GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

XXI. The mound at Ḥumṣ with drawn-bridge in.

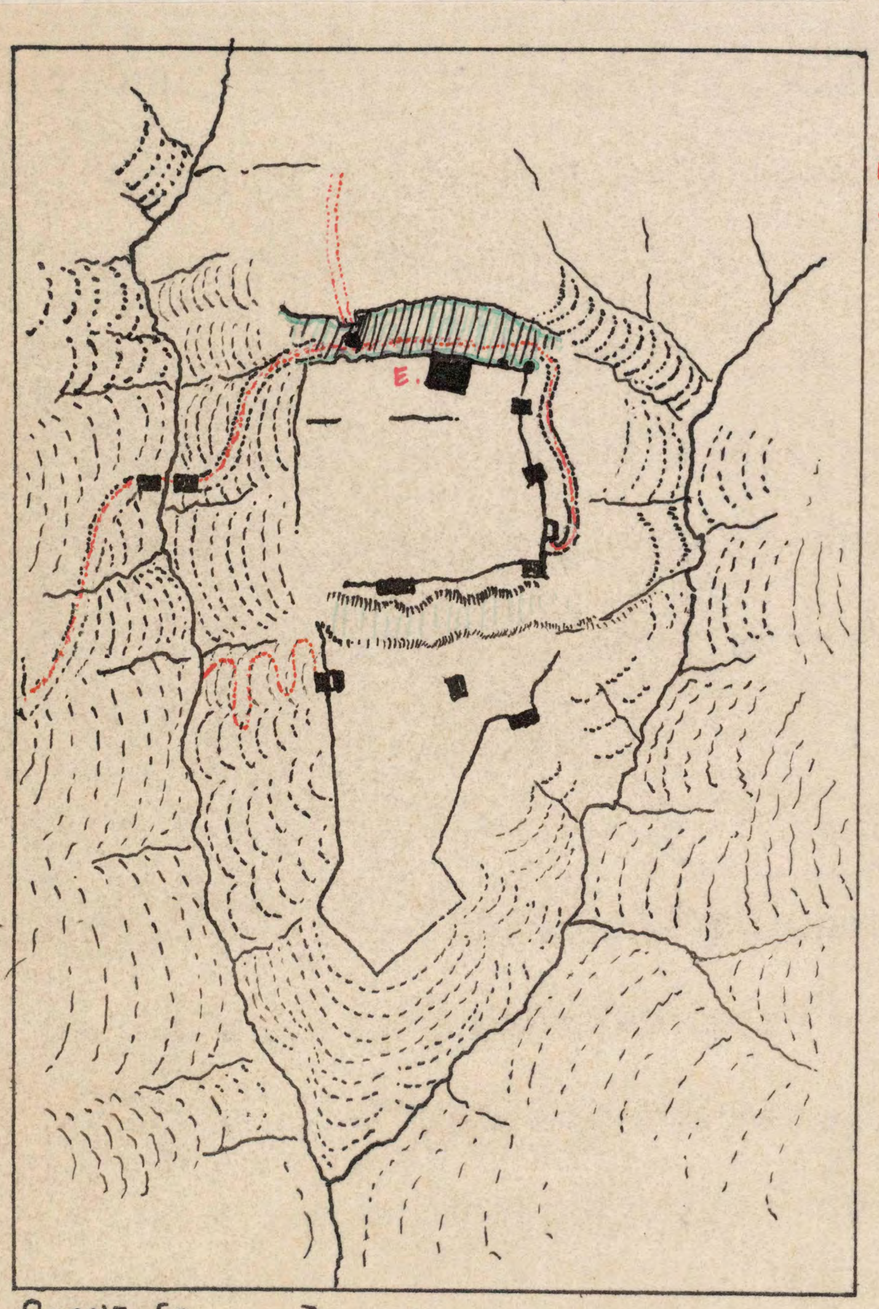
GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

so typically Byzantine there can be no possible hesitation in dating it before the arrival of the Crusaders : very little of its walls remain.

Going further East, the site of Turbessel (Tell Bashar تل بشر) is entirely laid waste. There had been once a little castle on a mound, but only a few stones of a square tower are left. At Bira (Biredjik برجك) on the Euphrates is a fortress which would be typically Byzantine if the Arabs under Malek es Zahir had not rebuilt the high towers looking southward : and the huge castle of Edessa (Urfa اورفا Rages) is also Byzantine with Arab additions. The rock moat, over 500 feet long, with an average depth of 40 feet, and a width of 30 feet is too huge a work for the Latins ever to have undertaken in their insecure tenure of the place : besides we have town walls tolerably perfect, and unquestionably Byzantine, and the Crusaders appear to have maintained a semi-Byzantine administration during the few years they held the province. It is important, having regard to other castles in Northern Syria, to notice the pier of rock left standing in the moat when the rest was excavated : its purpose was to support the centre of a timber bridge, and to make it high enough it was necessary to cap it with masonry : the only large wood to be found in Edessa to-day is the poplar-tree, and a long beam of this is quite untrustworthy, even in the far less trying strain of the roof of a native hut. In Europe a draw-bridge

22.



SAONE [SAHYON.] REY . P. 107.

Entrances marked in Red.

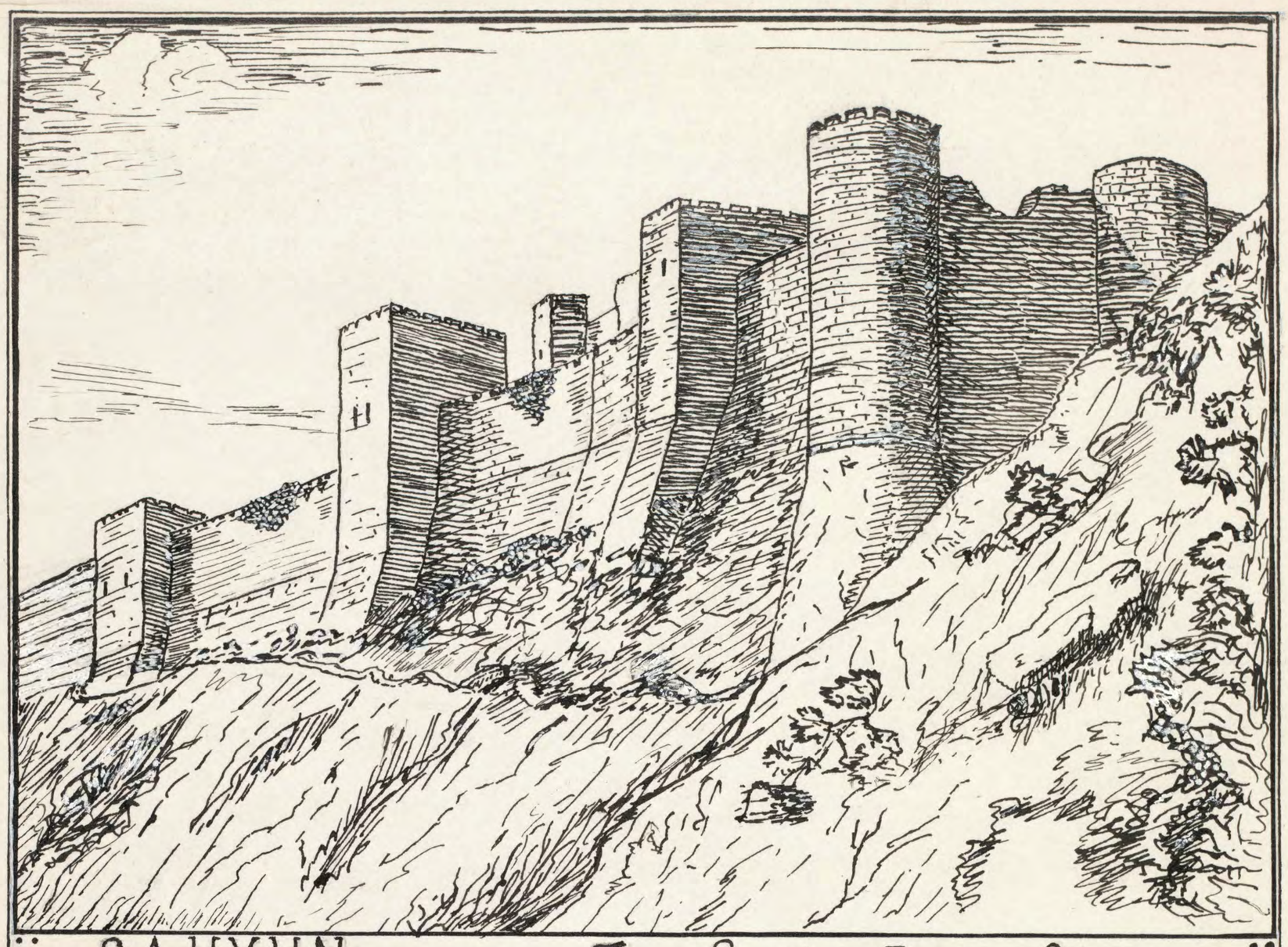
Rock-cut ditch lined green.

could be made quite long without any sacrifice of stability, and therefore the moat pier was not required. One example however is to be found at Toncquedec in Brittany, in work of the fourteenth century.

