1984 EXCAVATIONS AT RED BAY, LABRADOR

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Although excavations at the 16th century Basque whaling stations at Red Bay, southern Labrador did not benefit from the unusually fine summer experienced by the remainder of the province during July and August the results of the excavations were of such a nature as to make the endless reports of sunshine and record high temperatures from such places as St. John's and Hopedale less noisome than they otherwise might have been. I should like to thank the field crew and laboratory crews who laboured under often trying circumstances, including an outbreak of particularly virulent "stomach flu" on July 19th (since known as "Brown Thursday"), for their unflagging good humour and attention to the task at hand throughout the summer. Thanks are also due the Historic Resources Division, Department of Culture, Recreation and Youth and the Department of Regional and Economic Expansion who combined to provide finances for the 1984 season. Finally, the Canadian Conservation Institute, National Museums of Canada, once again provided personnel and equipment to assist in the removal from the field and treatment of the many friable objects recovered during the season as well as continuing conservation services throughout the winter months.

Work during the past summer was concentrated in three areas on Saddle Island, where most previous excavations have taken place and where the majority of undisturbed 16th century deposits are found, and on neighbouring Twin Island where an innovative technique for excavating small ponds which served as receptacles for refuse proved its worth and rewarded us with a number of organic and other artifacts which will be described further below.

Saddle Island

The three main areas to receive attention on Saddle Island included the cemetery (Area L) which was discovered in 1982, a large shore station (Area C) partially excavated between 1978 and 1982, and a second shore station (Area J) on which work was interrupted in 1982 because of the accidental discovery of

the nearby cemetery. The results of excavations at each of these areas are summarized briefly below.

Area L

Under the supervision of Brenda Kennedy, University of Calgary, work on the 16th century whalers' cemetery continued despite the often inclement weather which plagued excavations at this area more than any of the others. More than 25 additional burials were excavated which increased the burial count to 46 and the number of individuals to at least 123. These burials changed the picture somewhat from that reported for 1983 (c.f. Tuck 1984 for a summary of the 1983 excavations). The number of single interments discovered during 1984 was far greater than that revealed by the previous season's excavations and makes the number of single and multiple burials approximately equal. Several of these burials were marked by three or four boulders placed atop the grave, a pattern not previously observed. Also the pattern of strict adherence to the compass, with the heads of skeletons to the west, was broken in a number of cases during the burials of the individuals discovered during 1984. This sometimes resulted from natural obstacles to grave digging, such as bedrock outcrops, but in several instances there was no apparent natural reason for burials with heads orientated 180 degrees from the normal pattern. The cemetery also produced the first archaeological evidence of the presence of individuals other than adults at Red Bay during the 16th century. Two individuals of very short stature were exposed, one of which retained a second molar showing far less wear than the other teeth, suggesting an age at death in the early teens.

In contrast to the 1983 season, most of the skeletons recovered during 1984 were in an extremely poor state of preservation, hence it was decided not to attempt to remove them from the ground but make such observations as possible and re-cover the skeletons with clean sifted sand and shell. In part the poor preservation resulted from wet conditions, but more importantly from a lack of shell in the soil. The former, however, was not entirely without benefit for while it resulted in poor bone preservation, in at least one instance it resulted in good preservation of textile which accompanied a single burial, in this case a pair of pantaloons and an upper garment which upon

cleaning at the Canadian Conservation Institute now appears to be a shirt; sleeves meeting near the waist, where the hands of most skeletons were crossed, are now visible. Both garments were removed en bloc using a technique of reinforcing the material with adhesive-soaked gauze, developed at Red Bay by Judith Logan, conservator with the Canadian Conservation Institute; both garments are now undergoing treatment at the C.C.I. Testing on the last day of excavation revealed several other graves, somewhat deeper and wetter than the burial with the textiles, and having even better organic preservation. It is hoped that excavations in 1985 will reveal more evidence of dress during the 16th century whaling episode at Red Bay.

Area J

During the early part of the 1982 season sods were removed from what appeared to be a small tryworks located on a rock outcrop near the shore of Saddle Island about 100 m south of a larger tryworks (Area G) which had been excavated earlier in the summer. Work there was interrupted by the discovery of a nearby cemetery and was not resumed until 1984. As excavation proceeded this summer past it became obvious that the feature originally thought to be a single tryworks was somewhat more complex than we had expected. While the major mound of rubble resolved itself into a very well-preserved "oven" consisting of three firepits (see Figure 1), each somewhat smaller than those investigated in previous years, other smaller deposits proved to be earlier tryworks which had been partly dismantled during the course of construction of the more recent example. While we suspected, from the shattered condition of the rocks comprising the previously excavated tryworks, that these features must have required constant maintenance, the tryworks at Area J provided the first evidence of total rebuilding, perhaps on more than one occasion. The remains of a low wall were revealed a few meters behind the most recent tryworks and five firepits could be traced either by the remaining rocks which formed them or by the absence of oil which had not stained the bedrock in places where the walls had once stood and thereby provided a negative image of the former construction. Additional stains and scattered rocks suggest that a third, still older tryworks may also have once stood there.

Still another tryworks was excavated at Area J, this one consisting of

only a single firepit backed up against a near vertical bedrock outcrop which formed a portion of the walls of the structure. Only a few very small fragments of roofing tile were found associated with this structure; it clearly did not have a tile roof. In fact a large mass of cloth found on the floor of the firepit may indicate that it was roofed with cloth, a fact also mentioned occasionally in documentary sources which forbid the use of sails as roofing material. A preliminary identification suggests that the fibres are wool, which seems to rule out the possibility that it is a fragment of a sail, since Michael Barkham, in his study of 16th century Basque shipbuilding (Barkham 1981), does not mention the use of wool for sails. Whether it will prove to be a garment, and give us another look at costume of the 16th century, however, awaits completion of the conservation procedures.

