリッド-11



SE06-7



SD22-24



SD22-28



グリッド-13



SD09-2

瀬戸四耳壺、鉢・備前播鉢・志野（内面）



グリッド-11



SE06-7



SD22-24



SD22-28

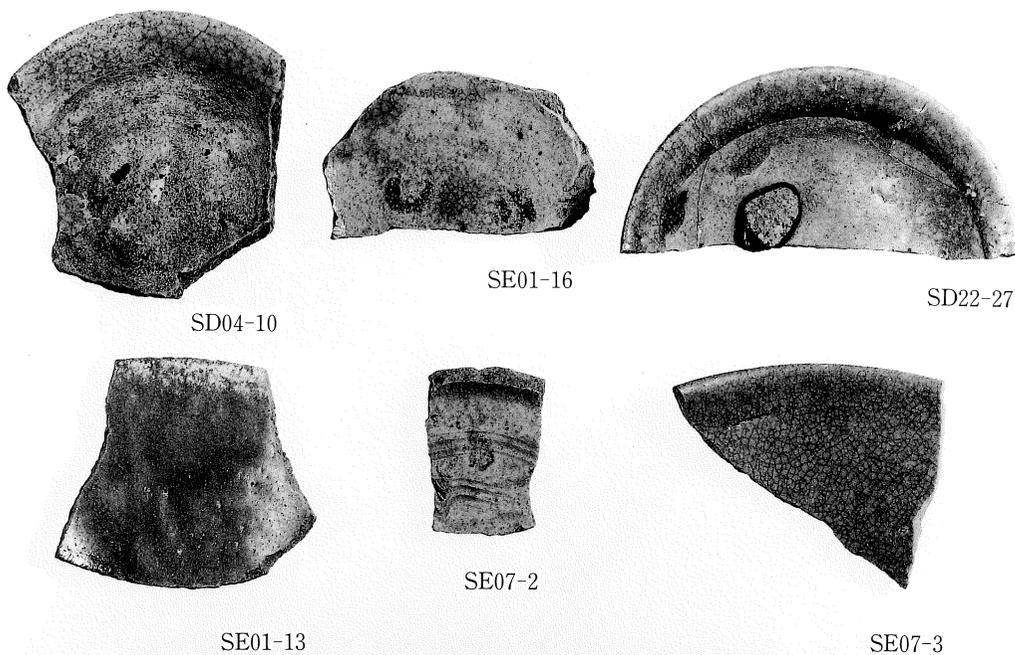


グリッド-13

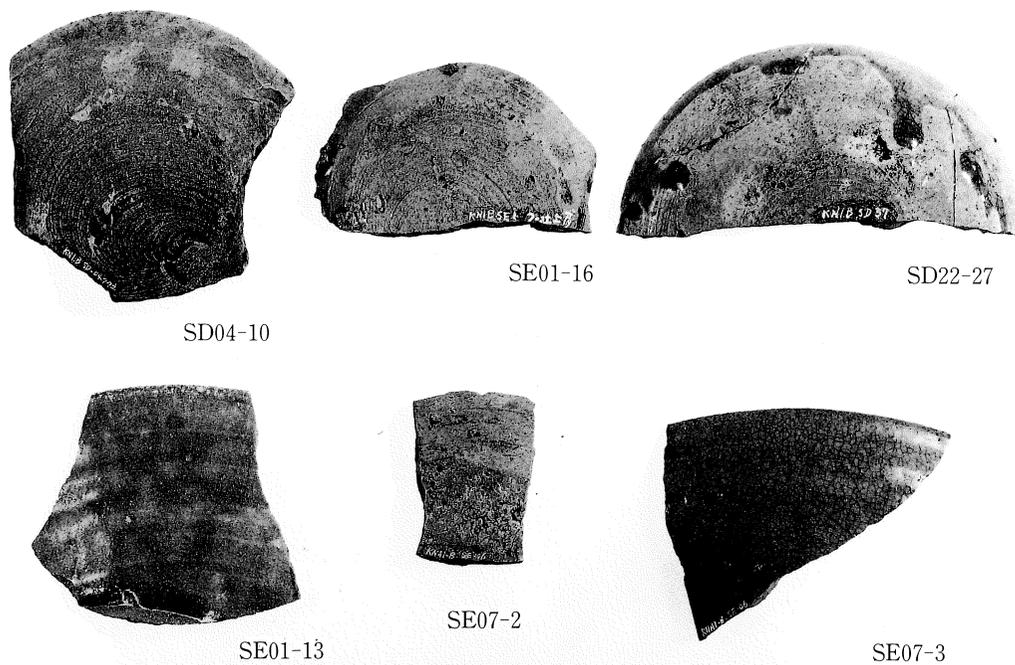


SD09-2

瀬戸四耳壺、鉢・備前播鉢・志野（外面）



瀬戸皿、鉢、盤 (内面)



瀬戸皿、鉢、盤 (外面)



SS13-3



SD17-5



SD12-14



SD51-9



SS08-7



SD12-13

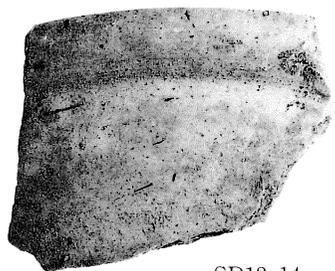
瀬戸碗 (内面)



SS13-3



SD17-5



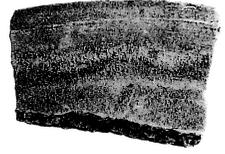
SD12-14



SD51-9



SS08-7

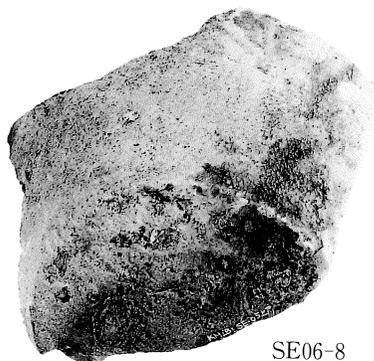


SD12-13

瀬戸碗 (外面)