In Rum Kalaat (قلعة روم) another stronghold of Edessa, the only sign of Latin occupation is in the form of the grooves for a portcullis. For some reason the Byzantines never used this defence for a gateway with any frequency. They knew of it of course, for it is described by Vegetius, and found in action in Pompeii and the Great Pyramid ; and judging from their practice European castle-builders found them profitable. In the East they may be taken invariably as tokens of European influence.

These castles are a little disappointing, but there is one great castle, depending on Antioch, that of Saone (Sahyun صهيون) which, taken as a whole, is probably the finest example of military architecture in Syria. Like the other castles in the North the remains are very largely of the Byzantine period, but added to in a very definite and very evident fashion by the Crusaders. The castle is built on a narrow ridge,(22) isolated from its neighbours on each side by being placed in the sharp angle of two streams just about to meet. The valleys on this side and on that are extremely narrow, and some four hundred feet deep. Across one of them half way up had been thrown a bridge, leading to a road cut

23.



SAHYUN. The South - East Corner.

The tower of entrance is the furthest to the left. The great moat runs along before the round towers on the right.

in the cliff face over what in winter is an impassable torrent. From the bridge the way into the castle leads through a rock moat isolating the end of the promontory, and along the further side of the ridge, to a gate nearly midway in the Southern face of the fortress (Plan 22 : and 23) It is unfortunate that the section of this gate in Rey is entirely misleading. There is no portcullis, and no machicoulis above, but the doorway is sunk a few inches within the face of the wall, and this depression carried up to a height of some 30 feet, in a shallow blind arch. The plan of the castle given by him, and repeated here (plan 22) with the more obvious corrections, ~~are~~ is also apparently hurried : ~~the earth~~ Scene is of such colossal size, and so deeply set in inhospitable hills that a complete examination of it is a matter of some exertion and discomfort. Rey's sketch of the great rock moat minimises its very striking proportions ; and his description is vague and inadequate. The Byzantine work, which includes all but the great square keep marked E (Plan 22) is in plan just like any ordinary Byzantine work, though of very exceptional quality. The moat in particular is in places over a hundred feet in width, and the pinnacle to support the bridge stands 110 feet high with its cap of masonry. (24 & 28) The whole moat is very beautifully carved out of the rock, and its sides have generally been finished to a comparatively smooth surface. It separated the castle from the broader part of the ridge, the part that runs up into the Jebel Daryous.

I had malaria rather heavy those days.

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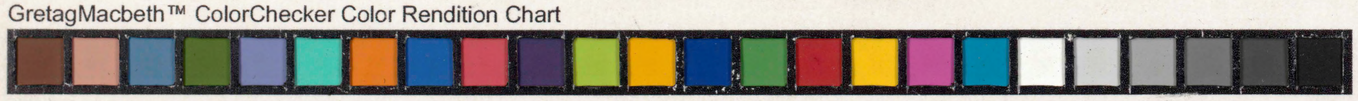

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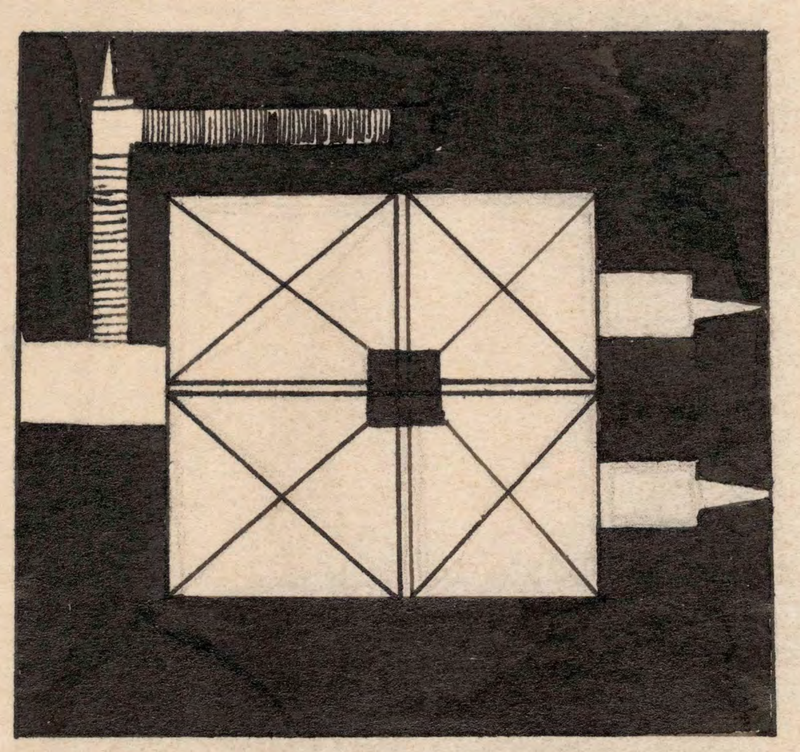
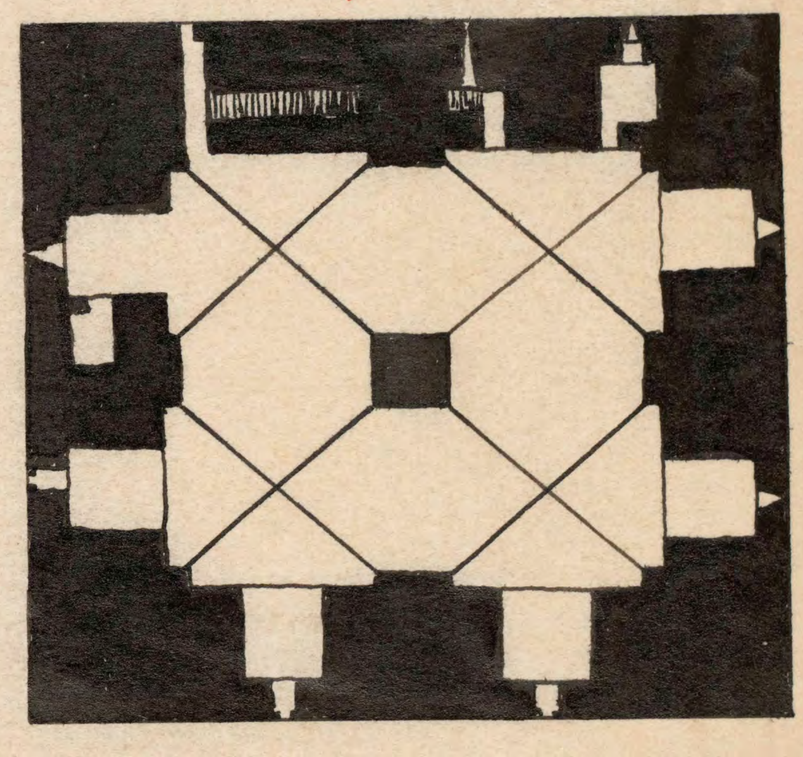
24.

XXV. Keep of Saone from S.W.

26



27.



SAONE
[Sahyun]

0 10 20 30 40 feet.

The keep of the Latin owners of Saone is however of more particular interest. One of a fairly numerous class in Syria, it bears a distinct resemblance to the keeps of North-west Europe, only modified to suit the local conditions. (Plate XXV)

Norwood

In Europe no keep was vaulted above the basement; in Syria there was no other way of making a roof. When so large a building was stone-vaulted, however, the height of the European keeps became impossible : the architect of Coucy could build a vaulted keep of four stories, but not so the architect of the early 12th century. With the abolition of the upper stories went naturally the entrance by ladder or forebuilding on the first floor.