As excavation proceeded to the areas immediately surrounding the tryworks a large roof fall was exposed. It consisted of poles between about 10 and 20 cm in diameter and up to three meters long which had been laid parallel to one another with their edges touching. This was then covered with a layer of sods, perhaps cut with an iron mattock which was found nearby. The sods were then covered with strips of baleen held down with rocks. Since no nails were used in this construction the roof must have been flat or of shallow pitch; scattered other preserved timbers may have been support posts, but were not preserved in sufficient numbers to allow any further reconstruction. Nor are we able to suggest with any certainty what sorts of activities went on within this structure. No tools were recovered; a few bits of coarse earthenware, fragments of glass, scattered barrel parts, a cane basket or mat, walnut and almond shells, and an olive pit suggests domestic, rather than "industrial" use. The best guess might be that the structure sheltered the workers responsible for the rendering at the nearby tryworks, or perhaps served as a temporary shelter for men engaged in its construction. Further work planned for 1985 in other nearby water saturated areas may reveal additional details of construction or function.

Finally a Thule or Labrador Inuit steatite bowl fragment (see Figure 2) was found <u>within</u> the sod comprising the roof suggesting it was incorporated into the roof at the time of construction; it can be inferred, therefore, that there was a native occupation of the area prior to the construction of at

least this building. More will be said of the native presence at Red Bay below.

Area C

This was one of the first areas tested in 1977 and subsequently the scene of major excavations during the 1978 - 1981 seasons. A large tryworks, probably containing at least five firepits and with portions of a wood platform from which the cauldrons were tended was exposed as a result of these excavations (see Tuck and Grenier 1981). Work was resumed in 1984 with the intention of excavating completely one shore station in an attempt to determine what other structures or activity areas might have existed there.

The area is bounded on two sides by steep rock faces upon which habitation would have been impossible; on the third side is a cooperage (Area E) previously excavated, and the remaining side faces Red Bay Harbour. About three-quarters of this area has been investigated. Evidence of two additional structures was found during 1984 and one of these was completely exposed. Located in a v-shaped terrace a few metres above and to the southwest of the tryworks, this structure apparently took advantage of the steep bedrock walls to support a roof framed with poles, some of which were preserved, and covered with tile. The preservation of the roof supports resulted from waterlogged conditions which must also have existed at the time the structure was in use for a drain floored with pairs of barrel staves laid end to end and covered by smaller cut staves or boards laid edge to edge was a central feature of the structure. Resting on the upper layer of wood was found the rim sherd of a collared ceramic vessel of native manufacture which will be described more fully below.

Once again there is little direct evidence to suggest the function of this structure; some circumstantial evidence, however, provides at least a few hints. Previous work has suggested that only structures somehow related directly to the whaling operation (e.g. tryworks and cooperages) were roofed with tiles. It seems likely, therefore, that the structure revealed at Area C was an "official" building, in contrast to the less elaborate dwellings and other structures discovered elsewhere on Saddle Island and Twin Island. Its location, near a tryworks and elevated slightly above it, accords well with

the location of at least two cooperages. However, except for a a number of barrel parts, which are unfortunately ubiquitous wherever conditions for preservation are favourable, no evidence of coopering was found; if the place was occupied by coopers they were remarkably careful with the tools of their trade. One large object, about two-thirds of a grindstone about 110 cm in diameter, suggests an area where artisans of some type worked. Although sharpening of harpoons, lances, flensing knives, and other whaling implements was undoubtedly important it seems unlikely that a building of this size would have been constructed solely to house a grinder. Despite the absence of direct evidence, therefore, the interpretation of this structure as a cooperage with equipment and space for other artisans seems most reasonable at this point. Finally, it is possible that it was used for only a few seasons (its perpetually wet floor would certainly have been a nuisance) thereby accounting for the lack of coopers' tools. After this unsuccessful attempt to establish a cooperage the work may have been carried on to the northwest of the tryworks at Area E where there was both ample room for several cooperages and an amount of refuse to suggest that they once existed there.

The second newly-discovered structure at Area C was revealed only a few days prior to the close of excavations. Thus far, it consists only of a few large strips of baleen, perhaps part of a roof or wall similar to the collapsed roof from Area J. Hopefully, 1985 excavations will reveal more of this structure.

Twin Island

Excavations begun by Ralph Pastore and Reginald Auger (1984) on Twin Island, a few hundred meters south of Saddle Island and apparently known to the Basques as "Isle of Flowers", were continued during the 1984 season. Instead of concentrating on the several small structures, some of which date from the Basque period, our excavations centered on the removal of material from a small pond adjacent to one of the structures. The water level in the pond was lowered to within a few centimeters of the surface of the silt which had produced a few artifacts of Basque origin in 1983. The suspended upper few centimeters of silt were then removed using a system of siphons and the water level maintained by pumping clear water into the pond. Unfortunately

the only available water was sea water at temperatures usually very close to 0^0 C. The outflow at the exhaust of the main siphon hose was screened through one-quarter inch mesh. Working from movable platforms the crew was able to remove successive layers of silt and expose artifacts in place which were then mapped at a scale of 1:10 using a tape positioned on the permanent map to give both distance and direction after the fashion of what might be called a "mechanical alidade". Depth below datum were recorded using a string, line level, and three meter tape. In all, the system worked remarkably well; the difficulties of working for eight hours in near-freezing water were offset by the unusual material recovered from the pond.

Preservation was for the most part excellent, owing to the apparently oxygen free environment of the silt. Lead was recovered uncorroded and four hundred year old wood remained as fresh and light coloured as the day it was thrown into the pond. Artifacts recovered from this matrix include objects of wood, bone, leather, iron, lead, and glass in addition to occasional ceramic roofing tile fragments but, strangely, no ceramic vessels which comprise the majority of assemblages from most areas on Saddle Island.