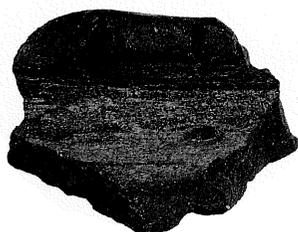
SE01-8



SE06-8



SS05-2



SE01-9



SS13-6

渥美・瀬戸甕



SS11-1



SD04-9

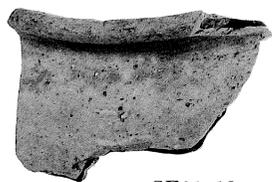


SE01-18



SE01-20

在地土師質皿



SE01-12



SS07-5



SK32



SD22-50



SD22-48

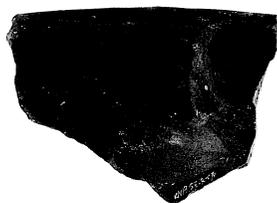


SK32

在地甕



SE03-18



SE03-19



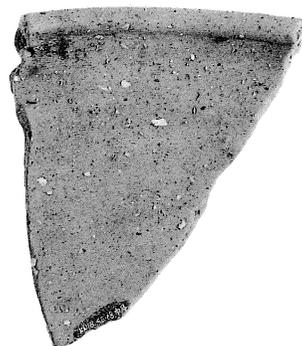
SD22-48



SD12-11



SD22-45



SE03-17

在地内耳鍋



SE06-4



SE06-6

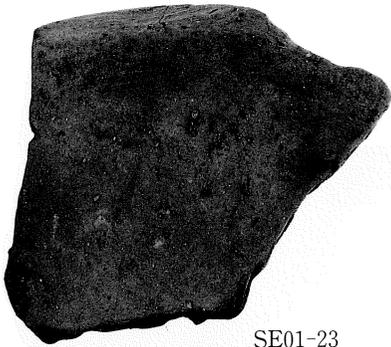


SE03-28



SE03-29

在地片口鉢



SE01-23



SS07-2

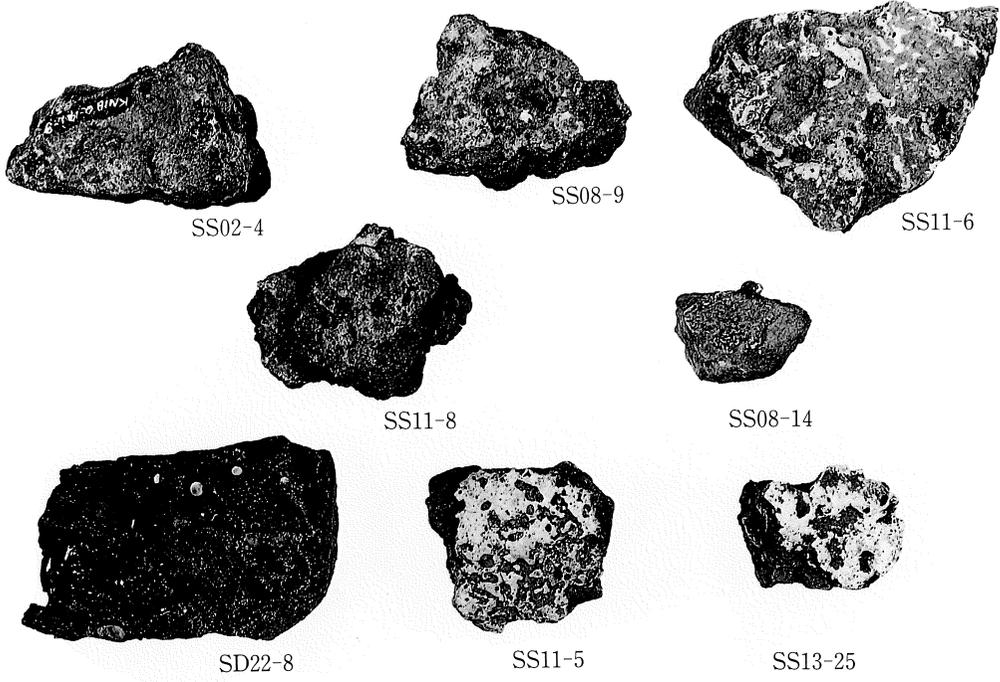


SK92

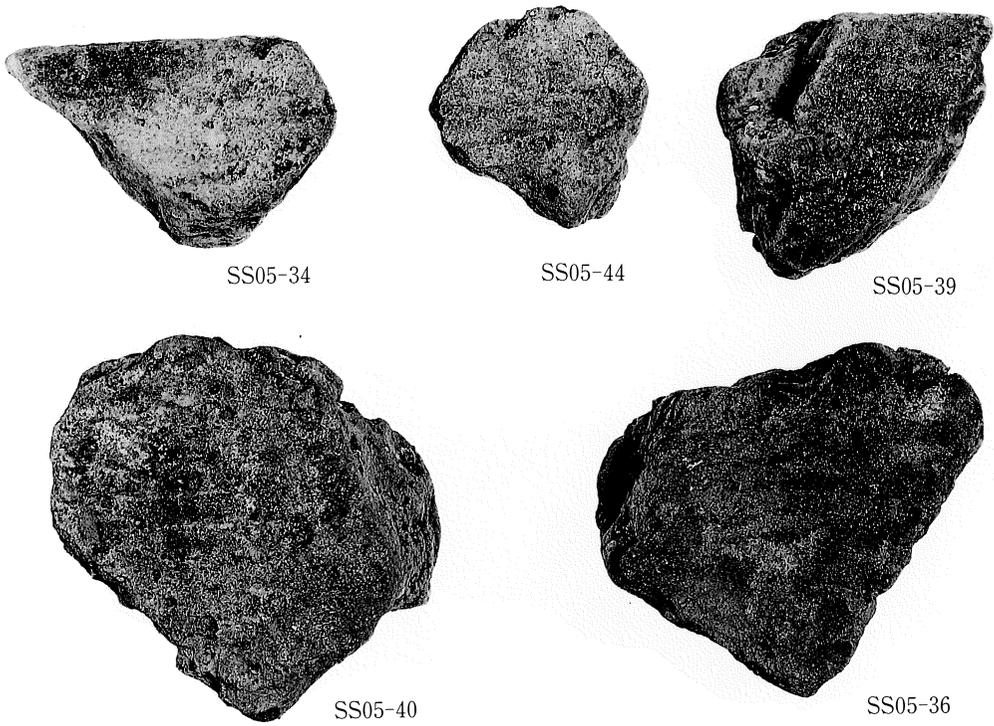


SE07-4

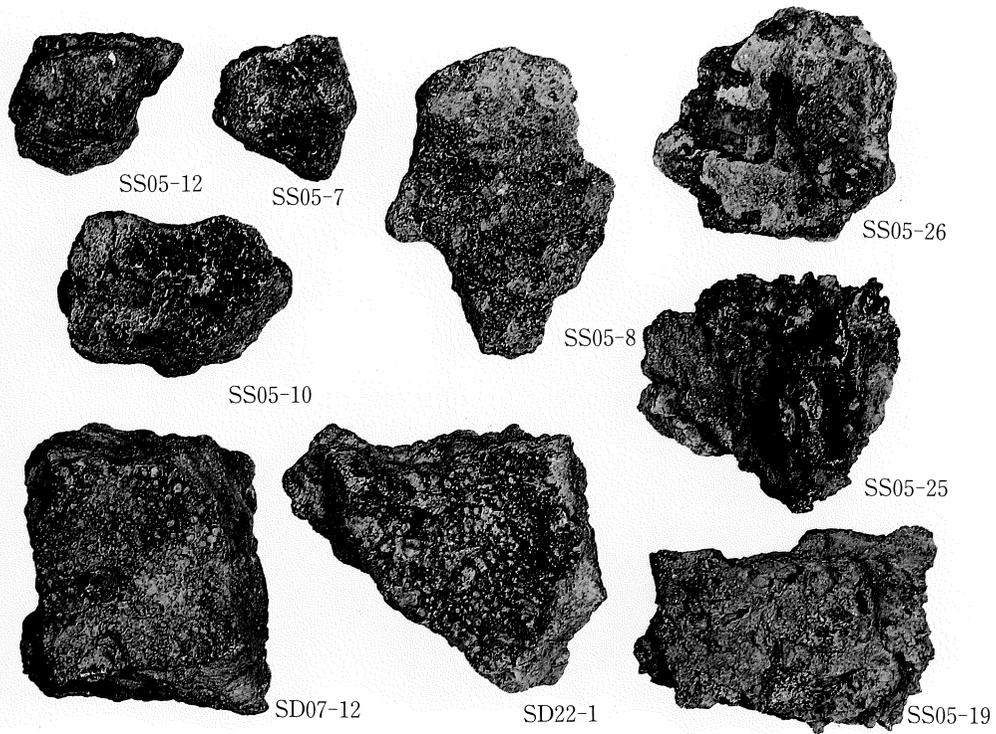
在地片口鉢



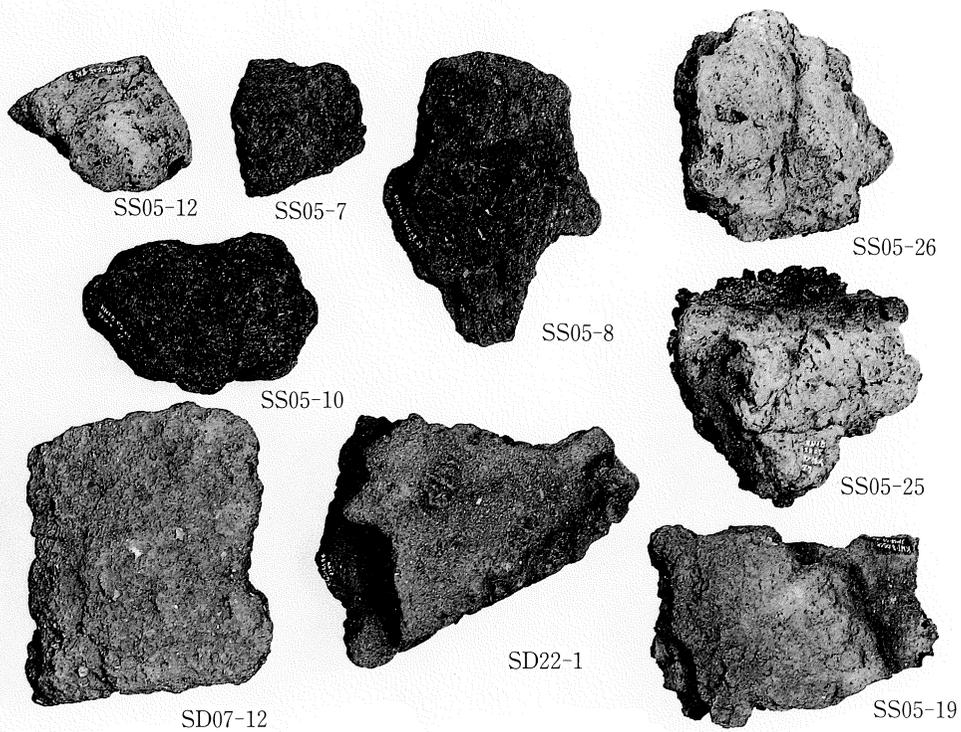
炉壁 (内面: 铜)



炉壁 (内面)



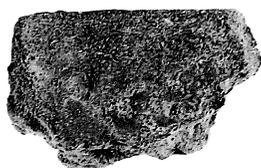
炉壁 (内面)



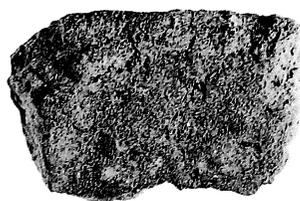
炉壁 (外面)



SD30-8



SD22-5



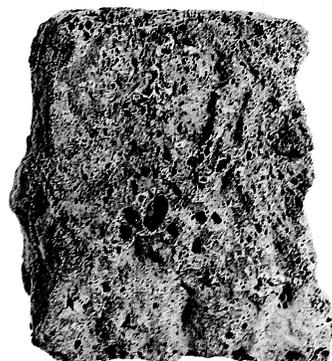
SD22-6



SS06-4

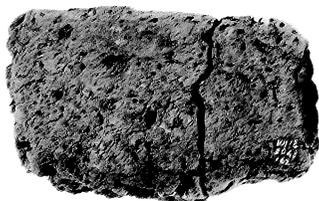


SD07-10



SS02-1

炉壁 (内面)



SD30-8



SD22-5



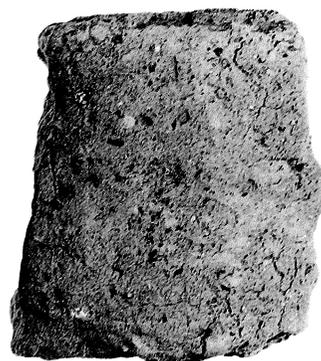
SD22-6



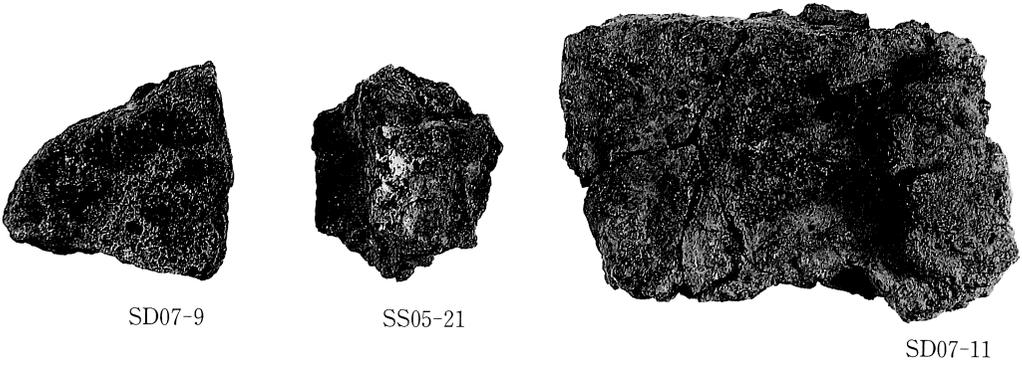
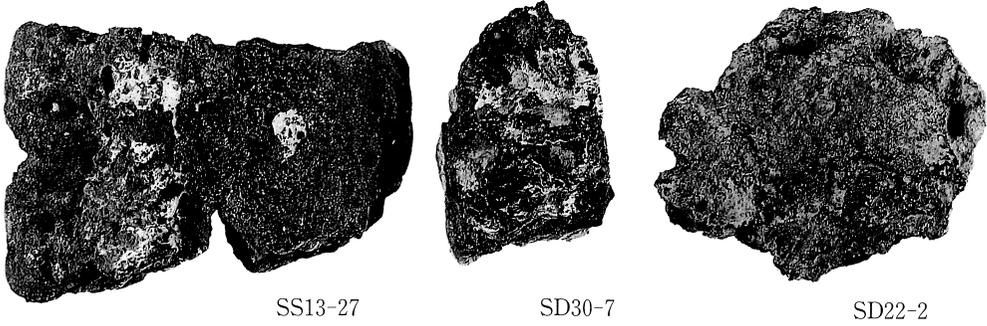
SS06-4



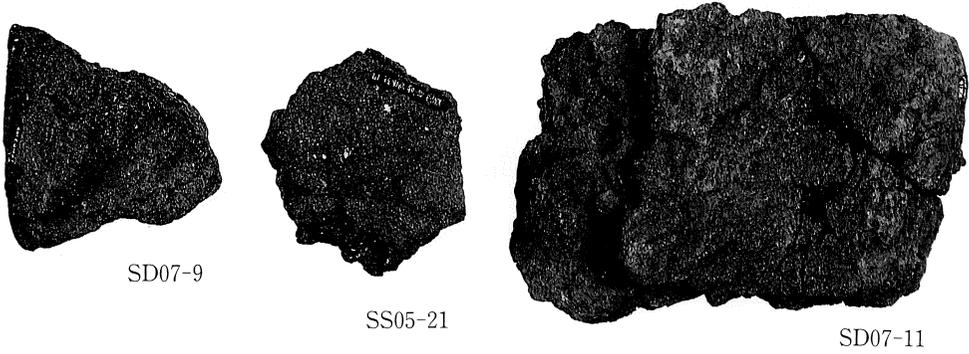
SD07-10



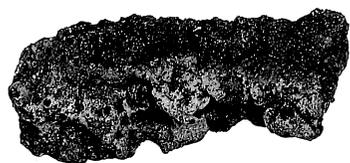
炉壁 (外面)



炉壁 (内面)



炉壁 (外面)



