# THE JOURNAL OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA

# Archaeological Institute of America

# AMERICAN

# JOURNAL OF ARCHAEOLOGY

Becond Beries

THE JOURNAL OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA

VOLUME XVI

1912



NORWOOD, MASS.
PUBLISHED FOR THE INSTITUTE BY

The Norwood Press

NEW YORK: THE MACMILLAN COMPANY LONDON: MACMILLAN & CO., Ltd.

# American Journal of Archaeology

SECOND SERIES

THE JOURNAL OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA

Vol. XVI, 1912

#### Editorial Board

#### Editor-in-Chief

#### HAROLD NORTH FOWLER.

Professor in Western Reserve University.

#### Associate Editors

GEORGE H. CHASE (for the American School at Athens),
Professor in Harvard University.

JOHN C. ROLFE (for the American School in Rome), Professor in the University of Pennsylvania.

JOHN P. PETERS (for the American School in Palestine), Rector of St. Michael's Church, New York.

ALLAN MARQUAND (for Mediaeval and Renaissance Archaeology),

Professor in Princeton University.

ALEXANDER F. CHAMBERLIN (for American Archaeology),
Professor in Clark University.

WILLIAM N. BATES,
Professor in the University of Pennsylvania.

#### Honorary Editors

FRANCIS W. KELSEY (President of the Institute),
Professor in the University of Michigan.

JAMES R. WHEELER (Chairman of the Managing Committee of the School at Athens), Professor in Columbia University.

ANDREW F. WEST (Chairman of the Managing Committee of the School in Rome),

Professor in Princeton University.

CHARLES C. TORREY (Chairman of the Managing Committee of the School in Jerusalem), Professor in Yale University.

#### Editorial Contributors

Professor Carroll N. Brown, Classical Archaeology.

Miss Mary H. Buckingham, Classical Archaeology.

Mr. Lacey D. Caskey, Classical Archaeology.

Miss Edith H. Hall, Classical Archaeology.

Professor Harold R. Hastings, Classical Archaeology.

Professor Elmer T. Merrill,
Numismatics.

Professor Frank G. Moore, Roman Archaeology Professor Charles R. Morey, Christian and Mediaeval Archaeology.

Dr. James M. Paton, Classical Archaeology.

Professor Lewis B. Paton, Oriental Archaeology.

Professor ARTHUR S. PEASE, Classical Archaeology.

Professor Samuel Ball Platner, Roman Archaeology.

Dr. N. P. VLACHOS, Classical Archaeology.

Professor ARTHUR L. WHEELER, Numismatics.

### CONTENTS

Archaeological Institute of America:	PAGE
The Paintings of the Grotta Campana. — A. M. HARMON	1
Greek Inscriptions from Sardes (Plates I-II).	
-W. H. BUCKLER and DAVID M. ROBINSON	11
The "Roman Bowl from Bagdad."—A. T. OLMSTEAD	83
A New Collegium at Rome. — HARRY LANGFORD WILSON	94
On Some Recently Discovered Works by Luca della Robbia.	
— Allan Marquand	163
The Frieze of the Erechtheum. — LUDWIG PALLAT	175
The Positions of Victor Statues at Olympia.	
- Walter Woodburn Hyde	203
Methods of Determining the Date of Roman Concrete Monuments.	
- Esther Boise Van Deman	230
An Archaic Etruscan Statuette (Plates III-IV).	
-GISELA M. A. RICHTER	343
San Savino at Piacenza I (Plates V-VII). — A. KINGSLEY PORTER	350
Who Built the Arch of Constantine? Its History from Domitian	
to Constantine. — A. L. Frothingham	368
Methods of Determining the Date of Roman Concrete Monuments.	
- Esther Boise Van Deman	387
Third Preliminary Report on the American Excavations at Sardes	
in Asia Minor. — HOWARD CROSBY BUTLER	465
A Statuette in the Princeton Museum. — FLORENCE M. BENNETT	480
Minerva Victrix? Note on the Winged Goddess of Ostia.	
- CLINTON W. KEYES	490
San Savino at Piacenza II. — A. KINGSLEY PORTER	495
Discovery of Some New Petroglyphs near Caicara on the Orinoco.	
— T. A. Bendrat	518
The "Roman Bowl from Bagdad."	
A. T. OLMSTEAD and RONZEVALLE	524
The Mnesimachus Inscription at Sardes.—WILLIAM K. PRENTICE	526
AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS:	
The Older Parthenon (Plates VIII-IX). — B. H. HILL	<b>5</b> 35
AMERICAN SCHOOL OF CLASSICAL STUDIES IN ROME:	
Inscriptions from Rome. — A. W. VAN BUREN	97
iii	