The most obvious wooden artifacts were numerous poles of local softwoods up to about 15-20 cm in diameter and ranging to three meters in length. All had been cut with iron axes and many show no further modification except that the branches have been removed. Some had apparently been barked, for the small branches are cut flush with the trunk; others were not since the branches protruded a few centimeters from the trunk. Some were cut on both ends and occasional specimens appear to have been thinned near the centre resulting in a "waisted" appearance. It seems certain that these are the remains of some sort of temporary structure which once stood near the edge of Twin Island pond but no clues to the types of construction, save for the absence of nails or nails holes, suggest what it might have looked like or, for that matter, who built and occupied it.

Other objects include a number of long pointed spits or skewers (Figure 3) made from barrel hoops, staves, and small boat planks which, judging from the burning at the points and near where they expand to form a "handle", were used to roast meat over an open fire. Several appear to have burned completely through at about the point where the meat must have been skewered,

suggesting that they were propped up extending over the fire and at least occasionally left unattended while the meat cooked. The recovered food bone, presently undergoing analysis at the Zooarchaeological Indentification Centre, Museum of Natural Sciences, seems to include primarily bird species, with a few mammals among which seal and walrus are recognizable, and a surprising near-absence of fish bone. I suspect that chunks of whale meat might also have been roasted using these implements but, for obvious reasons, such species are unlikely to be represented by refuse bone. Whale bone was common in the deposit, however. Both ribs and veretebrae were recovered and it is clear that they were carried to Twin Island for use as fuel. Many of the vertebrae have the processes removed by chopping, the bodies show use as chopping blocks and were often intentionally split, and thousands of fragments of burnt whale bone were recovered from the lower levels of the deposit where they had settled owing to their density. While still infused with fat and oil they doubtless burned with a hot, if somewhat aromatic, flame. Other pieces of oak and beech, some clearly salvaged from a sizeable vessel (see Figure 4), or from broken or discarded tools or barrels also apparently were brought to Twin Island for use as fuel or raw materials for the manufacture of other implements.

Imported woods were used to fashion a variety of objects in addition to the roasting spits. These include: a pine (sp.?) "paddle" resembling a thick ping-pong paddle; another unusual paddle-like object which defies interpretation; a biconical bead made from palm wood; a beechwood bowl; what appears to be a turned candle holder; an unusual handle, possibly of African mahogany, which may derive from some sort of weapon; beechwood wedges; and a number of other objects.

Local materials were also fashioned into a variety of implements including, among others, a hone made from leather stretched over a block of whale bone and the unique carved object shown on Figure 5. Once shaped into a rough peg-like form one side was carefully smoothed and a series of symbols carved upon it. While the identification cannot be certain it appears to be a tally stick, for two of the carvings resemble ownership marks of a style well known from both Red Bay and the Basque country; the carved grid in which each of the boxes has been cut through may be the tally itself. Similar objects

were in use in Spain into the 19th century; each participant in a series of transactions kept one of a pair of identical sticks and notches were cut in each as transactions were carried out, thereby providing an unalterable record of account (Arrinda 1978:187).

Non-organic material includes several nails and nail fragments, a fragment of a large iron dowel or bolt with the head flattened from two opposite sides, lead shot of various sizes, and the sherds of a large one-piece tumbler with a footring similar to that commonly found on stemmed wine glasses shown on Figure 6.

In addition to this material, which appears to have originated in the Old World or to have been modified by 16th century European whalers, there is another group of specimens which provides a new dimension to our investigations. It includes a ground slate end blade fragment, a chert (?) drill bit, seal vertebrae strung on ribs (see Figure 2), a carved wood ball and a wooden spiral, perhaps a wound plug. With a soapstone pendant found in 1983 this material provides undeniable proof of Inuit presence on Twin Island. It is possible also that some of those objects attributed to the Basque, such as the roasting spits, could have been fashioned by Inuit; in fact, it is conceivable that the entire Twin Island assemblage, despite the European origin of many of the objects and most of the raw materials, could have been deposited by Inuit rather than Europeans.

The site is clearly a "contact" site since both European and native material are represented in a context which suggests that they were deposited within a short time of one another. The problem lies in attempting to determine exactly which group deposited which artifacts. Hopefully the analysis of the well preserved collection of faunal remains, now being processed by Dr. Stephen Cumbaa at the Zooarchaeological Identification Centre, National Museum of Natural Sciences, will yield some information on seasonality or butchering practices which may help to solve this puzzle. At present, the evidence indicates clearly that Inuit were present on the Strait of Belle Isle late in the 16th or early in the following century. Although it seems likely that these people were attracted by the presence of Europeans it remains to be determined whether any face to face contacts ever took place and, if so, what form they might have taken.

As mentioned briefly above, evidence of the presence of another group of native people was recovered from a structure overlooking the tryworks at Area C. It is in the form of a single potsherd found above a wood drain and below the roof fall of this structure, hence must have been deposited some time before the structure collapsed. The sherd, as shown on Figure 7, is of a high-collared castellated vessel with short oblique impressions on the interior lip, an incised decoration on the exterior collar, pinched collar base, and annular impressions below the castlellation. Except for the fabric, which is softer and appears to be somewhat less well-fired than is usually the case, this sherd bears all of the attributes considered typical of late prehistoric Iroquoian ceramics. Whether this might have been dropped by a descendant of one of the supposed Iroquoians whom Cartier met in the Strait of Belle Isle in 1534 or an Algonkian speaker who once had a good look at some Iroquoian pottery remains even less clear than the questions regarding Inuit contacts.

Excavations planned for the coming summer will address many of the questions posed by the 1984 excavations, particularly that concerning Basque/native contacts. A second pond, this one on Saddle Island, will be excavated using a modification of the system employed on Twin Island. It is known that this pond also contains native material. A kayak paddle fragment, possible drum frame or circular wooden box, and a number of seal bones were recovered during preliminary testing. Hopefully this pond and the surrounding area will provide more information regarding the timing and nature of these early Inuit contacts with Europeans.