Square keeps are to be found in Syria at Saone in Antioch, at Chastel Blanc, Chastel Rouge, Botron and Giblet in Tripoli, and at Beaufort, Banias, and possibly Caesarea in the kingdom. This one at Saone is the most massive (XXV. 26.27) : in form it is roughly a square of about 90 feet each way : the height is 76 feet, and the thickness of the walls in the first floor some 22 feet.(1) The entrance is on the ground level by a very small doorway, closed only by a hinged gate. The keep at Giblet, probably the latest in date, is the only one that has a portcullis of those in Syria : and in Europe also a portcullis in a keep

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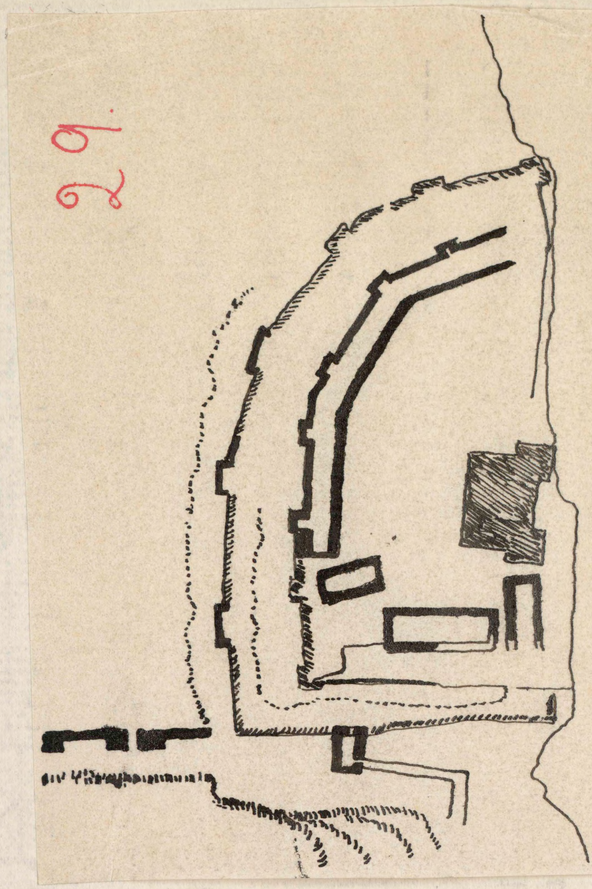
(1) There is a lusty colony of snakes on the ground floor preventing exact measurement, above all since it is in total darkness.

No portcullis!



TORTOSA.
The Castle
REY. Pl. xx.

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GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

98. Samu. 74 dibh.

GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

and a sign of late date

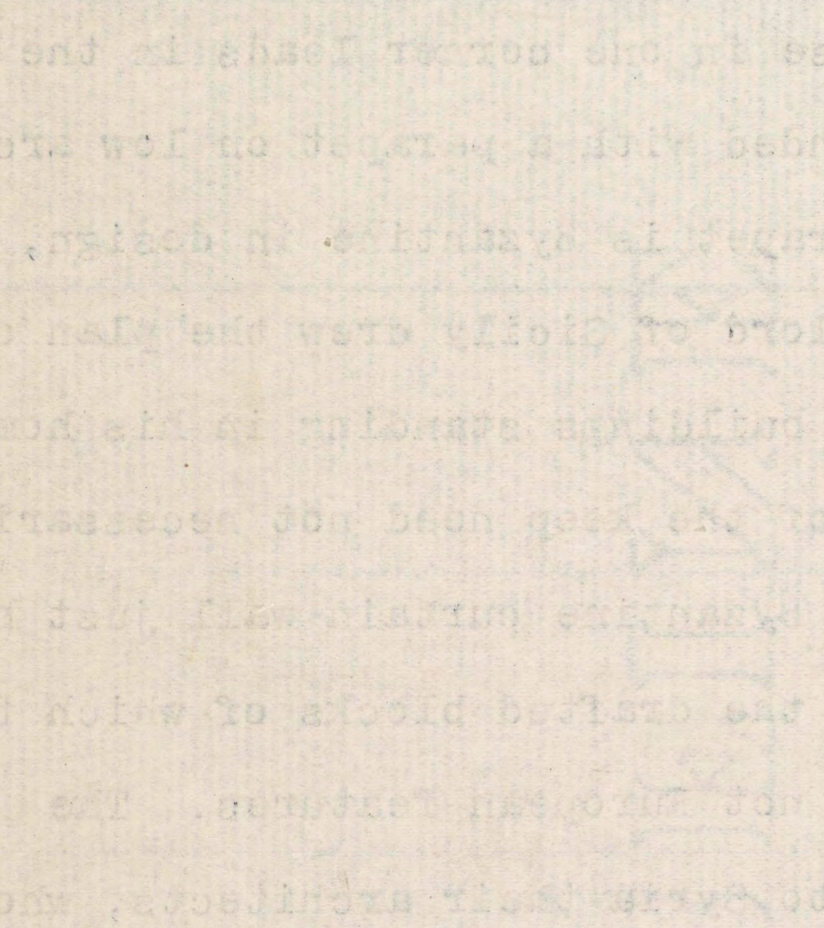
is a rarity. The gateway gives on a flight of steps, leading in the thickness of the wall to the first floor. Each storey is stone-vaulted, on one huge pier, in the centre, nine feet square. The upper room is well lighted, by windows of reasonable size, and has garderobes and withdrawing rooms, like any keep in Normandy. A staircase in one corner leads in the wall to the roof, which is surrounded with a parapet on low arches, pierced with loops. This parapet is Byzantine in design, though if, as seems probable, some lord of Sicily drew the plan of the keep, he may have copied buildings standing in his home : in other words this parapet of the keep need not necessarily be a copy of the parapet of the Byzantine curtain wall just below. The straight staircases, and the drafted blocks of which the tower is built are of course not European features. The Crusaders brought with them to Syria their architects, who also acted as chief masons : but the mass of the work must have been done by the natives of the country, the Syrians accustomed to build Greek fortresses. They naturally adopted their own technique in doorways and staircases, and ways of dressing stone, but their secondary position is evident. The keep form owes nothing to the Greeks.

but it probably is

From Saone ~~north~~ South wards to Tortosa (Tartus طرطوس) there are no early Latin fortresses : and Tortosa itself is one half Byzantine, and the other half destroyed. Rey's plans (29) give far more than can be seen to-day on the spot, for Tartus

31

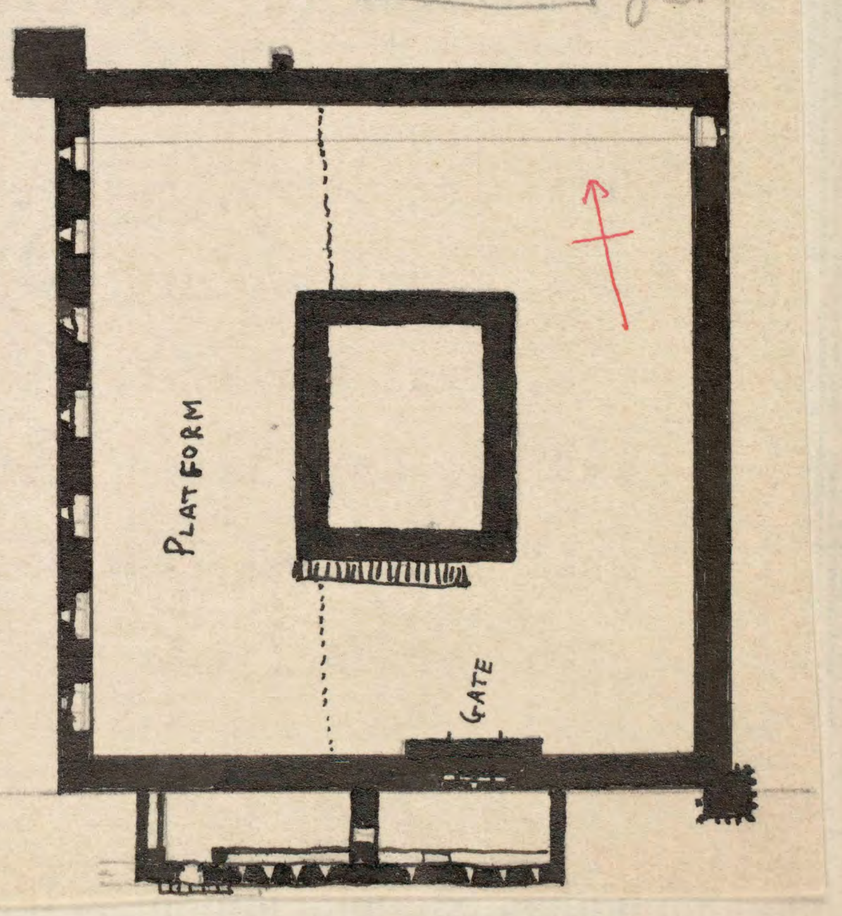
KEEP OF CHASTEL ROUGE. 1st FLOOR

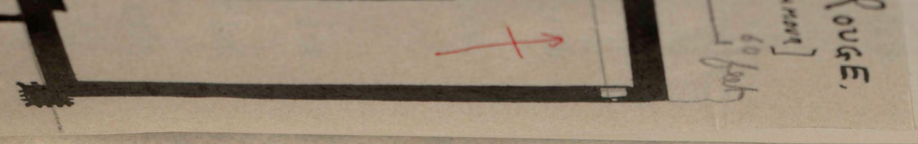


0 10 20 feet.

32

CHASTEL ROUGE.
[KALA'AT YAHMOUR]





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XXX Roland Pahman.

GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

is flourishing, and heavy walls and rock-ditches are inconveniences in a growing seaport. The great square tower, which he marks within the innermost line of defence, is quite impossible to get at to-day, thanks to the existence of the harem of the governor above it : what one can see from the streets suggests rather only two towers on the sea-front. Of course forty years ago there may have been more to find, but Rey's facts are sometimes persuaded to keep pace with his imagination, when the results are disastrous. The North gate of the city, which he describes, is standing however just as he left it - one of the most interesting gateways in the Latin East (Rey . p. 213) It (appears to be) 13th century, but there can be no question as to the large amount of Byzantine remains in the two great walls of the town.

Half a dozen miles southward of Tortosa lies Chastel Rouge (Kalaat Yáhmur قلعة يحمور) a fortress without a history, and in its present condition an architectural enigma. It (xxx) stands in a level plain, one of the very few flat places of Northern Syria, without any natural advantages of position whatever : there (may) have been ditches around it once, but (if so) they have been filled in completely, so that probably they were never very large. The castle is composed of a square of walls, with rectangular angle towers (32). Two of the towers are corbelled out, but not pierced for machicoulis. So far the work could lay claim to Byzantine origin. Within

33. The gate from a Kodak 'Autumn' film ad.

مسیلمہ

A little Metwali robber-hold
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GretagMacbeth™ ColorChecker Color Rendition Chart

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this very small square of walls however is a Latin keep, of very considerable dimensions, and most solidly built. It fills up nearly all the space within the containing wall (1) and therefore to this extent looks like an after thought. Further the entrance to the keep is on the first floor, which proves that some building in front was understood when the keep was planned. There is now a kind of terrace on the Western side of the keep, but not enough of it is visible to determine exactly whether it is the original arrangement or not. (32)

Otherwise the keep is not unlike Saone. The battlements are (or were) similar and the scheme of vaulting also corresponds. The stairs up are straight, but begin in the open air on the terrace. The plan (No 31.) will give all these features better than any description. The gate (plan 33) is interesting, from the close resemblance between it and the Northern gate of Tortosa, in the placing of the machicoulis. (2) Those of the latter sort in this gate are comparable with those of Tortosa. Otherwise one can make nothing of it, and the fore-works beyond are amazing in their inefficiency : probably they are an addition of Arab times, and date from the period when the moat was

---

(1) The rest is now filled with a warren of Arab huts, lived in by Arabs most squalid, and yet most suspicious. They refused to let me examine the keep at all closely.

(2) "Machicoulis" are always used in two senses, the stone substitute for boards, on a wall top, and the square traps pierced in the floor of the room above an entry.

35

FIRST FLOOR

34

GROUND FLOOR

0 5 10 20 m.

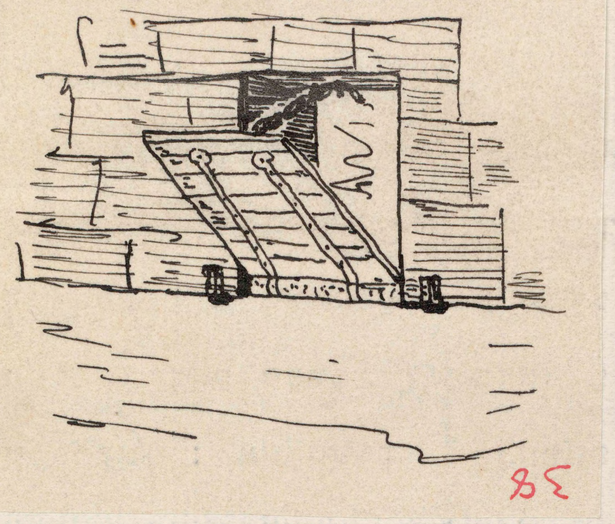
Safita, the keep.

XXXVI Safita from the E.

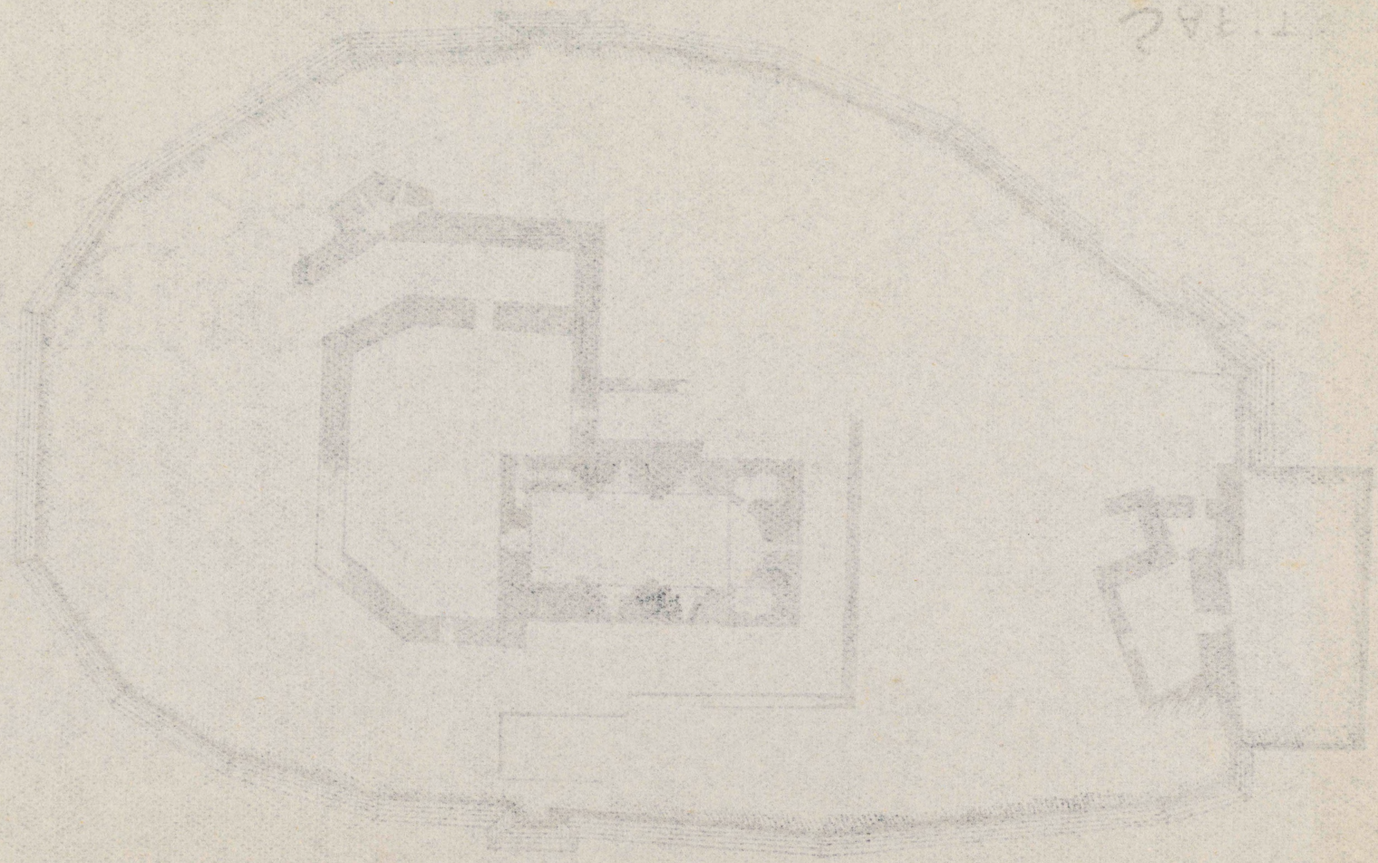
GretagMacbeth™ ColorChecker Color Rendition Chart
cm
1 inches
1

filled in. If so the castle would be a compound of Crusader keep and gateway, of Byzantine outer walls, and Arab fore-works : and the unsuitability of the different parts, when arranged as they are, points rather at a composite effort. The keep is 58 feet long and 28 broad, and about 40 feet high.

Inland from Kalaat Yahmur stands Chastel Blanc (Safita Sidon) the most elaborate of the keeps of Northern Syria. The castle at Safita occupies the summit of a hill of consider-able steepness, and the keep is on the highest point of all. Its dimensions are some 100 feet long by 60 broad, and it is still standing to-day, complete to its battlements well over a hundred feet above the poor houses of the village, clustered round its foot. (xxxvi) The lower story of the keep 34 is used as the village church, as formerly it was the chapel of the castle. The door of entrance was blocked only by a single hinged gate, and appears a weak point : which is perhaps the reason why the door at the foot of the stair leading to the hall on the upper floor is also heavily barred and bolted. In the chapel there is one loophole high up above the altar, and two on each side of the nave. They are however so narrow, and at such a height above the ground as to be evidently unfitted for de-fence. Indeed as a rule loopholes are meant less for firing through than for admitting light : the recesses in which they are placed are seldom made high enough for a long bow, or



A Shutter, in
EMBRASURE.