Archaeological News and Discussions (July, 1911-June, 1912)  — William N. Bates, Editor:
NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS 111, 433  Oriental and Classical Archaeology:—General and Miscellaneous,
111, 433; Egypt, 113, 436; Babylonia and Assyria, 115, 437; Syria and Palestine, 115, 438; Asia Minor, 117, 440; Greece, 120, 440; Italy, 129, 445; Spain, 132, 446; France, 133, 446; Belgium, 135, 448; Switzerland, 135; Germany, 136, 448; Austria-Hungary, 137, 451; Russia, 138; Great Britain, 140, 451; Africa, 141, 453; United States, 144, 453.
Early Christian, Byzantine, Mediaeval, and Renaissance Art:— General and Miscellaneous, 145; Italy, 147, 455; Spain, 151, 457; France, 152, 457; Belgium, 152; Germany, 152, 457; Austria-Hungary, 153, 459; Great Britain, 153, 459; Africa, 155; United States, 156, 460.
American Archaeology: — General and Miscellaneous, 158, 461.
SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PERI- ODICALS
Oriental and Classical Archaeology: — General and Miscellaneous, 253, 559; Egypt, 254, 561; Babylonia, Assyria, and Persia, 258, 564; Syria and Palestine, 261, 568; Asia Minor, 264, 570; Greece, 265, 571 (Architecture, 571; Sculpture, 265, 572; Vases and Painting, 270, 575; Inscriptions, 274, 578; Coins, 277, 582; General and Miscellaneous, 278, 583); Italy, 282, 587 (Architecture, 282, 587; Sculpture, 282, 587; Vases and Painting, 285, 589; Inscriptions, 285, 589; Coins, 286, 590; General and Miscellaneous, 289, 591); Spain, 290; France, 291, 592; Holland, 291; Switzerland, 291, 594; Germany, 291, 595; Austria-Hungary, 292; Great Britain, 292, 595; Africa, 293, 596.
Early Christian, Byzantine, and Mediaeval Art: — General and Miscellaneous, 293, 596; Italy, 296; France, 298, 597; Germany, 598; Great Britain, 298, 598.
Renaissance Art: — General and Miscellaneous, 299, 598; Italy, 300, 598; Spain and Portugal, 304; France, 304, 601; Belgium and Holland, 305, 602; Germany, 306, 603; Austria-Hungary, 604; Great Britain, 308.
American Archaeology: — General and Miscellaneous, 308, 604; United States, 309; Canada, 312; Mexico, 313; Central America, 315; South America, 316.
Bibliography of Archaeological Books: 1911
General and Miscellaneous