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Figure 1

Tryworks at Area J, Saddle Island. The most recent construction, which supported three copper cauldrons is in the foreground. Remains of at least one older tryworks can be seen just behind the back wall of this example. The inside dimension of the fireboxes is approximately 1.2 m.

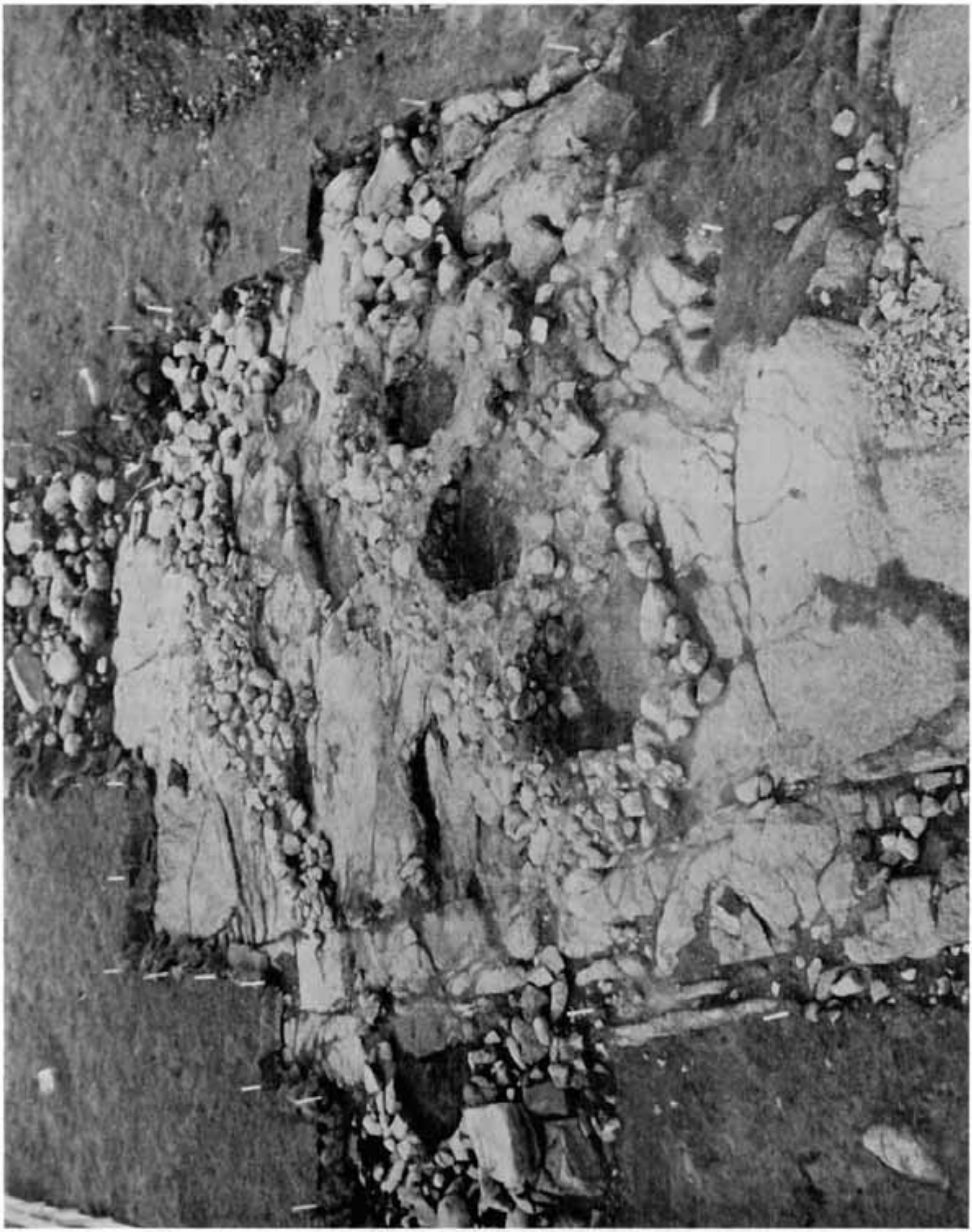

Figure 2

Inuit material from Saddle Island and Twin Island. At the upper left are a soapstone pendant, chert drill bit, and slate end blade from Twin Island-3. The soapstone bowl fragment at the lower left was incorporated into the roof of a Basque structure near the tryworks at Area J on Saddle Island. The seal vertebrae strung on ribs are shown as found in the pond at Twin Island-3. (Photo by Jack Martin)