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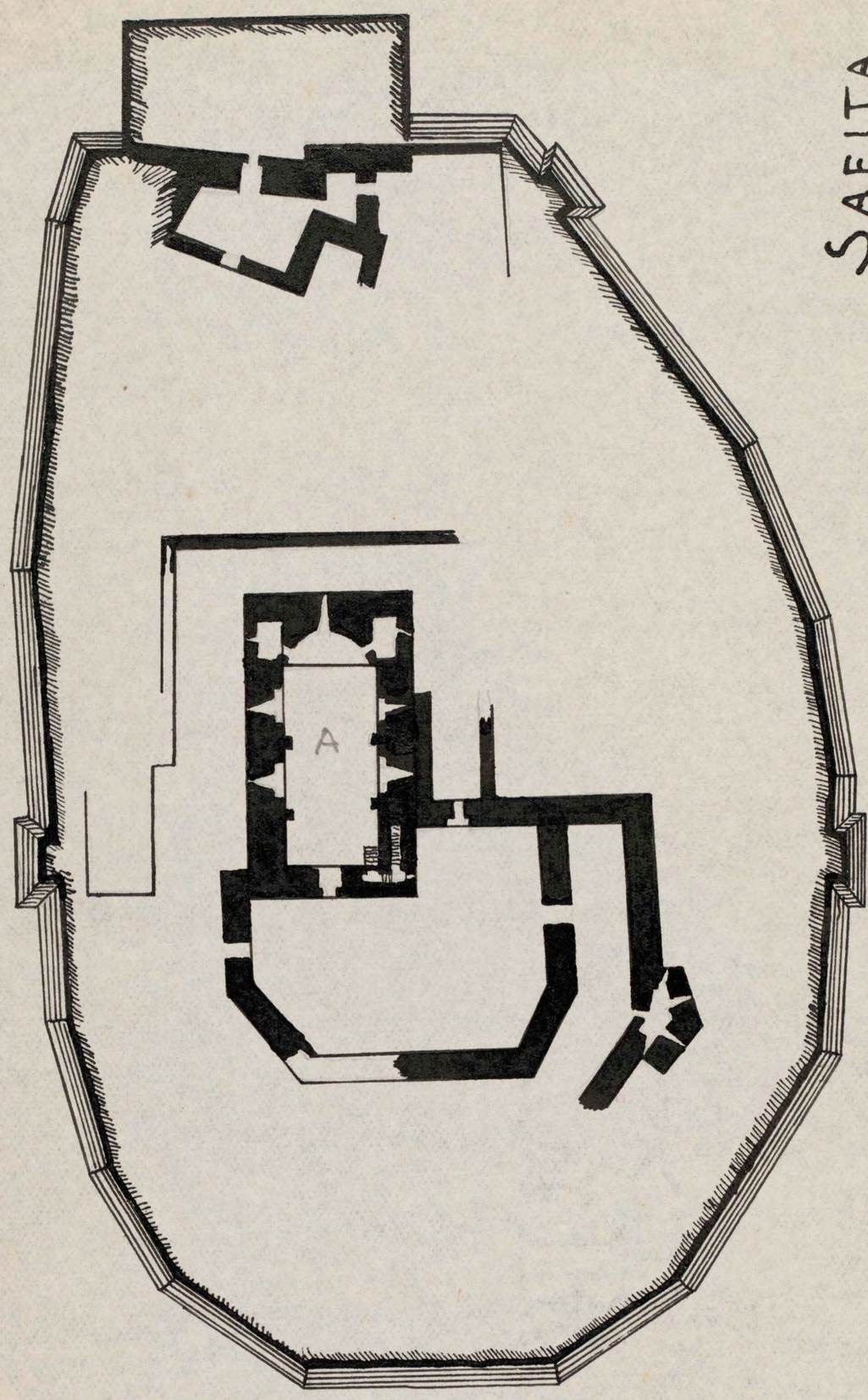
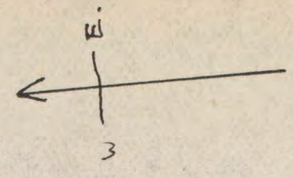
37.

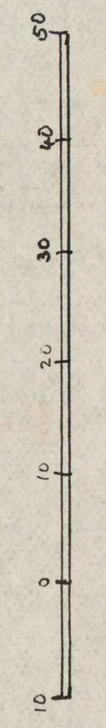




SAFITA

A. KEEP. (CHASTEL BLANC)

REY. PL. IX.



broad enough for a cross-bow. The archer would be forced to stand back within the tower ; and to pass a yard-long arrow or broad quarrell through a slit three inches or less in width is a feat requiring some skill, even if the shot is to be straight ahead. Through such loopholes as those in the garden wall of New College Oxford an arc of fire only 21 yards long at a range of 100 yards is the maximum. Walls generally speaking are always defended from the top.

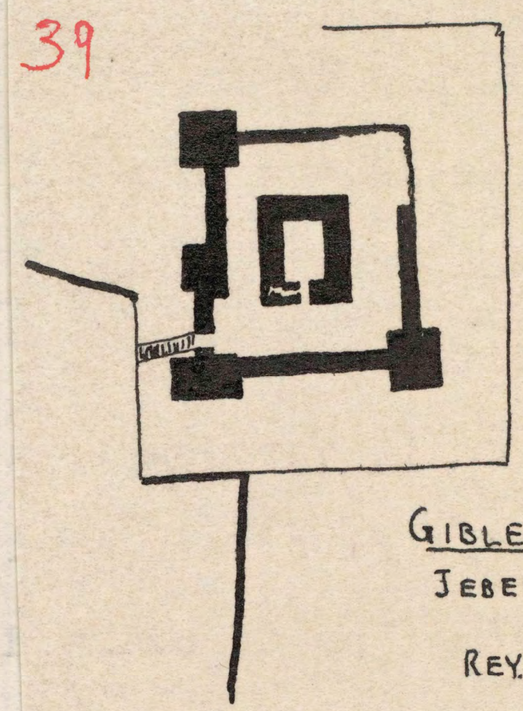
An efficient arc.

The loops at Safita are evidently intended only to light the chapel, and they do it very badly at that. Those of the hall occupying the first floor (XLV) are a little broader, but it is hardly possible from them to command the ground near the foot of the tower. The roof on the other hand is flat and unemcumbered with fittings, and on the top of each merlon is a recessed socket, for the swinging bar of the shutter that closed the crenellations (38): this shows that some use was made of it in attacks, but even so the keep of Safita can never have been a very efficient stronghold. It would be crowded with a garrison of 200 men and the necessary stores, which must have included water, for the upper floor (evidently meant, by its door, as a last resort) has no means of access to the cistern in the foundations.

The battlements of Safita are the oldest extant

The keep can never have stood alone. There are remains of walls to the east, and in Rey's plan (34) they are more comprehensible than to-day, since the governor of the district is

39

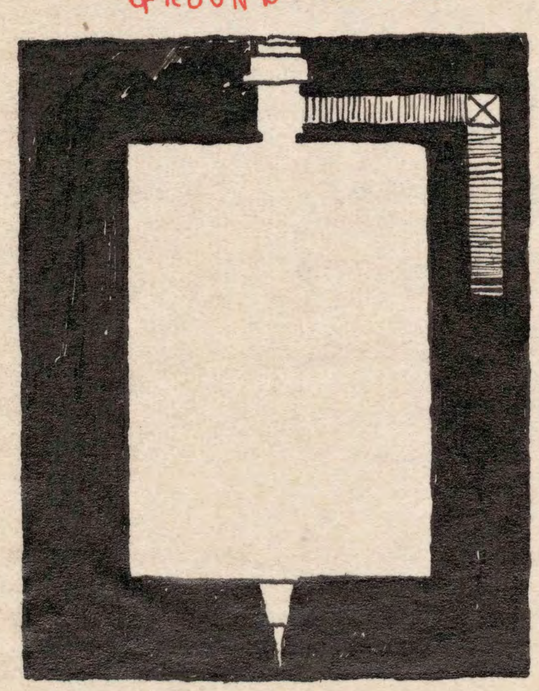


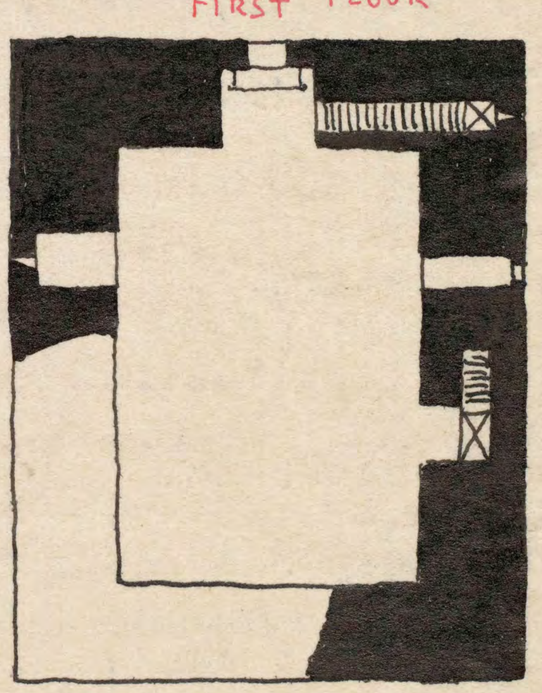
GIBLET.
JEBEIL

REY. PL. XXI

41 GROUND FLOOR

42. FIRST FLOOR





GIBLET
[JEBEIL]
Rey. pl. 119.