	PAGE
Oriental Archaeology 321	
Classical Archaeology 322	
Greek and Roman 322	
Greek, 322 (I, General and Miscellaneous, 322; II, Archi-	
tecture, 324; III, Sculpture, 324; IV, Vases, 325;	
V, Inscriptions, 325; VI, Coins, 325).	
Roman, 325 (I, General and Miscellaneous, 325; II,	
Architecture, 327; III, Sculpture, 327; IV, Vases,	
327; V, Inscriptions, 327; VI, Coins, 327).	
Christian Art	
(I, General and Miscellaneous, 327; II, Early Christian,	
Byzantine, and Mediaeval, 332; III, Renaissance, 336).	
Abbreviations used in the News, Discussions, and Bibliography	160
PROCEEDINGS OF THE THIRTEENTH GENERAL MEETING OF THE AR-	
CHAEOLOGICAL INSTITUTE OF AMERICA, Pittsburgh, December	
27, 28, and 29, 1911	101
Preliminary Statement	101
Abstracts of Papers read:—	
Greek and Roman Sculptures in Philadelphia.	
-William N. Bates	101
Note on a Roman Ring. — WILLIAM N. BATES	102
A Mummy Label in the Carnegie Museum.	
— HAMILTON FORD ALLEN	102
The Fenway Court Giotto. — Frank J. Mather, Jr	102
An Inscribed Bronze Plaque from Coptos. — HAMILTON FORD ALLEN	102
Neolithic Man in British Columbia. — CHARLES HILL-TOUT	102
Notes on Athenian Topography. — C. H. Weller	103
A New Roman Collegium. — H. L. Wilson	104
A Byzantine Madonna in the Princeton Art Museum.  — H. E. KEYES	104
A T	104
Ancient Lanuvium. — G. B. Colburn	104
— WILLIAM H. GOODYEAR	105
Some Recently Discovered Works of Luca della Robbia.	100
- Allan Marquand	105
Early Rib-vaulted Construction in Italy. — A. Kingsley Porter .	105
Ancient Ways in Modern Greece. — W. W. BAKER	106
Kallimachos and the Delphic Dancers. — Alfred Emerson	107
The Apocrypha and the Annunciation in Art.	
— Thomas Jex Preston, Jr.	107
Roman Eschatology Illustrated by Monuments and Inscriptions.	
- Franz Cumont	107
A Relic from an Ancient Schoolroom. — KENDALL K. SMITH	107
Deir el-Bahari and Abydos. — WALLACE N. STEARNS	108

Statuette of Hermarchus in New York .

Head of Epicurus in New York

Cloth from the Tomb of S. Giuliano

Painted Stone Disk at Chichester .

Madonna in Nynehead Church, Wellington, Somerset.

Adoration in Nynehead Church, Wellington, Somerset

Silver Patena in Constantinople

Mosaic from Giotto's Navicella

Basilica of Damous-el-Karita.

***	AGA
Etruscan Sarcophagi and Urns in the Field Museum of Chicago.	
	109
The Excavations at Cyrene: First Campaign, 1910-1911.	
—Joseph Clark Hoppin 1	109
The Excavations at Sardes: Second Campaign, 1910-1911.	
	109
The Excavations of the American School at Athens, 1910-1911.	
	109
Trial Excavations at Cnidus. — T. LESLIE SHEAR 1	109
The Real Explanation of the Founding and Early Growth of the	
City of Rome. — Arthur L. Frothingham 1	109
PLATES	
Processing Community Commu	
I. Inscription from the Temple of Artemis at Sardes. Column I.	
II. Inscription from the Temple of Artemis at Sardes. Column II.	
III. Etruscan Statuette in the Metropolitan Museum.	
IV. Etruscan Statuette in the Metropolitan Museum.	
V. San Savino at Piacenza. Ground Plan of the Church Restored.	
VI. San Savino at Piacenza. Longitudinal Section.	
VII. San Savino at Piacenza. Transverse Section of the Church as	it
exists To-day.	
VIII. The Parthenon. Section of South Stereobates. Looking East.	
IX. Ground Plan of Older and Later Parthenon.	
William Control of the Control of th	
ILLUSTRATIONS IN TEXT	
Married Townson of the Control of th	
Painting in the Grotta Campana (Martha, L'Art Étrusque, p. 422) .	AGE 2
r til dag sp	95
Hand of Assessment from Money	99
nead of Augustus from Meroe	' T.T