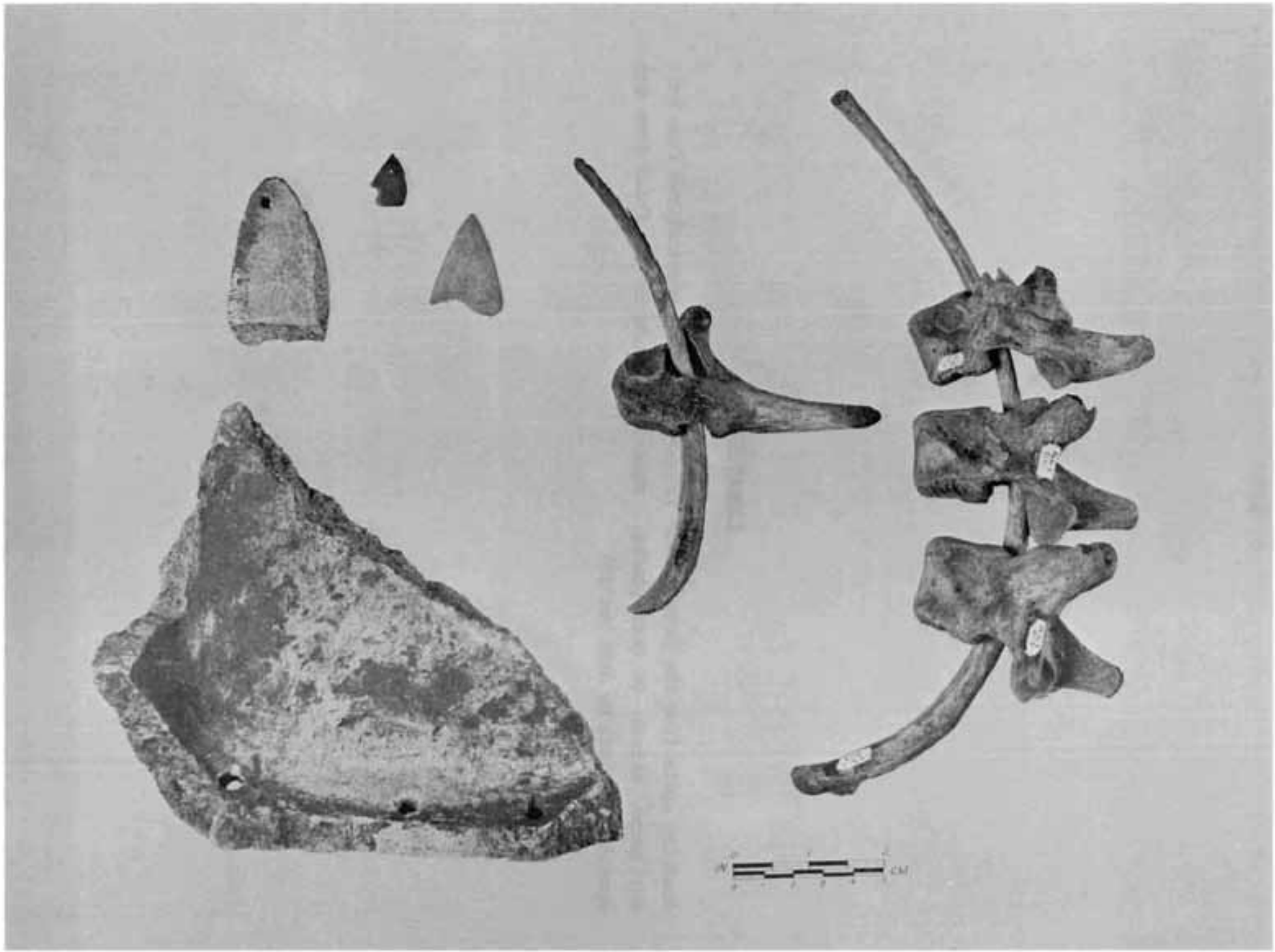

Figure 3

Roasting spits from the pond at Twin Island-3. All are manufactured from barrel hoops, staves, or boat planks. Note the burning on the third from top specimen. (Photo by Jack Martin)