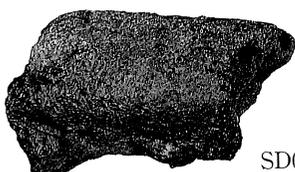
SD07-4



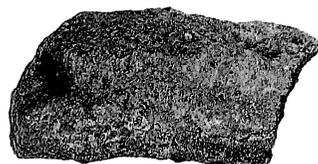
SD07-1



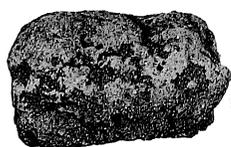
SD07-6



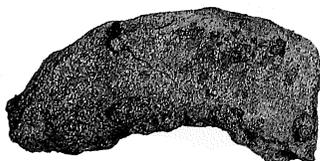
SD07-5



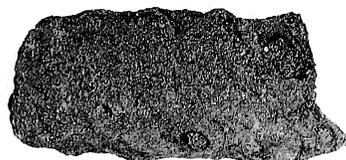
SD07-3



SD07-7

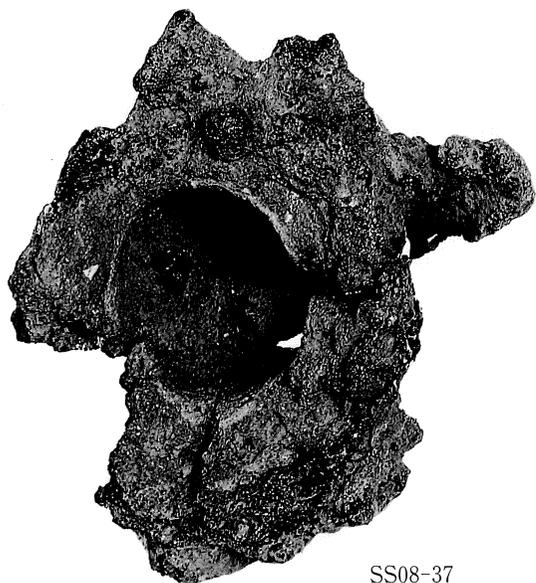


SD07-8



SD07-2

炉壁：クライ



SS08-37



SS13-4



SD22-14

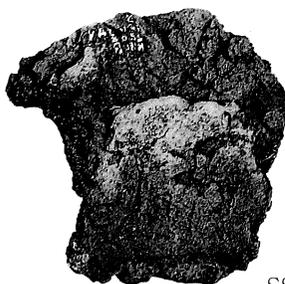
羽口・ノミ口



SS01-10



SS05-11



SS08-21



SS02-8



SS08-22



SS05-51



SS08-29

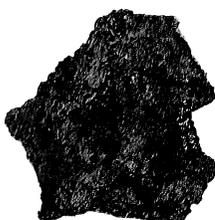


SD07-13

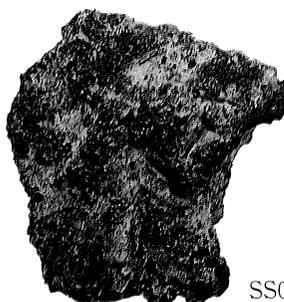
羽口 (内面)



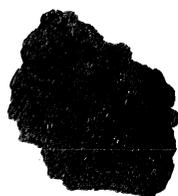
SS01-10



SS05-11



SS08-21



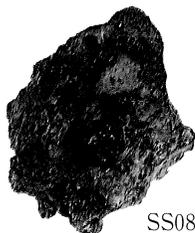
SS02-8



SS08-22



SS05-51



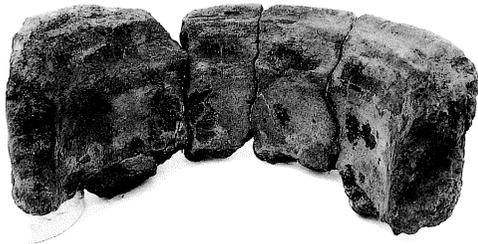
SS08-29



SD07-13

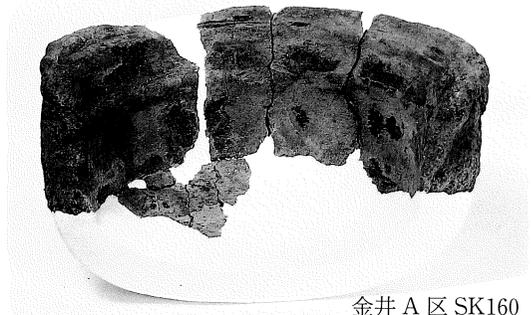
羽口 (外面)

鍋铸型



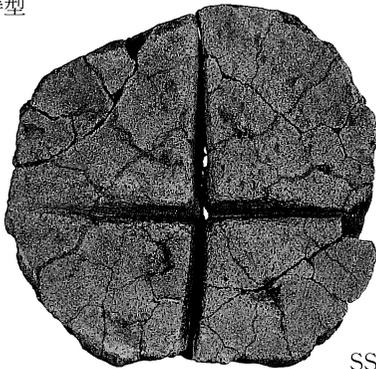
SS01-12

鍋铸型



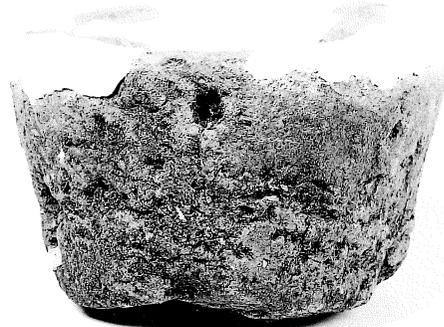
金井 A 区 SK160

不明铸型



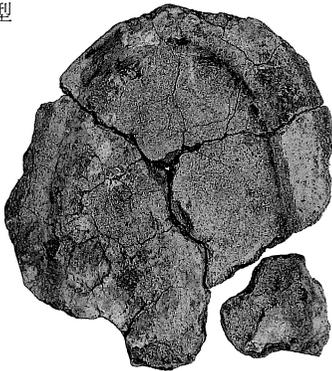
SS05-140

容器铸型



SS01-29

犁先铸型



SS01-31

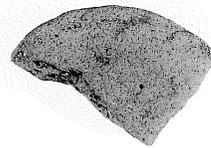
容器・鏡铸型



SS08-82



SS08-83



SS05-147

つまみ铸型



SD30-21



SS05-154



SS13-28



SS09-18



SS09-19



SD07-20

注ぎ口铸型



SS11-84



SD07-23



SD07-22



SS11-85



SD07-21

図版 98

三叉状土製品



SS07-14

三叉状土製品



グリッド-28

半球状土製品



SS11-107



SS01-39



SS01-38



SS06-21



SS11-106



SS05-160



SS05-163

半球状土製品



SS05-160



SS06-21



SS05-163

オシキ



SE03-8

スキ先



SK96

きぬた



SE11-2

曲げ物



SE03-13

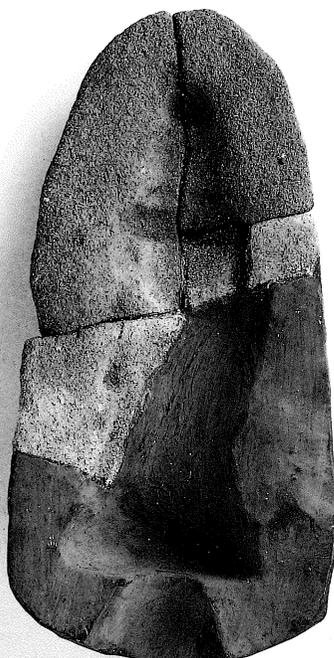
曲げ物



SE03-13



SS11-39



SS11-40

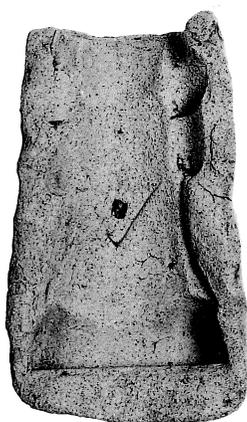
仏像鑄型



SS09-14



SD30-15



SS11-41

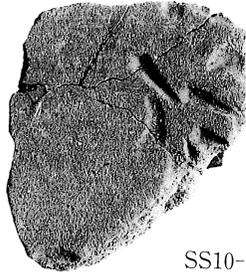


SS11-44

仏像鑄型



SS10-7



SS10-8



SS10-9

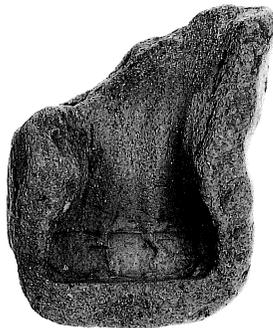


SS10-10

梵鐘鑄型 (陽鑄文字)



SS10-110



SD22-55

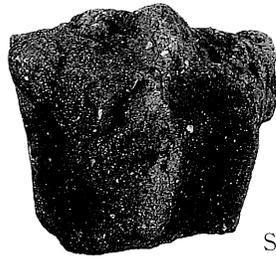


SD22-54

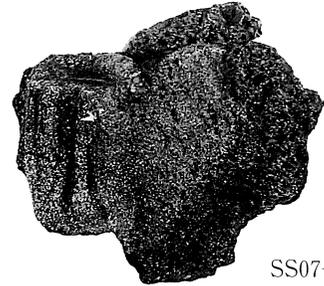
獸脚鑄型



SS07-16



SS07-10



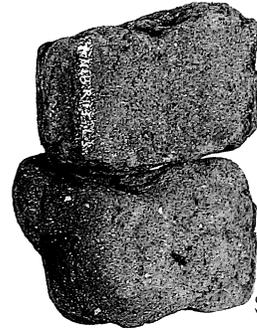
SS07-8



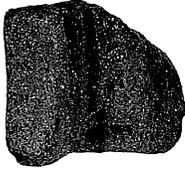
SS07-15



SS07-13



SS07-12



SS07-14

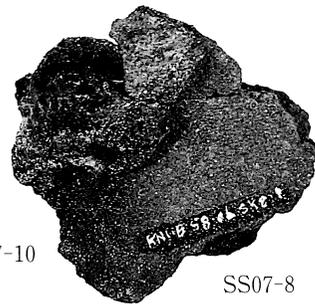
獣脚鑄型 (内面)