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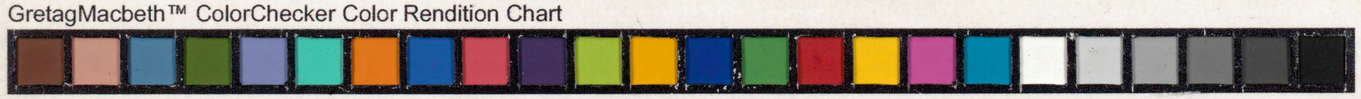


cm 1 inches 1

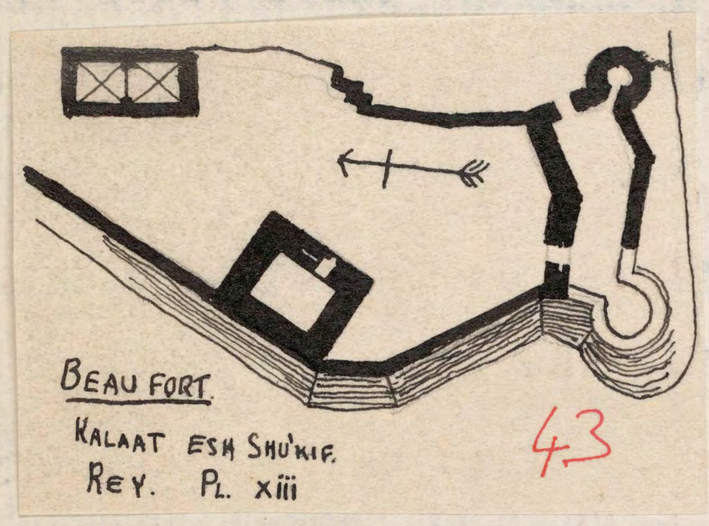
XL.

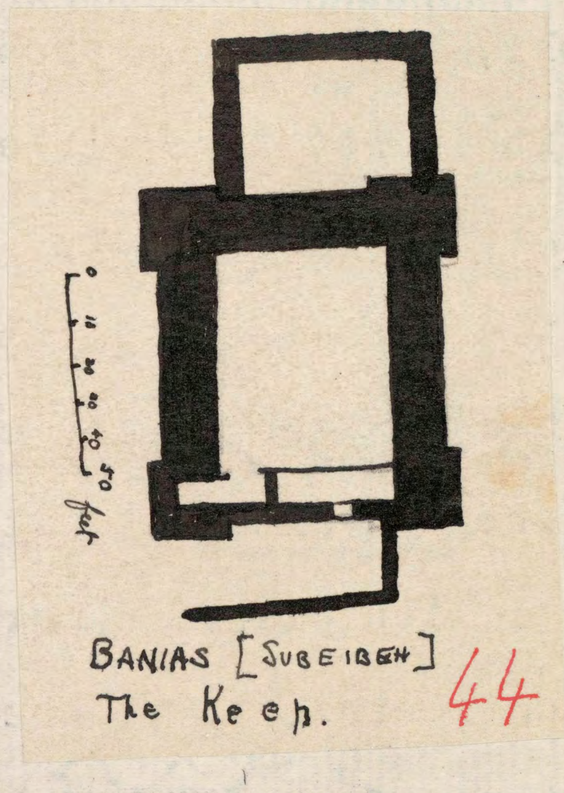
GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

grubbing them up to provide site and building material for his own residence. Below these yet further there is a ring wall of polygonal shape with a very pronounced talus completely encircling the hill. (Plan 37) This might conceivably be Byzantine work, but some little carelessness in the construction allies it rather with the pseudo-Byzantine style adopted by the Templars in the late twelfth and early thirteenth centuries. Safita was one of the chief fiefs of Tripoli, and as such probably existed in Byzantine times, so that it is not impossible that the wall is earlier than the coming of the Crusaders. At any rate it is perfectly evident, from the difference in technique that the builders of the keep had no hand in its construction. If it existed already, they took advantage of it : if not, they must have had something in its place. There would have been time between 1140 (supposing this to be the date of the keep) and 1220 for such an outer defence to have fallen into disrepair, or even to have become inadequate, for in Syria, with the constant fighting, development in military architecture came quickly.

At Giblet (Gebal, Byblus, Jebeil جبيل) the square keep of exceptionally heavy masonry presents one or two features of late date. The gateway has a portcullis,(41) and the parapet is two-storied, and of exceptional height, exactly like the inner curtain wall of a Byzantine fortress. Otherwise there is little to distinguish the keep from the others of its class,


BEAU FORT.
KALAAT ESH SHU'KIF.
REY. PL. XIII
43


0 10 20 30 40 50 feet
BANIAS [SUBEIBEH]
The Keep.
44

though the vault is managed entirely without pillars. The outer buildings (39) are of Latin construction, and perhaps contemporary.

These are the more important keeps yet standing in Syria. The remains of those at Botron (Batrum البترون) and Caesarea are sufficient only to show that there had been a square keep there : the keep at Beaufort (43) (Kalaat esh Shukif قلعة الشقيف) is of small size, and much damaged, and that at Banias (بنياس) (44) in the great castle of Subeibeh (سبيبة) on the hill above the springs of the Jordan has also suffered considerably. It had walls some eighteen feet thick, and its dimensions are reasonably large (90 feet long by 83 feet broad). The opportunities of the various Latin occupations of the place point to its being very early indeed in date.

Very good wants more work

Jean of Rigmin Brus. before 1135.

It will be evident from this summary sketch of the early Latin fortresses in Syria that the feudal nobility, who first were faced with the need for castle-building, allowed no interference with their plans of Greek architects. The shapeless, defenceless Norman keeps went up all over the country, with hardly an attempt at improvement. The parapets of keeps are sometimes a little elaborated, though at Safita the old simple fashion of Europe is maintained unaltered, and this is the largest, and on the whole the finest keep in Syria. One cannot as a rule say what the outworks of these keeps were like. It was not possible in the hills of central Syria to

GretagMacbeth™ ColorChecker Color Rendition Chart

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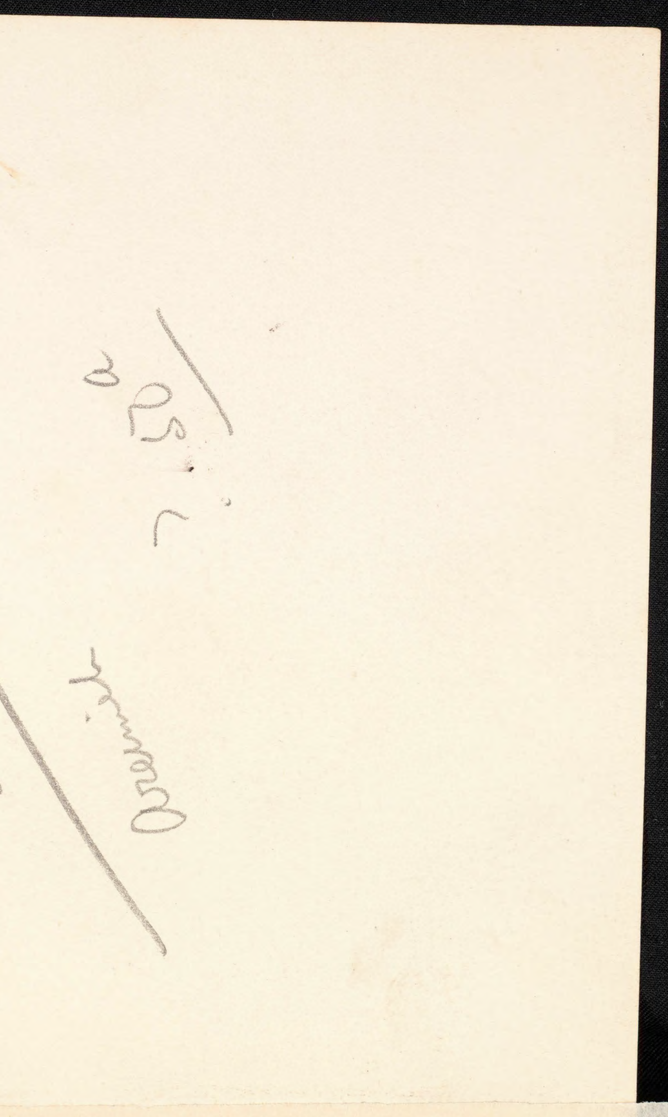