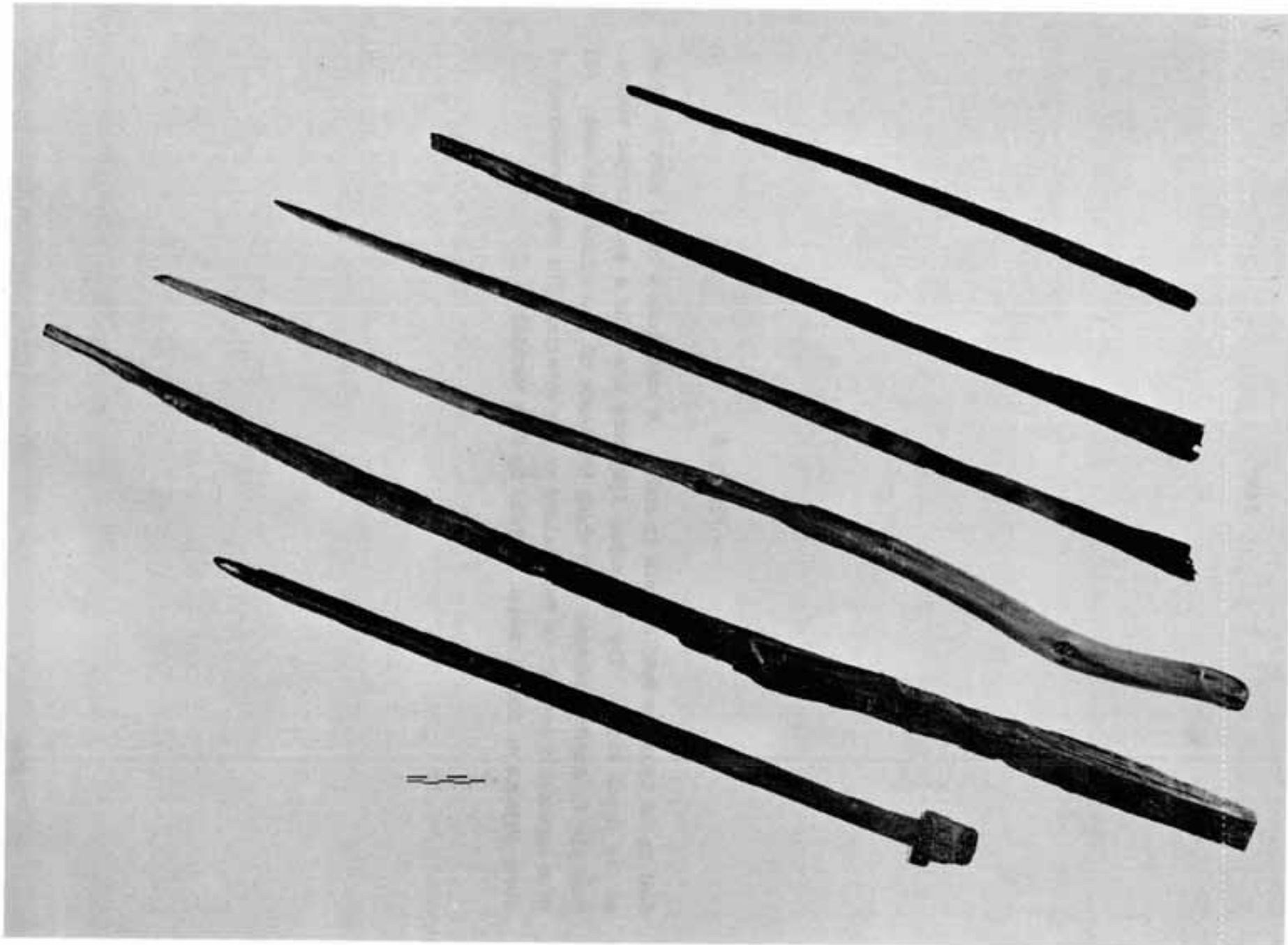

Figure 4

Boat parts from the Pond at Twin Island-3. A knee from a small boat is shown at the upper right. The two other fragments are from a much larger vessel. Note the triangular rebates into which the heads of fastenings were sunk. All were apparently brought to Twin Island as raw materials for the manufacture of other objects or for firewood. (Photo by Jack Martin)

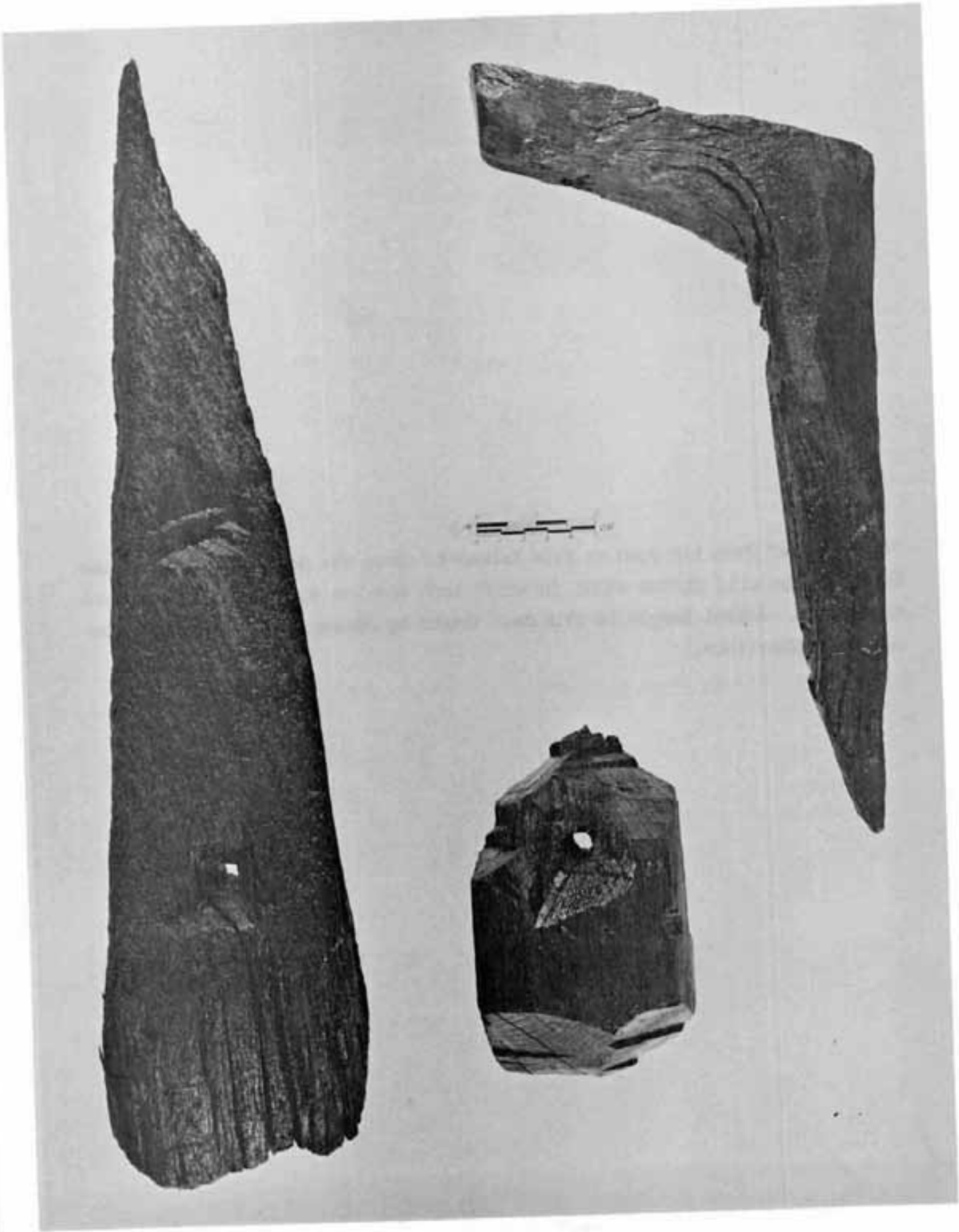

Figure 5

"Tally stick" from the pond at Twin Island-3. Note the ownership marks at the left and the grid at the right in which each box has a line or lines carved through it. Actual length is 29.5 cm. (Photo by Jeremy Powell, Canadian Conservation Institute.)