SS07-16



SS07-10



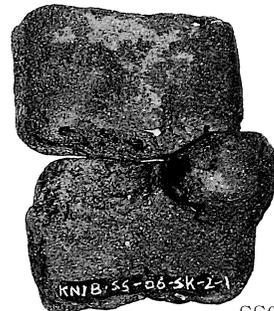
SS07-8



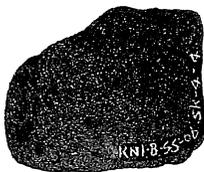
SS07-15



SS07-13

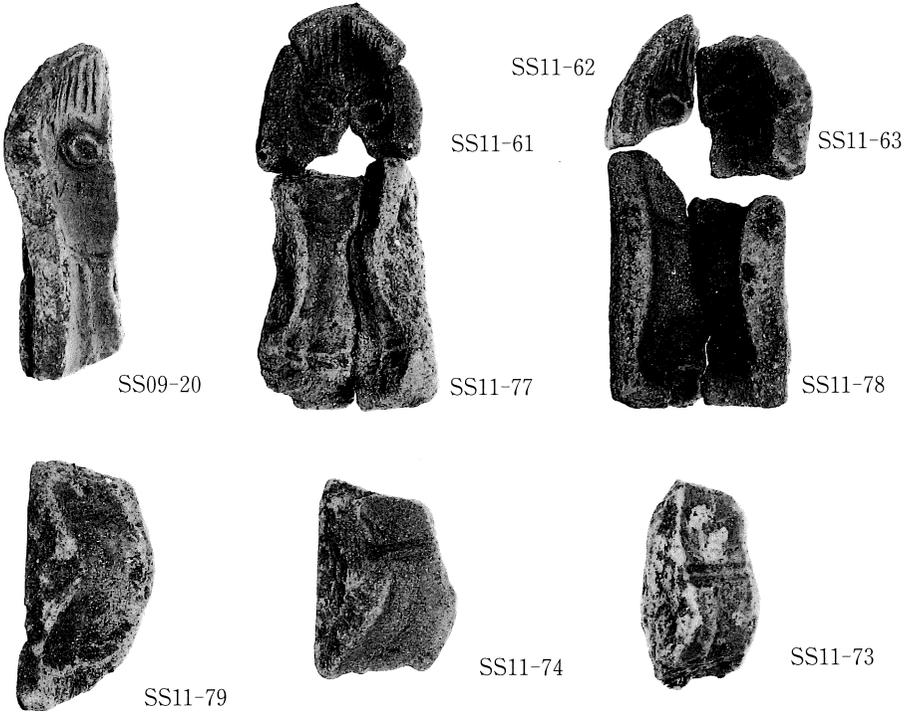


SS07-12

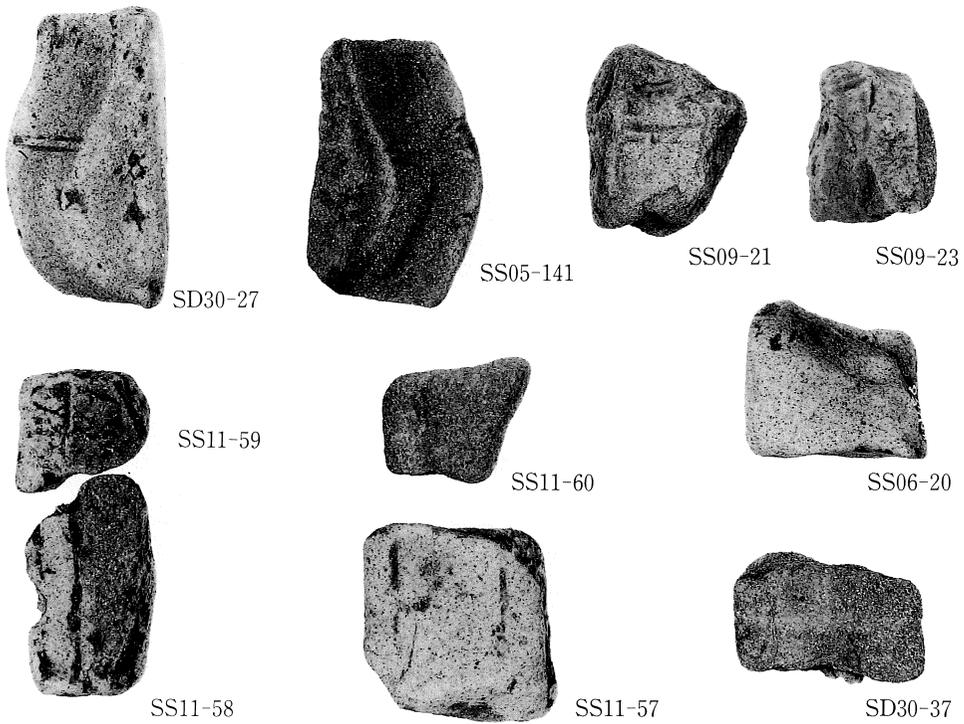


SS07-14

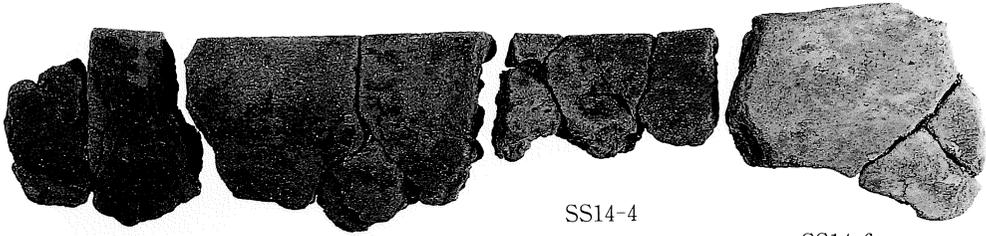
獣脚鑄型 (外面)