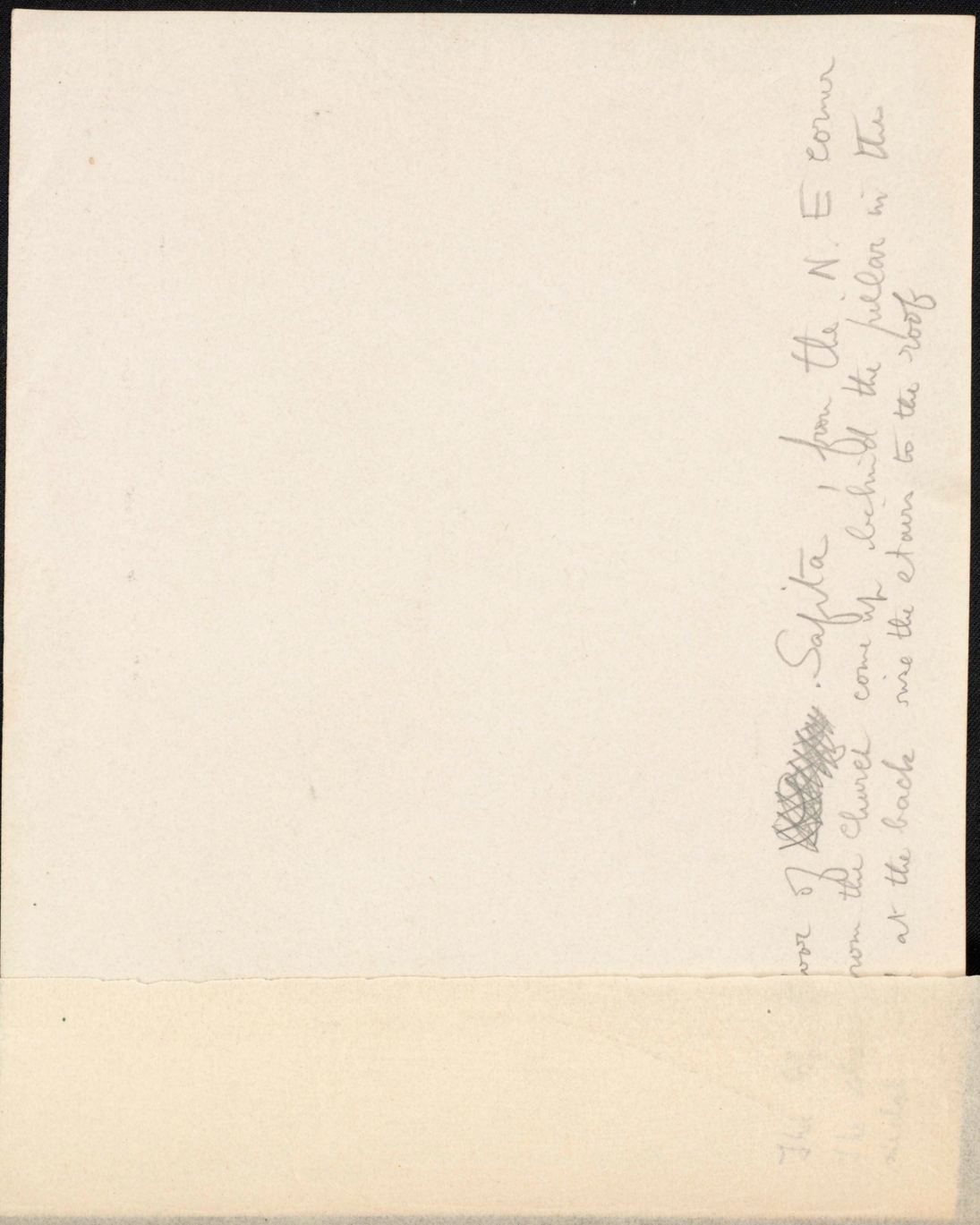

XLV. Safita, the upper tower.

GretagMacbeth™ ColorChecker Color Rendition Chart

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to dig out a ditch, and line the mound inside with a palisade : for one thing there was no wood, and for another no earth. The chipping out of a moat like that of Saone in a basalt cliff demanded careful consideration, and unlimited leisure and the lack of this time and means persuaded the Latins, as might have been expected, to take over and utilise so far as possible existing Greek fortresses. In course of time, they put up imitations of Byzantine enceintes simply through force of custom : but it is evident that there was no rapid, complete abandonment of Western principles in fortification. The Normans and Provencals thought their keeps better than anything the Greeks could offer.

The general agreement seems to be that the square keeps in the East were built before the middle of the twelfth century This date would suit fairly well with most of them. In Europe of course the form continued in favour a few years longer (though probably the number new-built decreased rapidly each year after 1150), but in Syria only Safita and Giblet appear to be as late : - Giblet from its portcullis, and Safita from the piers and arches of its upper hall (XLV) On the other hand there is at present very little known about the development of Latin Architecture in the East, so that a building which in France would be thirteenth century, might be twelfth century in Syria : and the mouldings and forms of the work at Safita are so plain that deductions from them

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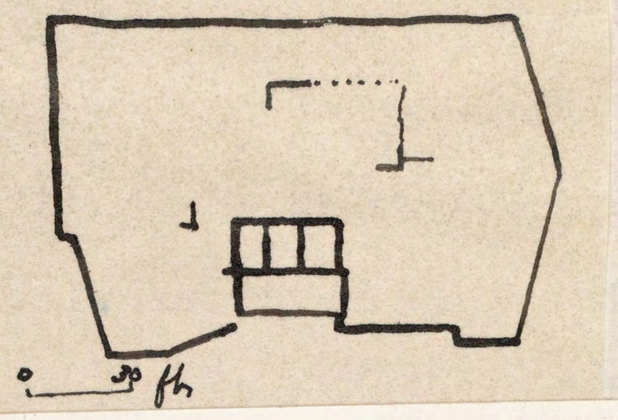
are exceedingly delicate. One thing is quite certain : the keep form of castle in Syria is the earliest.

To determine what followed these ~~castles~~ Keeps in the favour of the Latins is a more complicated question. Of course there were multitudes of castles built between 1150 and 1200, but, for one thing, these buildings are hard to get at and, for another, when reached they have invariably been rebuilt. The only exception to the rule is the little hold of the Chastellet or Castle Jacob (Bet el Ahsan بيت الحسن or Kaldat Gisr Benat Yakub حصر بنات يعقوب) two miles down the river Jordan below Lake Haleh. It was begun, finished, taken, and destroyed in 1178 - 79, but unfortunately Saladin's troops razed it so completely that it is almost uninteresting. What does remain fairly visible is mainly a towerless curtain-wall of no great strength. Saladin probably found it much the same, since it was built in five months, and mined in five days. There was never more than a single line of wall.