144

145

150

154

156

164

166

. 146

. 148

									PAGE
Prudence. Heilbronner's, Paris	•		•	•	•	•	•	•	170
Faith. Heilbronner's, Paris .	•	•	•	•	•	•	•	•	171
Group from the Frieze of the Erec		um	•	•	•	•	•	•	175
Head in Figure 1	•	•	•	•	•	•	•	•	176
Fragment of the Frieze of the Ere	chthe	um	•	•	•	•	•	•	177
Sketch of Figure 3	•	•	•	•	•	•	•	•	177
Side of the Fragment, Figure 3	•	•	•	•	•	•	•	•	177
Sketch of Figure 5	•	•	•	•	•	•	•	•	177
Side of the Fragment, Figure 3	•	•	•	•	•	•	•	•	178
Sketch of Figure 7	•	•	•	•	•	•	•	•	178
Fragment of the Frieze of the Ere	chthe	eum	•	•	•	•	•	•	179
Sketch of Figure 9	•	•	•	•	•	•	•	•	179
Side of the Fragment, Figure 9	•	•	•	•	•	•	•	٠	180
Sketch of Figure 11	•	•	•	•	•	•	•	•	180
Side of the Fragment, Figure 9	•	•	•	•	•	•	•	•	180
Sketch of Figure 13	•	•	•	•	•	•	•	٠	180
Fragment of the Frieze of the Ere	chthe	eum	•	•	•	•	•	•	181
Sketch of Figure 15	•	•	•	•	•	•	•	٠	181
Fragment, Figure 15, from Below	•	•	•	•	•	•	•	•	181
Sketch of Figure 17	•	•	•	•	•	•	•	•	181
The Altis at Olympia (after Luck	enbac	h, Ol	ympic	a und	$l$ $Del_{I}$	ohi)	•	•	204
A Refaced Wall	•	•	•	•	•	•	•	•	233
An Unfaced Wall of Opus Caeme				Perio	d of l	Nero	•	•	234
Bipedales in the Large Theatre at				•	•	•	•	•	237
Walls of Domitian and Hadrian i				ugus	tana	•	•	•	238
Republican and Imperial Walls on	n the	Velia			•		•	•	239
Brick-facing of the Periods of Dor			Sept	imiu	s Sev	erus	•	•	240
Opus Quadratum of the Fifth Cen	itury	•	•	•	•	•	•	•	242
The Cuniculi and the Equus Dom	itiani	i	•	•	•	•	•	•	248
Bronze Head of Zeus		•			•			•	267
Satyr and Eros. Intaglio .	•				•				<b>26</b> 8
Vase signed by Epictetus .									270
Apulian Crater. Contest of Athe	na an	d Pos	seido	n	•				273
Epirote Voting Disks									279
Roman Portrait Bust									284
Portrait of Michelangelo by Raph	ael								302
San Savino. Detail of Clearstory		ve th	e Ea	asteri	nmost	Alt	ernat	е	
Pier on the North Side of the									360
Easternmost Pier on the South S			Nave	e: sh	owing	r Bas	se an	d	
Preëxisting Campanile .				.,	-				362
South Wall of Choir; Showing	Rarre	l Var	ilt an	d Fr	·aome	ents o	of Ar	١	
cient Masonry		. ,							366
The Arch of Constantine, seen from	· m th	· a No	rth			•		•	369
Part of the Haterii Relief, showi					· netar	tine :	" 9 = 3	ŧ.	500
was in the Time of Domitian	_	A	ich C	1 00	nough	ше	as i	ı	377
was in the Time of Domitian	•	•	•	•	•	•	•	•	011