獸脚鑄型



獸脚鑄型

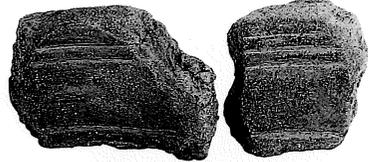


SS14-4

SS14-6



SS14-5



SS14-23

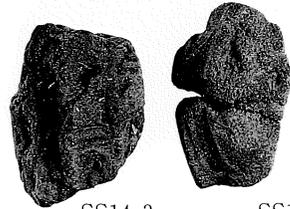
SS14-20



SS14-22

SS14-11

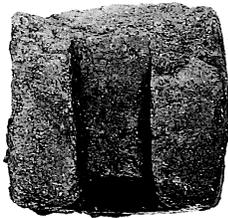
SS14-12



SS14-3

SS14-2

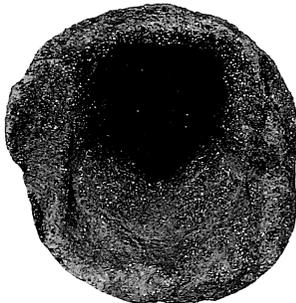
容器・獸脚鑄型



SS11-43



SS05-42

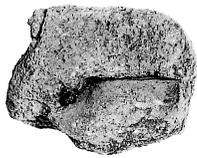


SS05-17



SD30-25

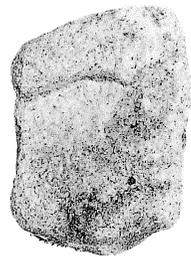
猫足鑄型



SS05-149



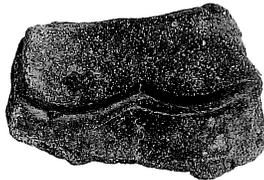
SS05-151



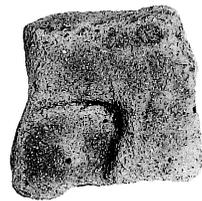
SS05-148



SS08-90



SS08-89



SD30-18

飾り金具鋳型



SS11-87



SS11-91



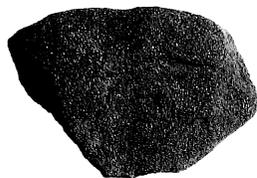
SS11-92



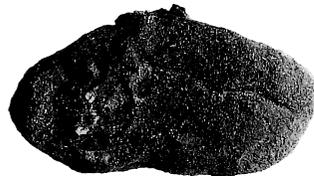
SS11-93



SS11-90



SS11-89



SS11-88



SS11-86



SS11-99



SS11-100

飾り金具鋳型



SS08-139



SS08-138



SS08-140



SS08-141



SS08-142



SS02-14



SS05-167



SS05-165



SS05-166



SD30-50



SS12-15



SS12-16



SD22-76



SD22-74

三叉状土製品



SD07-31



SD07-44



SD07-33



SD07-38



SD07-40



SD07-30



SD07-32



SD07-35



SD07-39



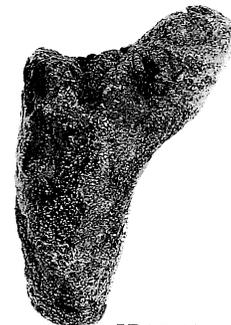
SD07-36



SD07-43

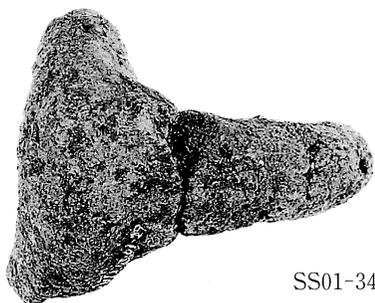


SD07-37

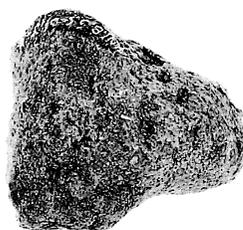


SD07-41

三叉状土製品



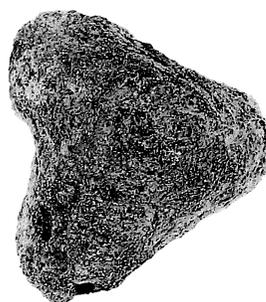
SS01-34



SS01-37



SD30-47



SS08-137

三叉状土製品（上から）



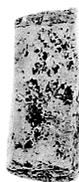
グリッド-19



SD01-4



SD22-52



SD22-51



グリッド-18



SD22-53



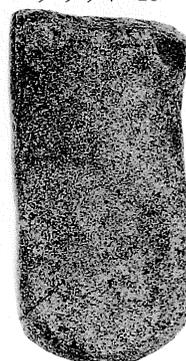
SS13-13



SS01-6

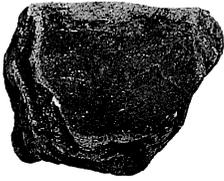


2号粘土-4



SD43-75

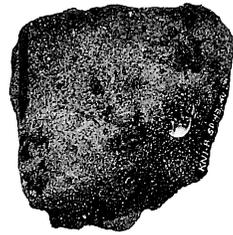
砥石



SS08-132



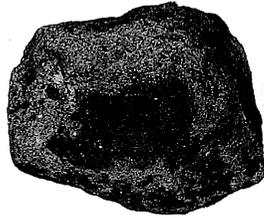
SS08-132



SD30-10



SS08-134

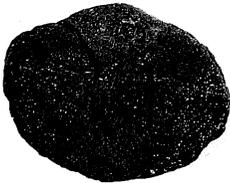


SS08-133

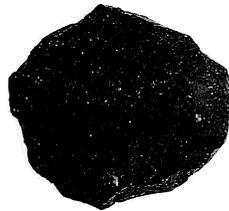


SD30-11

トリベ・鍛冶羽口



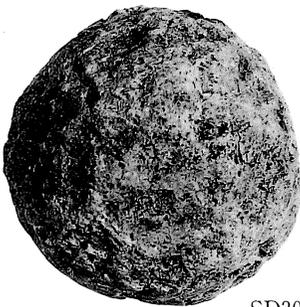
SS08-136



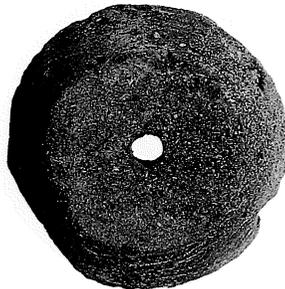
SS05-162



SS05-161



SD30-51



SD30-53



SS05-164

道具・紡錘車・土錘



SS08-96



SS09-10



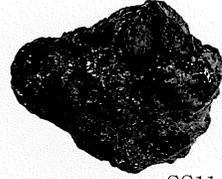
SD07-17



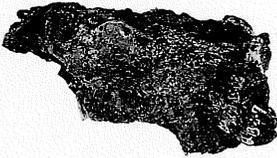
SS08-122



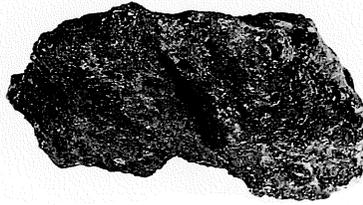
SS13-19



SS11-119



SS08-121



SS05-178

銅塊・銅滓



SS05-180



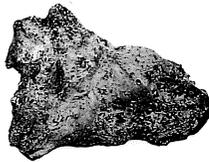
SS05-181



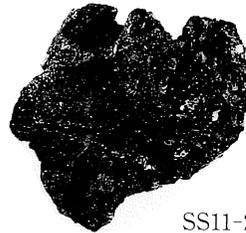
SD07-16



SS11-122



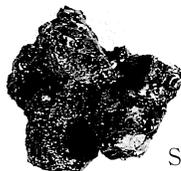
SS11-121



SS11-20



SS12-20

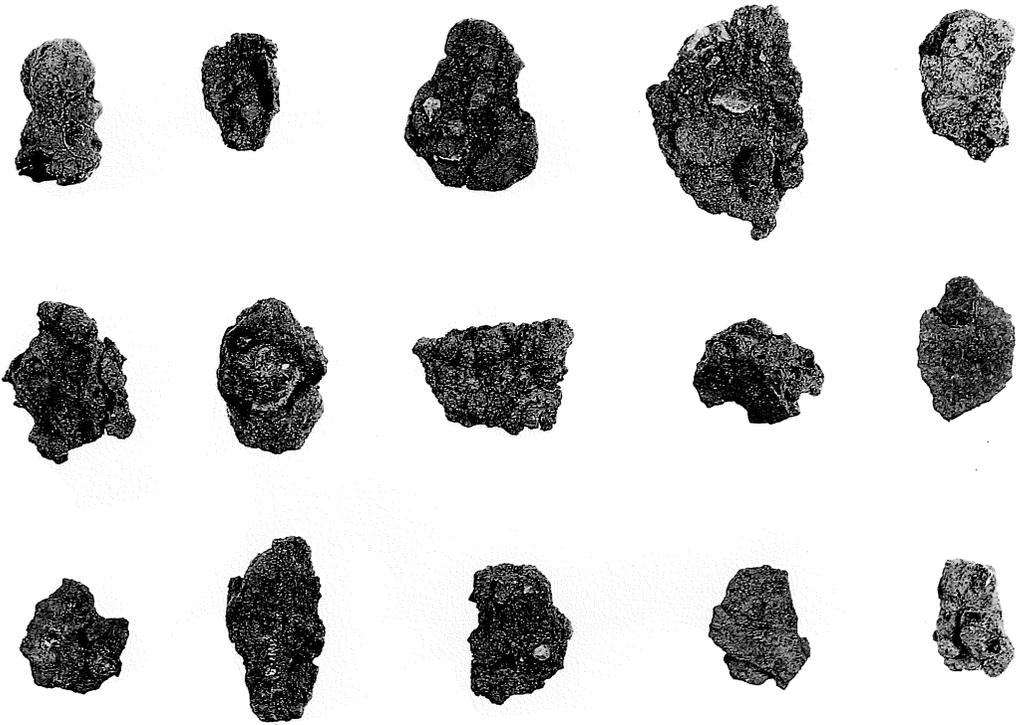


SS13-21

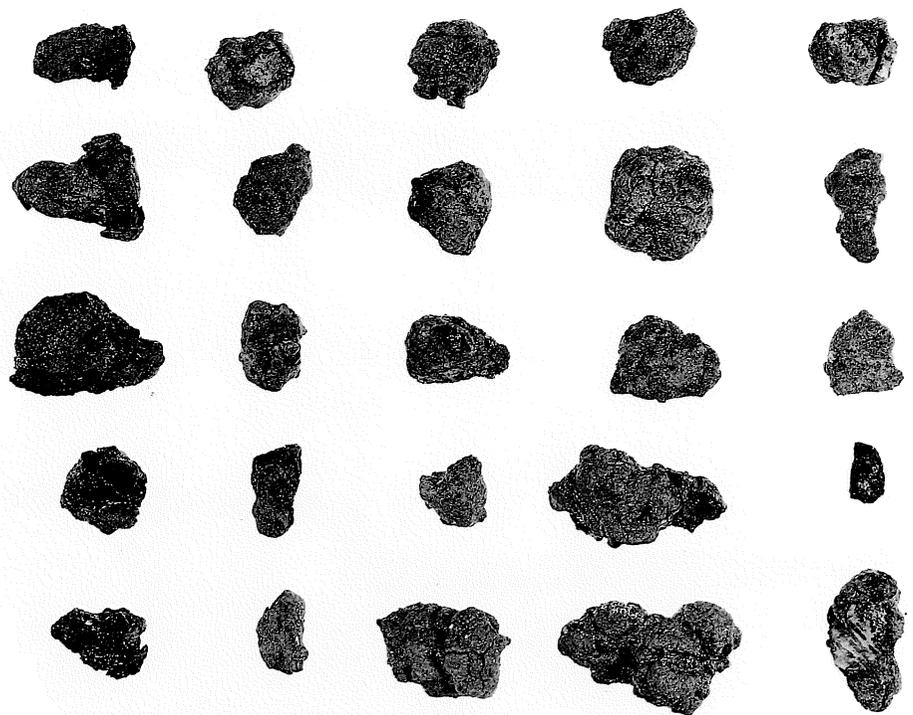


SD22-9

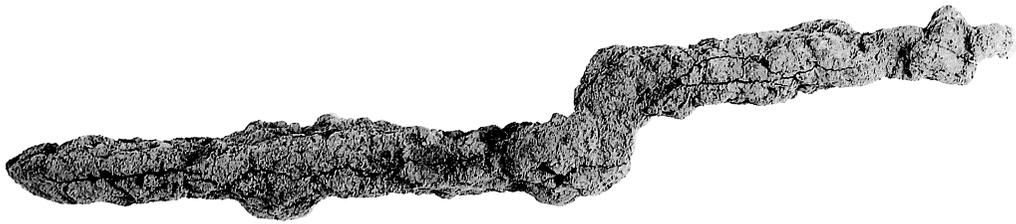
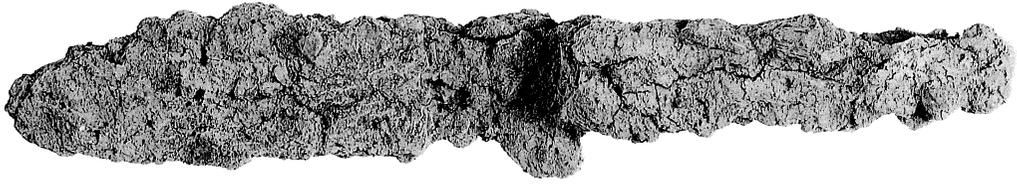
銅滓



鉄塊系遺物



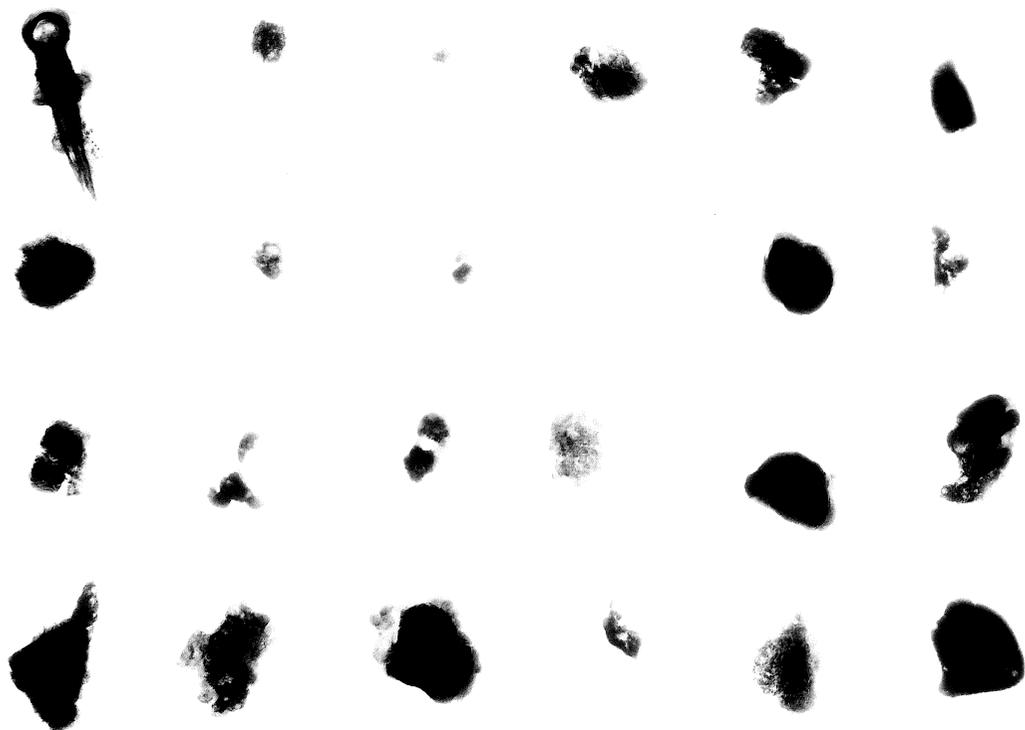
鉄塊系遺物



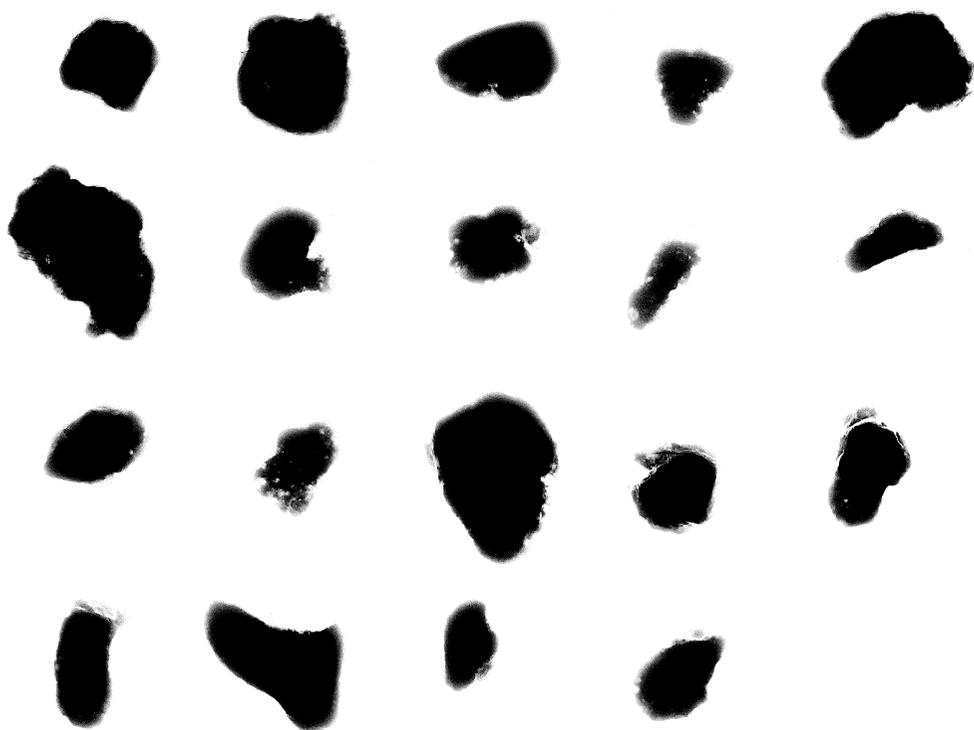
ハタまわし



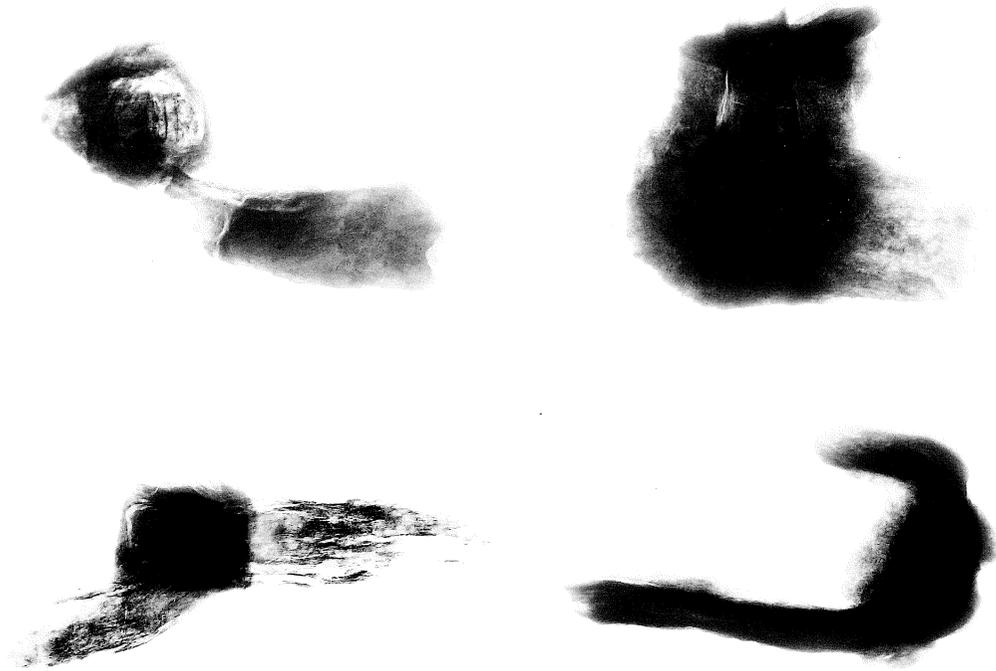
ハタまわし (X線写真)