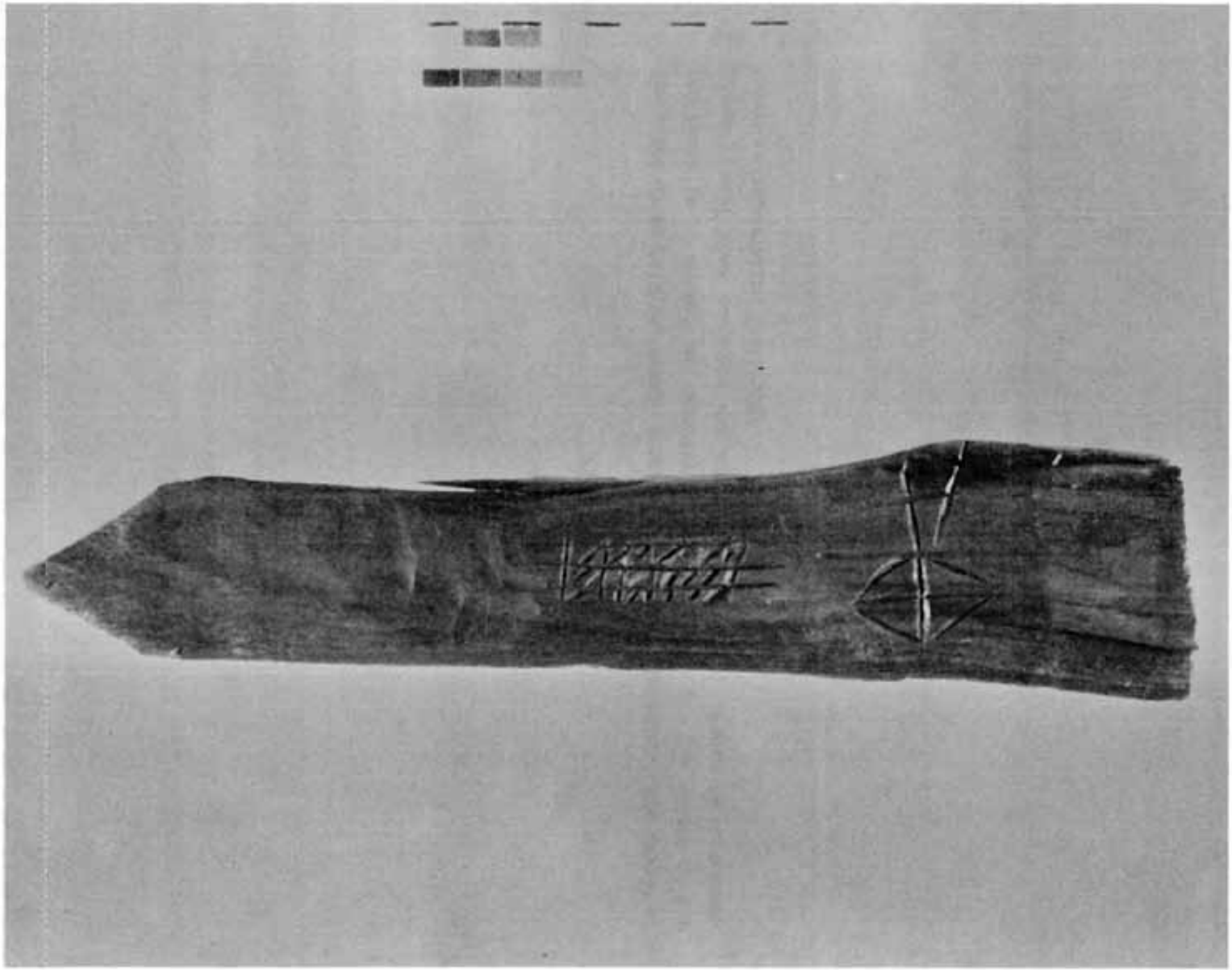

Figure 6

One piece glass drinking vessel from the pond at Twin Island-3. The height of the glass is 15 cm and the capacity approximately 340 g. The weight of the glass itself when complete was approximately 85 g. (Photo by W. Bokman, Canadian Conservation Institute)