viii *CONTENTS* 

							PAGE
East End of the Arch of Constantine		•					379
East End Medallion, "Sol Invictus"	•	•	•	•			384
West End Medallion, "Diana".							385
Brick Facing of the Time of Augustus	•	•					394
Facing of Triangular Bricks of the Tim			lius				401
Facing of Triangular Bricks of the Tim	ne of 1	Nero					405
Facing of Triangular Bricks of the Tim							<b>4</b> 08
Facing of Triangular Bricks of the Tim		Domi	tian				412
Roof-tile Facing of the Time of Hadria	n .	•					419
Brick Facing of the Time of Septimius	Sever	rus	•				423
Facing Bricks of the Time of Caracalla							424
Brick Facing of Bipedales of the Time		ocleti	an .				428
Brick Facing of the Time of Maxentius	3						<b>4</b> 30
Brick Facing of the Seventh Century	•	•	•				432
William Watson Goodwin		•					434
Attic Grave Relief in Berlin			•				449
Assyrian Sword in New York .	•	•	•				453
Head of an Athlete in New York .	•						454
Early Attic Vase in New York .		•					454
Portrait of Charles V in Milan .		•					456
Youthful Works by Martin Schongauer		•					458
Sardes. The Two Columns of the Tem	iple o	f Art	$_{ m emis},$	Apri	l, 191	. 0	466
The Two Columns of the Eastern Por	ch of	$\mathbf{the}$	Tem	ple of	$\mathbf{Art}$	emis,	
June, 1912	•	•					467
Interior Columns of Eastern Porch,	Anta	e, an	d D	oorwa	y of	$_{ m the}$	
Temple of Artemis		•	•	٠.	•	•	468
Base of Third Column from South End	in Fr	ront l	Row		•	•	469
Base of Column of Second Row on Sout			•	•	•		470
Capital found in the Middle of the Sout		e of t	he T	$_{ m emple}$		•	471
Capital from the Inner Row of Columns		•					472
Christian Church at Southeast Angle of	f the $f$	$\mathbf{Temp}$	ole			•	476
Statuette in the Princeton Museum							480
Statuette in the Princeton Museum							481
Winged Figure from Ostia							491
Winged Figure from Ostia							492
San Savino, Easternmost Alternate Pi	ier or	a So	uth S	Side	of N	ave;	
1 1 0 1 1 1 1 7 1 1 1		•					495
Easternmost Respond in Southern Side	e Ais	le; sl	nowir	ng Ca	pital	and	
Springing of the Vaults					٠.		496
Capital of the Third Pier from West on	Sout	hern	Side	of N	ave .		497
Easternmost Alternate Respond in Nort							497
Capital of 1107 in Crypt							498
Capital of 903 in Crypt							499
Capital of 903 in Crypt							500
Mosaic in Eastern Bay of Northern Side	e Aisl	le			•	•	512

### CONTENTS ix

General View of Interior	r of S	an S	avino	,		_				_	PAGE 515
Entrance to Crypt of Sar											516
Petroglyph, First Type									•		518
Petroglyph, First Type				•					•		520
Petroglyph, Second Type											520
Petroglyph, Third Type,		Tier	e"		•						521
A Forged Relief .		•								•	524
Southwest Corner of the				•	•	•			•	•	537
North Wall of the Acrop				recht	henn	1		•	-	•	538
Step of Kará Stone.											539
Block from Marble Step	•	•	•			•	•	•		•	539
Block from Marble Step		•		•	•	:	•		•	•	539
Marble Blocks of Middle		•	•	•	•	•	•	•	•	•	540
Marble Blocks in the Wa			· A croi	· mlie	•	•	•	•	•	•	541
Northwest Corner of the				,0115	•	•	•	•	•	•	542
Marble Stylobate Block			•	•	•	•	•	•	•	:	543
Half Block of Stylobate		•		:	:	•	•	•	•	•	543
Details of Marble Stylob				•	•	•	•	•	•	•	544
Corner Block of the Low				•	· Par	theno	'n	•	•	•	545
Steps of Kará Stone in si		cp or	ULIC	Oluci		·		•	•	•	546
Byzantine Grave in Nor		• t. Cor	ner c	f Pe	rietyl	• •	Secti	· m. lo	• oking	•	010
East	uncas	0 001	nor c	1 10	113091		OCCUI	)II 10	JAILE	•	547
Excavation in the South	wet.	Corn	• or of	the (	· Palla	•	•	•	•	•	548
Re-used Marble Blocks	WCSU	COIII	ei oi	une (	Joila	•	•	•	•	•	549
Re-used Marble Blocks	•	•	•	•	•	•	•	•	•	•	550
Anta Base of Older Part	· hana	• n	•	•	•	•	•	•	•	•	552
Details of Anta Base of			· ·hono	• -	•	•	•	•	•	•	553
Blocks of Moulded Wall-			шено	111	•	•	•	•	•	•	554
Excavation within the P			•	•	•	•	•	•	•	•	555
Babylonian Tablet.	arme	поп	•	•	•	•	•	•	•	•	565
House at Gournia .	•	•	•	•	•	•	•	•	•	•	
	•	•	•	•	•	•	•	•	•	•	571
Greek Sepulchral Stele	•	•	•	•	•	•	•	•	•	•	574
Silver Vase from Thessa Fresco at Gubbio .	•	•	•	•	•	•	•	•	•	•	584
rresco at Guddo .									•		600