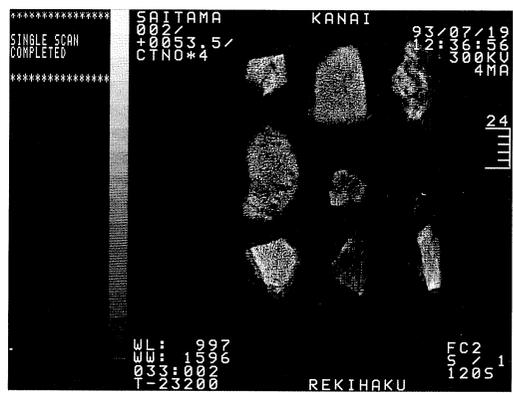
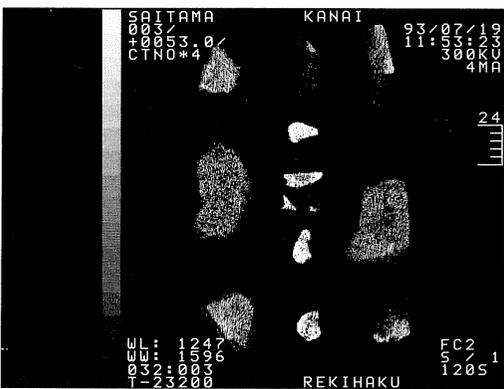
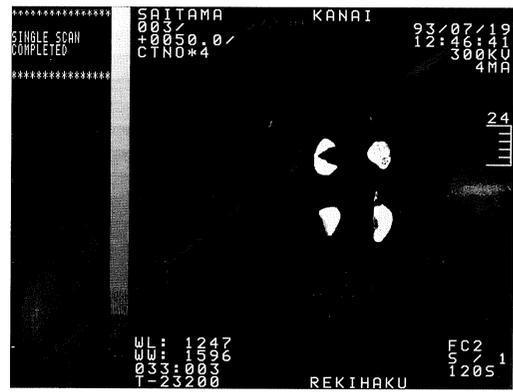
鉄塊系遺物 (X線写真)



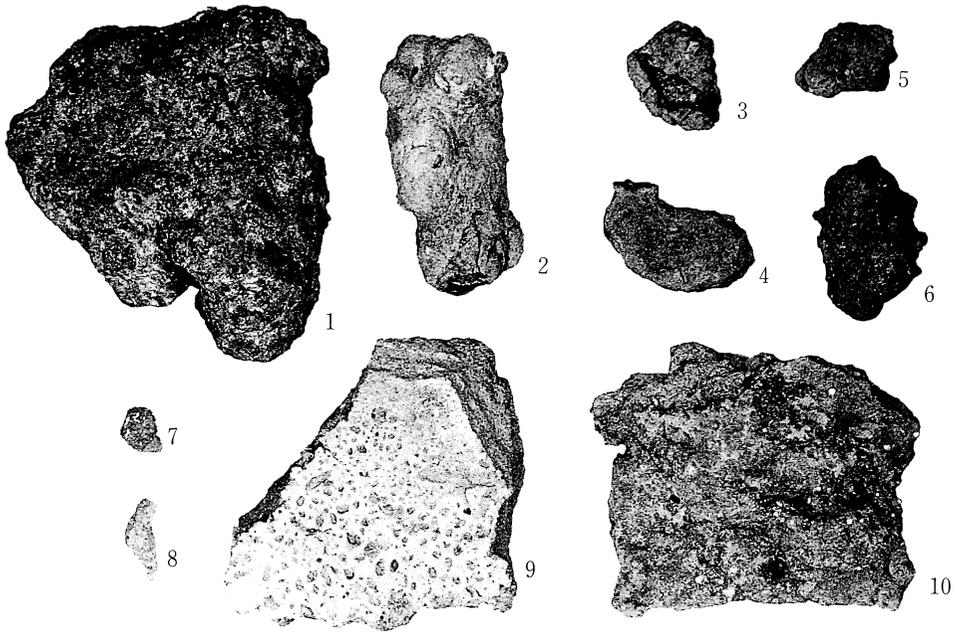
鉄塊系遺物 (X線写真)



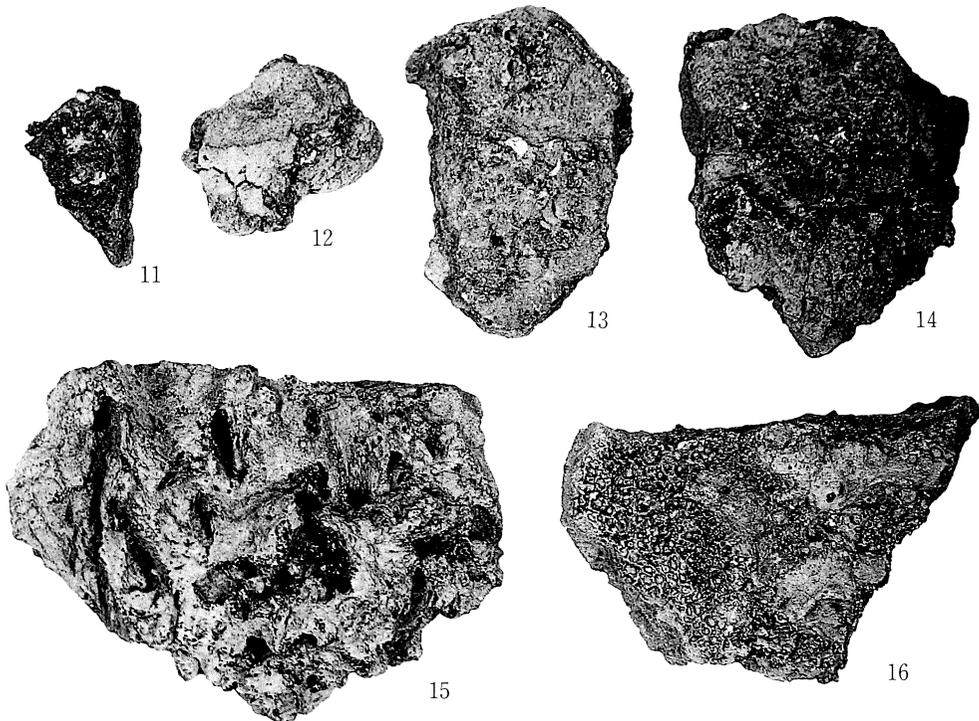
鉄製箍 (X線写真)



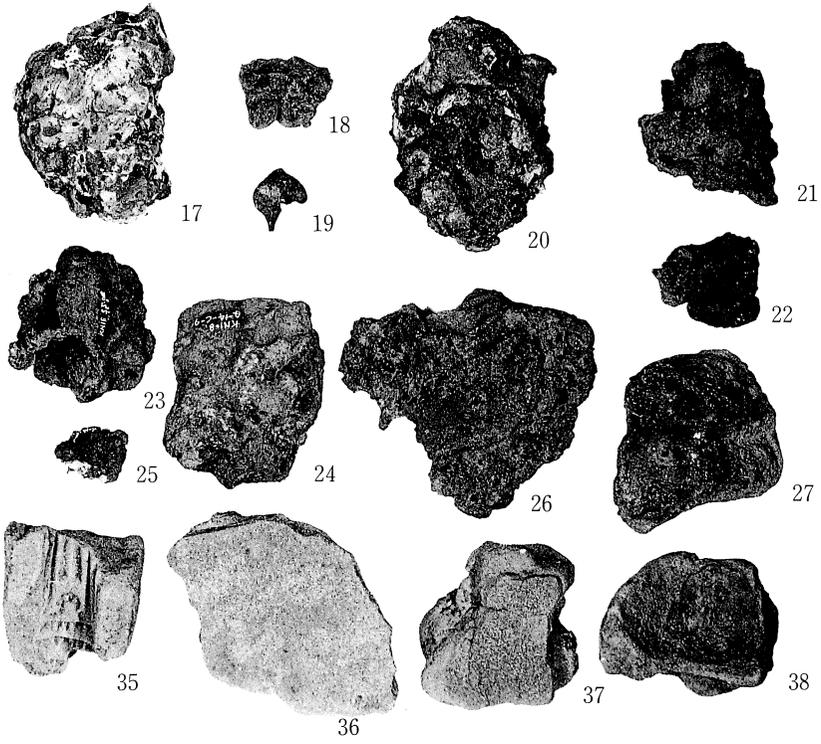
鉄塊系遺物 (X線CT写真)