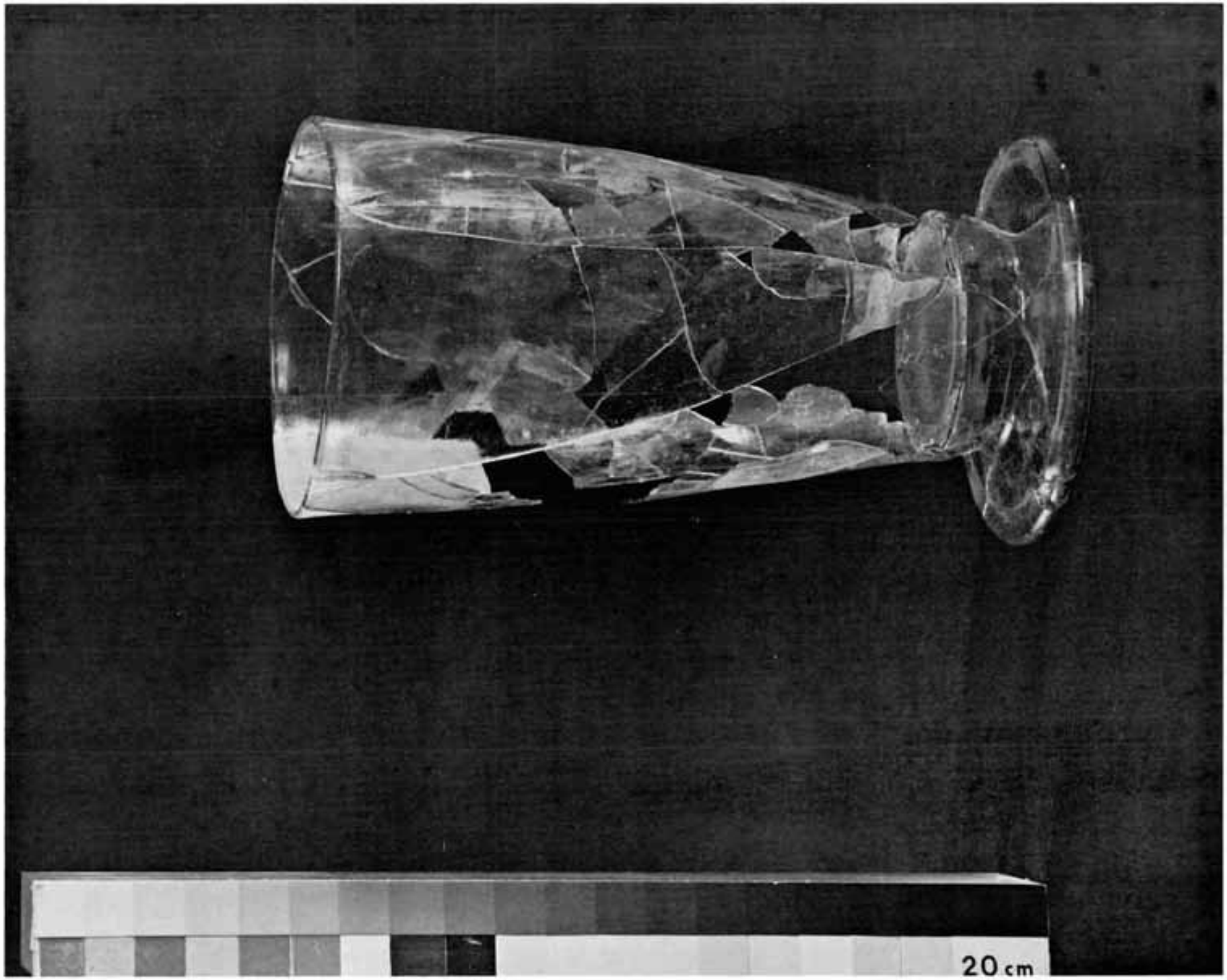
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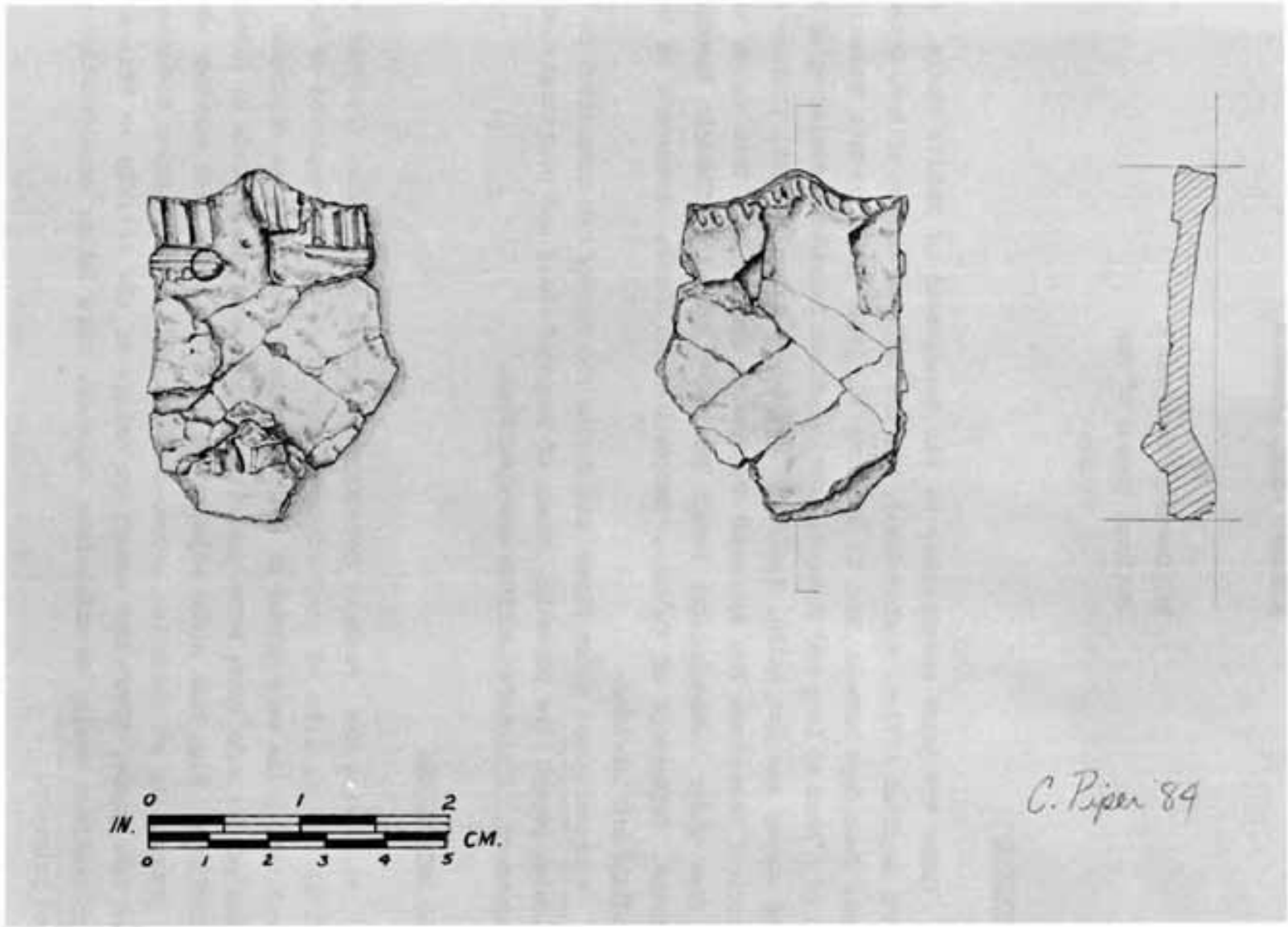
Figure 7

Potsherd found above the floor and below the roof fall of a Basque structure at Area C. Note the high collar, castellated rim, incised decoration, annular impressions below the castellation, and pinched collar base, all of which are characteristic of Iroquoian ceramics. (Drawing by Carol Piper)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