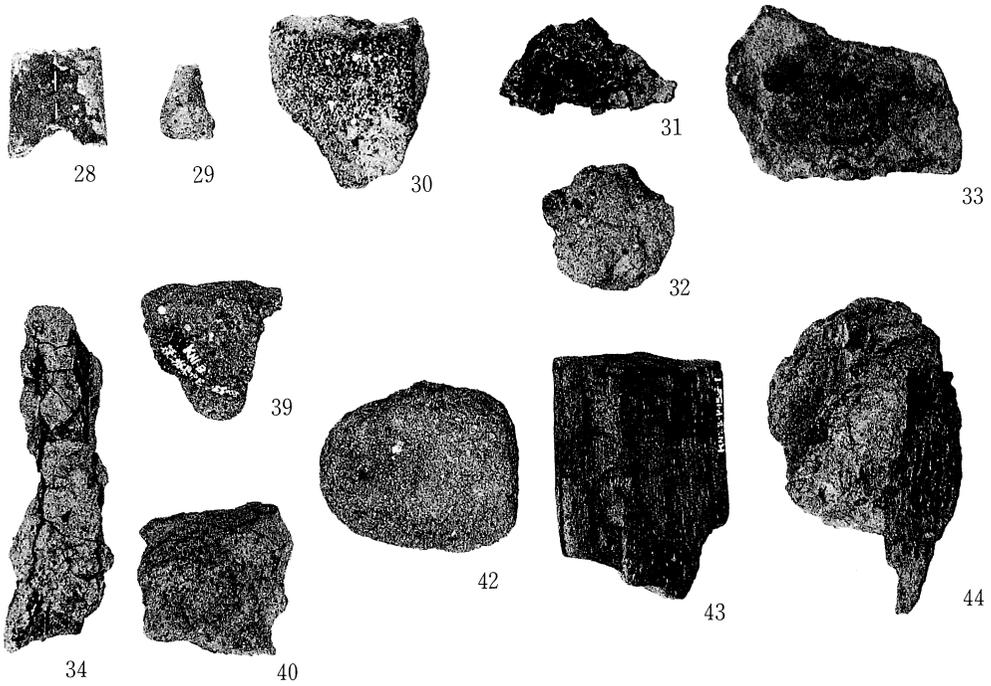
鑄造関連分析資料 1



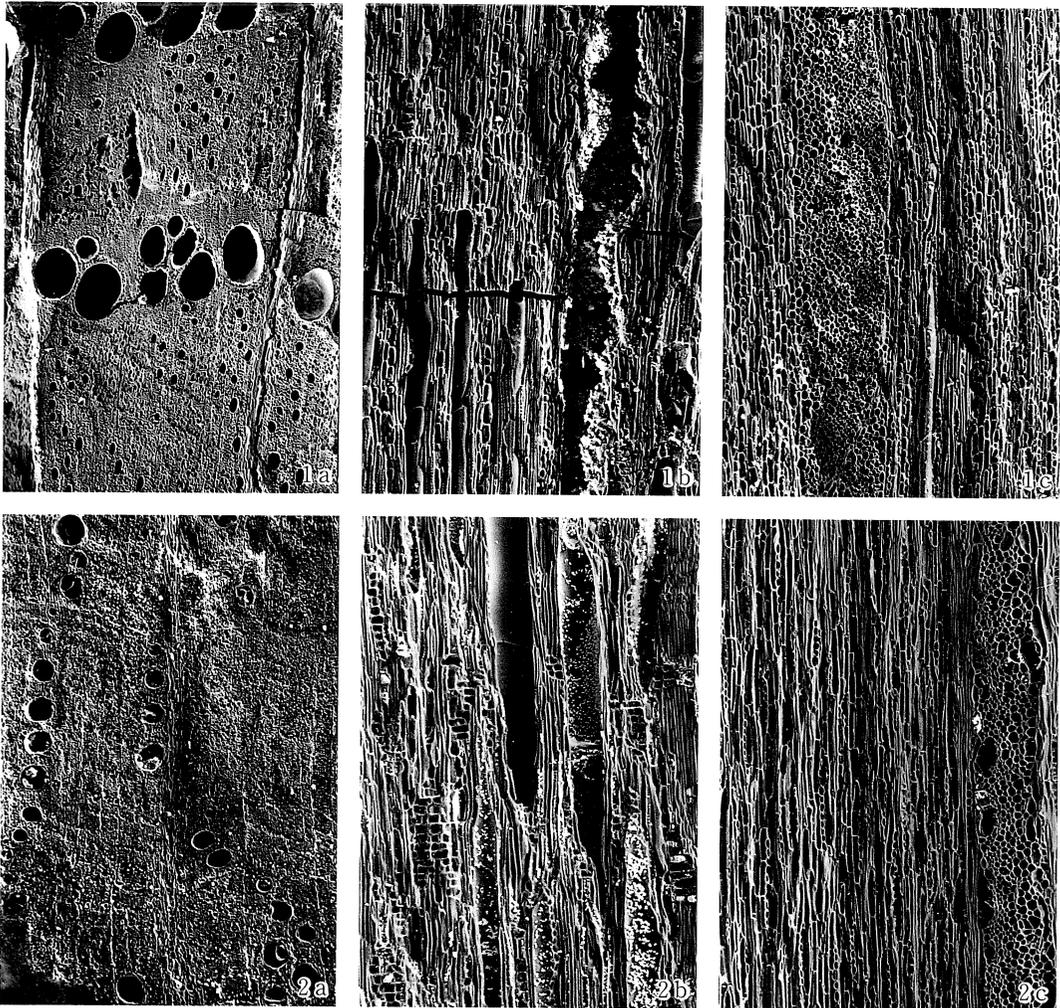
鑄造関連分析資料 2



鑄造関連分析資料 3



鑄造関連分析資料 4



1. コナラ属コナラ亜属クヌギ節の一種 (No. 5)

2. コナラ属アカガシ亜属の一種 (No. 4)

a : 木口, b : 柁目, c : 板目

200 $\mu$ m : a

200 $\mu$ m : b, c

自然化学分析 (炭化材) (82%)

図版 116

(1)KNB-1

鉄塊系遺物：SE-11

①×10 マクロ組織

②×400 硫化物系介在物

③×50 過熱組織

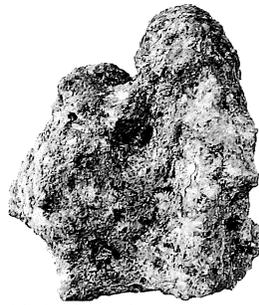
④×400 白鑄鉄（局部）

⑤×200 硬度549Hv

⑥×200 硬度362Hv

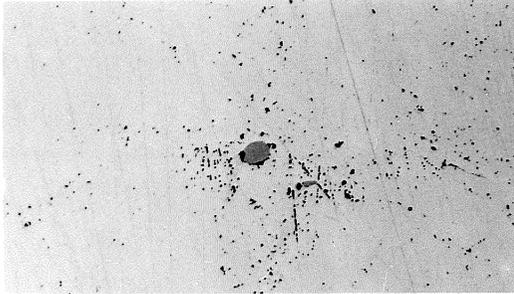
⑦×200 硬度294Hv

荷重200g

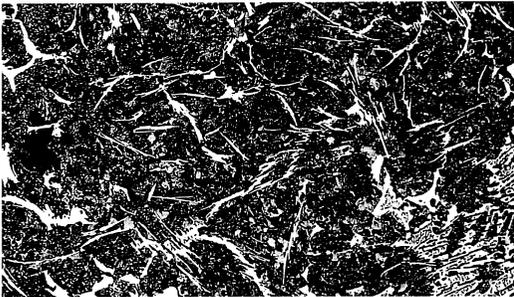


②

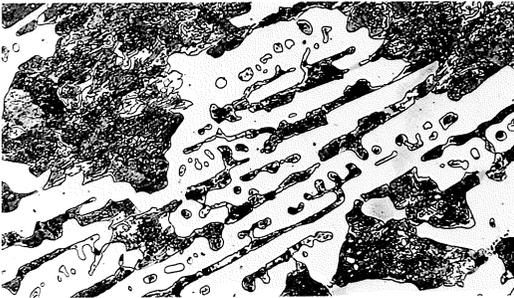
外觀写真 1 / 2.9



③



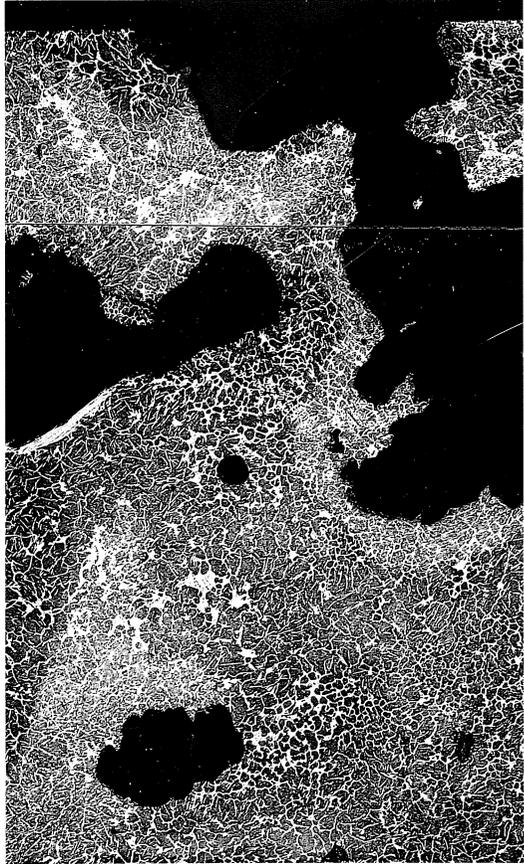
④



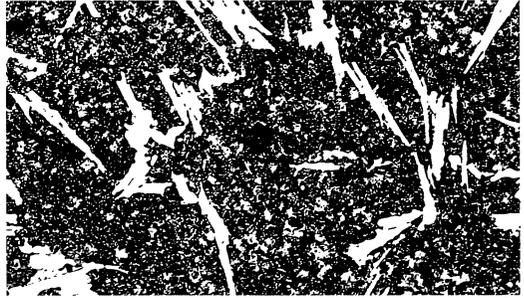
⑥



①



⑤



⑦

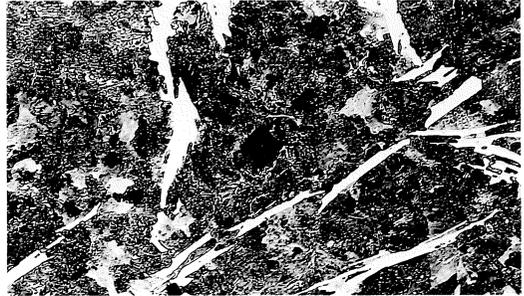


photo. 1 鉄塊系遺物の顕微鏡組織 (82%)

(2)KNB-2

金槌：SS-10 SSK-1

①×10 マクロ組織

白色部：焼入マルテンサイト

②×400 介在物(Ti系)

③④×400 トルースタイト

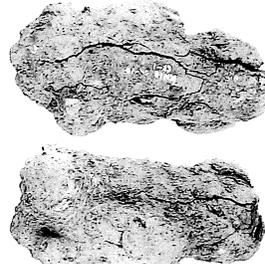
⑤×200 426Hvトルースタイト

⑥×200 351Hvトルースタイト

⑦×200 284Hv 微細セメントイト

⑧×200 172Hv パーライト

②



外観写真 1 / 2.5

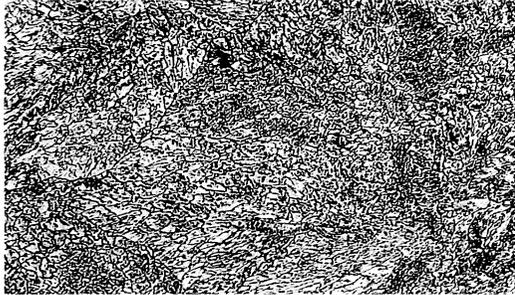
①



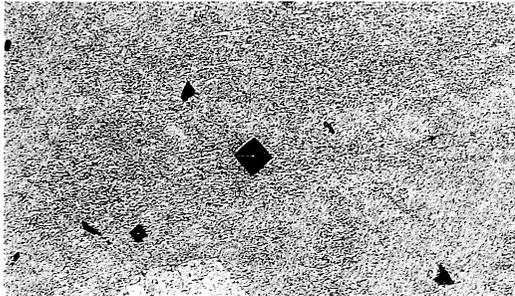
④ ⑧ ⑦ ⑥ ⑤ 硬度測定箇所



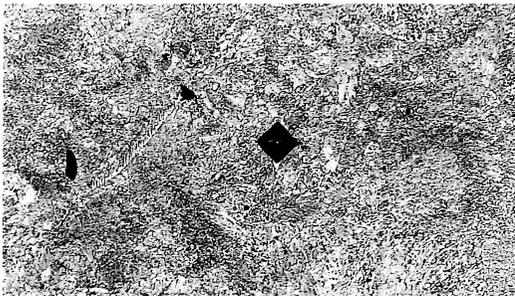
③



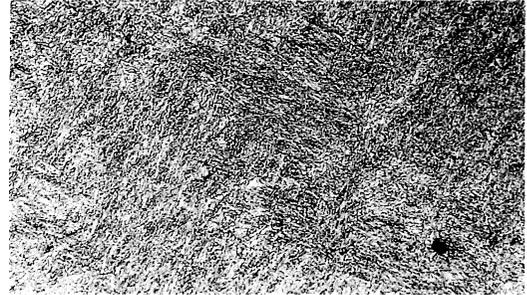
⑤



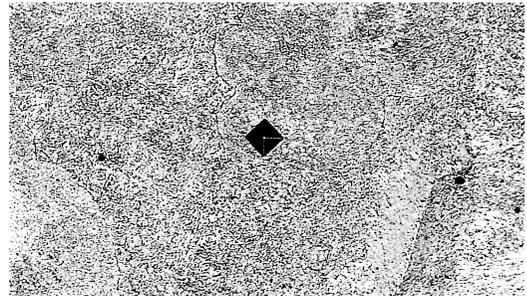
⑦



④



⑥



⑧

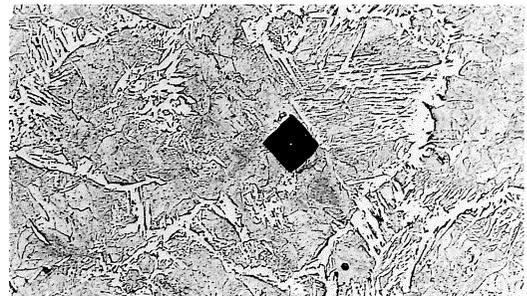


photo. 2 金槌の顕微鏡組織 (82%)

図版 118

(3)KNB-3

鉄塊系遺物：SS11

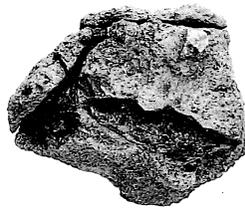
①×400 硫化物系介在物

②×200 841Hv セメント

③×200 802Hv レデブライ

④×200 386Hv パーライ

⑤×50 亜共晶組成白鑄鉄

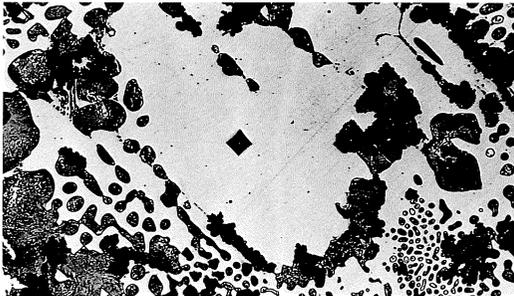


外観写真 1 / 1.1

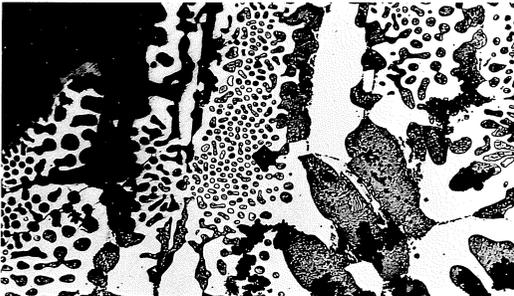
①



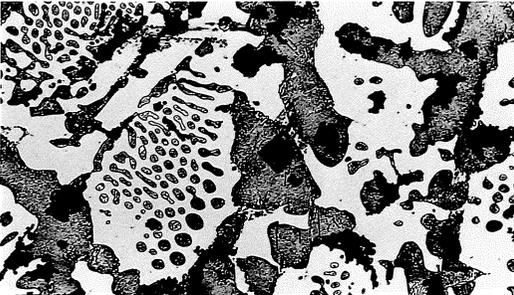
②



③



④



⑤

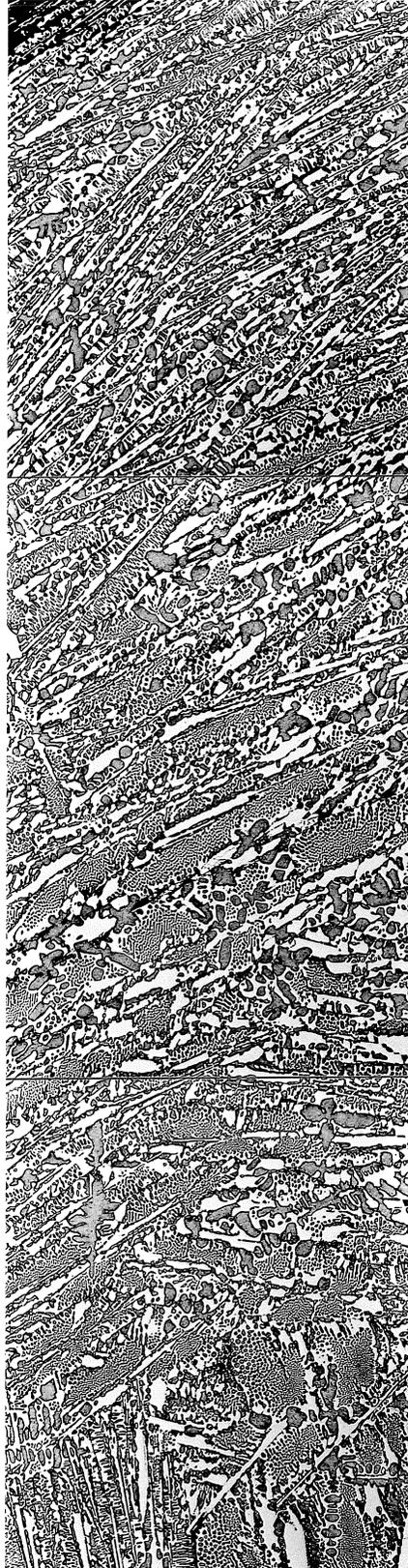


photo. 3 鉄塊系遺物の顕微鏡組織 (82%)

(4)KNB-4

鉄塊系遺物：L-12-g-5

①×400 硫化物系介在物

②×200 672Hv レデプライト

③×200 286Hv パーライト

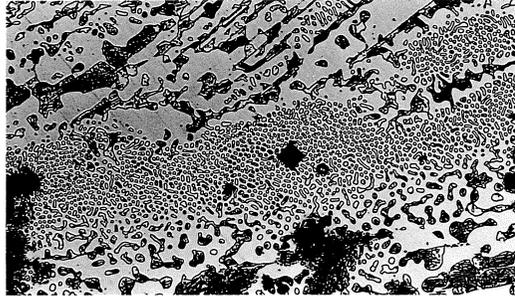


①



②

外観写真 1/1.4



③



(5)KNB-6

鉄塊系遺物：SS-14

④×10 マクロ組織

ピクラル etch

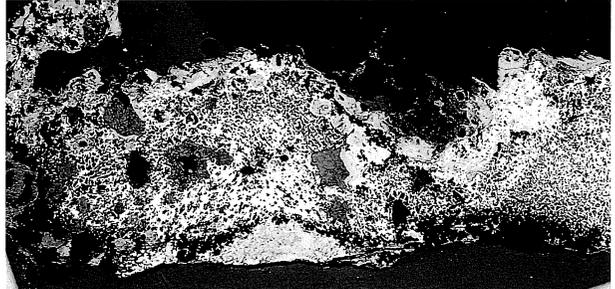
⑤×400 硫化物系介在物

⑥×200 硬度圧痕

490Hv 荷重200g

⑦×50 濃黒：自然腐食

亜共晶組成白鑄鉄



⑤

外観写真 1/1.4



⑥



⑦

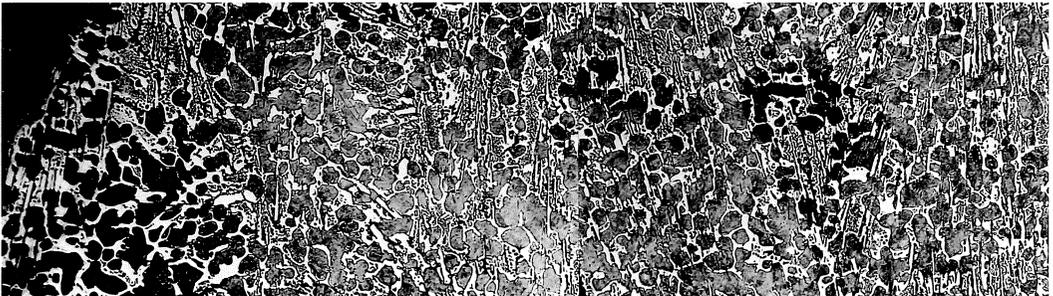


photo. 4 鉄塊系遺物の顕微鏡組織 (82%)

図版 120

(6)KNB-5

鉄塊系遺物：SS-05

①×400 研磨のまま片状黒鉛と硫化物介在物

②×400 ピクラルetch片状黒鉛とパーライト

③×200 148Hv 片状黒鉛

④×200 733Hv レデブライト

⑤×50 過共晶組成白鑄鉄 (片状黒鉛点在)



外観写真1 / 1.1

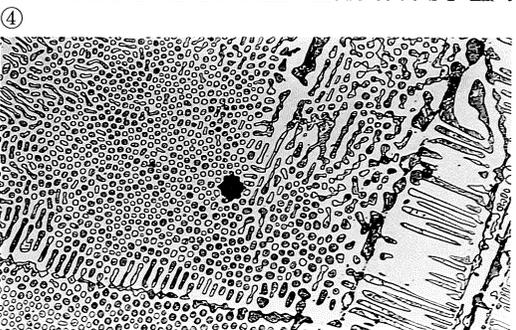
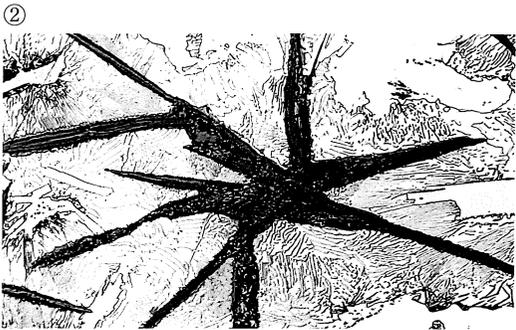


photo. 5 鉄塊系遺物の顕微鏡組織 (82%)

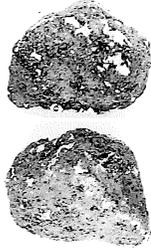
(7)KNB-7

銅塊：SS-10

①×400 研磨のまま

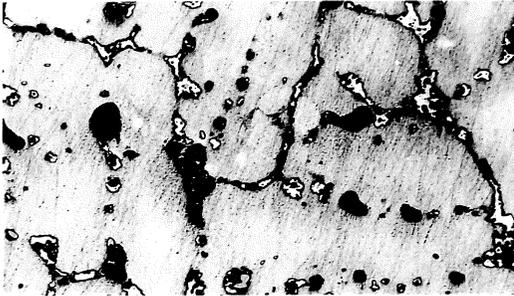
②×400 酢酸メチル 3  
 腐食 硝酸 3  
           水 5

③×200 硬度圧痕  
 68.7Hv 荷重200g



外観写真  
1.2倍

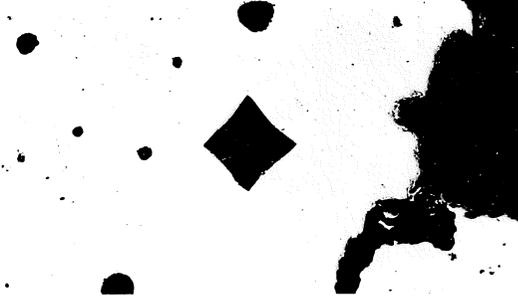
②



①



③



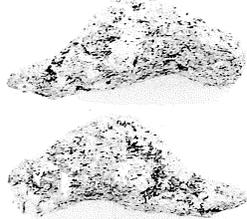
(8)KNB-8

銅塊：SD-30

④×400 研磨のまま

⑤×400 酢酸メチル 3  
 腐食 硝酸 3  
           水 5

⑥×200 硬度圧痕  
 77.9Hv 荷重200g



外観写真1.2倍

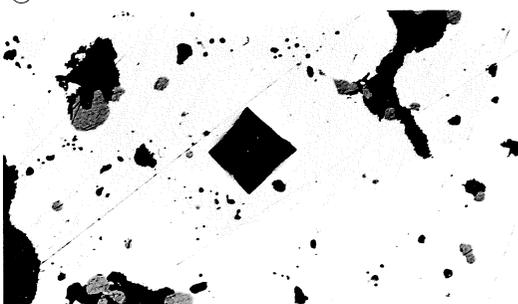
⑤



④



⑥



(9)KNB-9

炉壁、銅、炉底部：SS-07

⑦×100 暗黒色ガラス  
 質スラグ

錆化銅？

(錆化鉄かもしれない)

外観写真 1 / 2.9



⑦

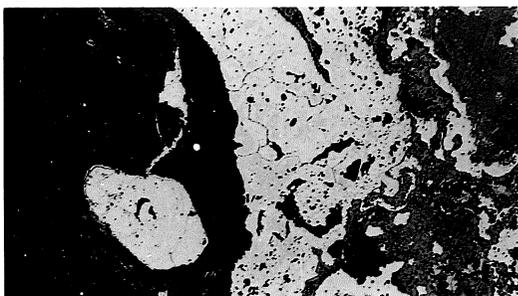


photo. 6 銅塊・炉壁銅の炉底部の顕微鏡組織 (82%)