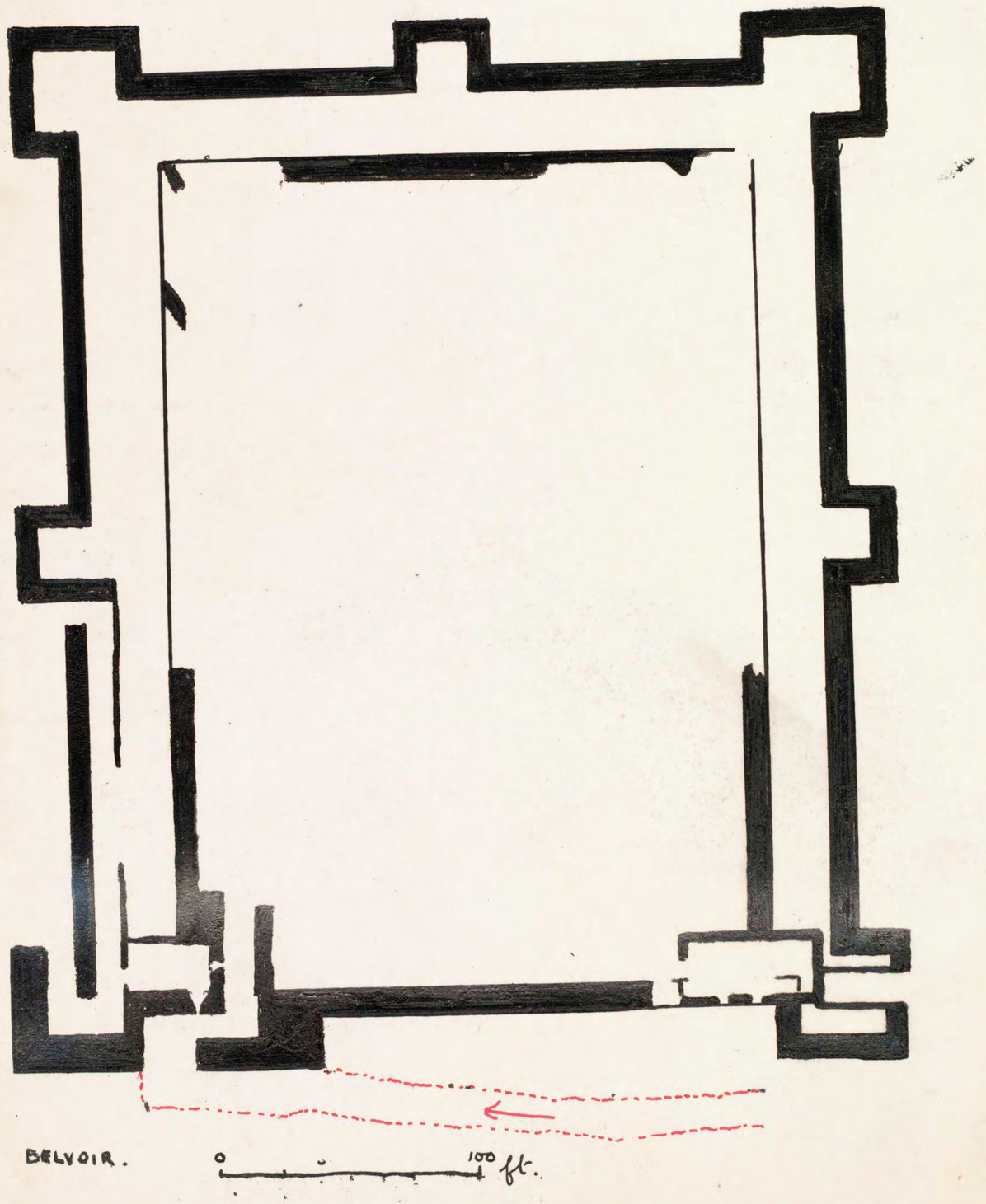
But they scarped the rock

The group of castles around Tiberias, and as far to the north as Beaufort are all known to have been built in the latter half of the twelfth century. They are Safed, built in 1140 rebuilt c. 1180, and again c. 1266, a Templar castle ; Hunin destroyed in 1167 and 1187 and rebuilt by Baibars, with Safed, in 1267 ; Toron (Tibnin تبنين) built before 1105 in the first instance, and again after 1150, after 1218, and at some date in the sixteenth or seventeenth centuries ; Belvoir

THE CASTLE AT HUNIN. 46



44.



C.H.C. PIRIE-GORDON

(Kaukab el Hawa كوكب الهوا) built about 1180, taken from the Latins in 1188 and rebuilt since and Tiberias, restored and rebuilt most frequently, till the last century. The great castle at Bahias (Subeibeh) stands on a different plane from the others and must be considered with the rest of the Hospitaller fortresses. Of the others Toron and Tiberias are both hopeless, since the present buildings are not even on the foundations of the old.

The first salient feature of all these fortresses, however, is their very close imitation of Byzantine models. Hunin (46) and Belvoir (47) with their broad, though shallow rock moats, and their very flat rectangular curtain towers, are quite unlike any work of the period in Europe. They are rather fore-runners of the later buildings of the Order of the Temple. It is quite reasonable to suppose that all the original masonry has been replaced at one time or other : but things that can never be destroyed are the rock-moats, and only the little depth that these possess proves them to have been by other hands than the Greeks.(1) The plans show practically everything that can be traced above ground, but this, though Greek in style, is all ~~the~~ more likely to be the work of Baibars.

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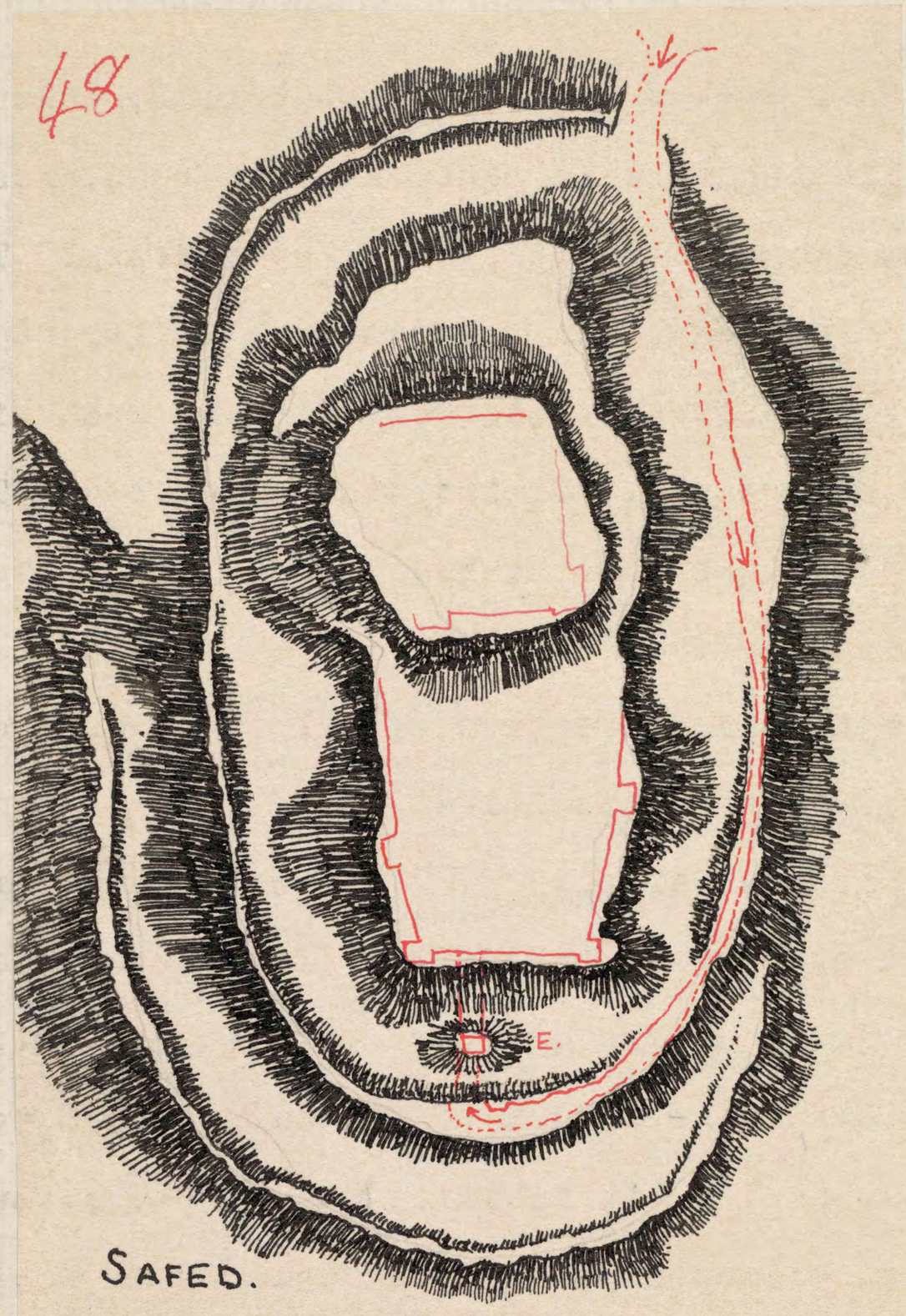
(1) At Belvoir Rey declares that there are traces of a square keep inside the ditch and wall, and this of course if true would be somewhat puzzling : neither Mr. Pirie-Gordon nor myself however could find the slightest trace of its existence. Rey was probably deceived by the wall of some Arab house.


48
E.
SAFED.

Safed is much more interesting. The castle hill (48) is reasonably well covered with soil, and in consequence the ditches around the castle present a more European form. Earthquakes, and the expansion of the Jewish quarter between them - account for the disappearance of every stone in the building : fortunately a huge vaulted store-pit beneath the inner ward remains to prove the date of the place. The entrance along the earthworks is very interesting : probably it crossed the moat by some sort of bridge resting on a tower that capped the mound E. There were evidently other towers (rectangular) restored conjecturally in red, along the top of the mounds. If complete Safed would have been one of the most valuable fortresses in Syria. It belonged to the Templars.

Professor Oman quotes from William of Tyre (1) the description of Darum in the southern coasts of Palestine, built by Amaury about 1160 on a purely Byzantine plan, like the outworks of Giblet. There is now nothing whatever left of it : "sed absque vallo erat et sine antemurali," and its weakness is sufficiently shown by Richard's storm of in in four days in 1192. Rey attempts to associate with it Blanche-Garde and Ibelin, but excavations at Blanche-Garde some years ago proved his plan (2) wholly imaginary.

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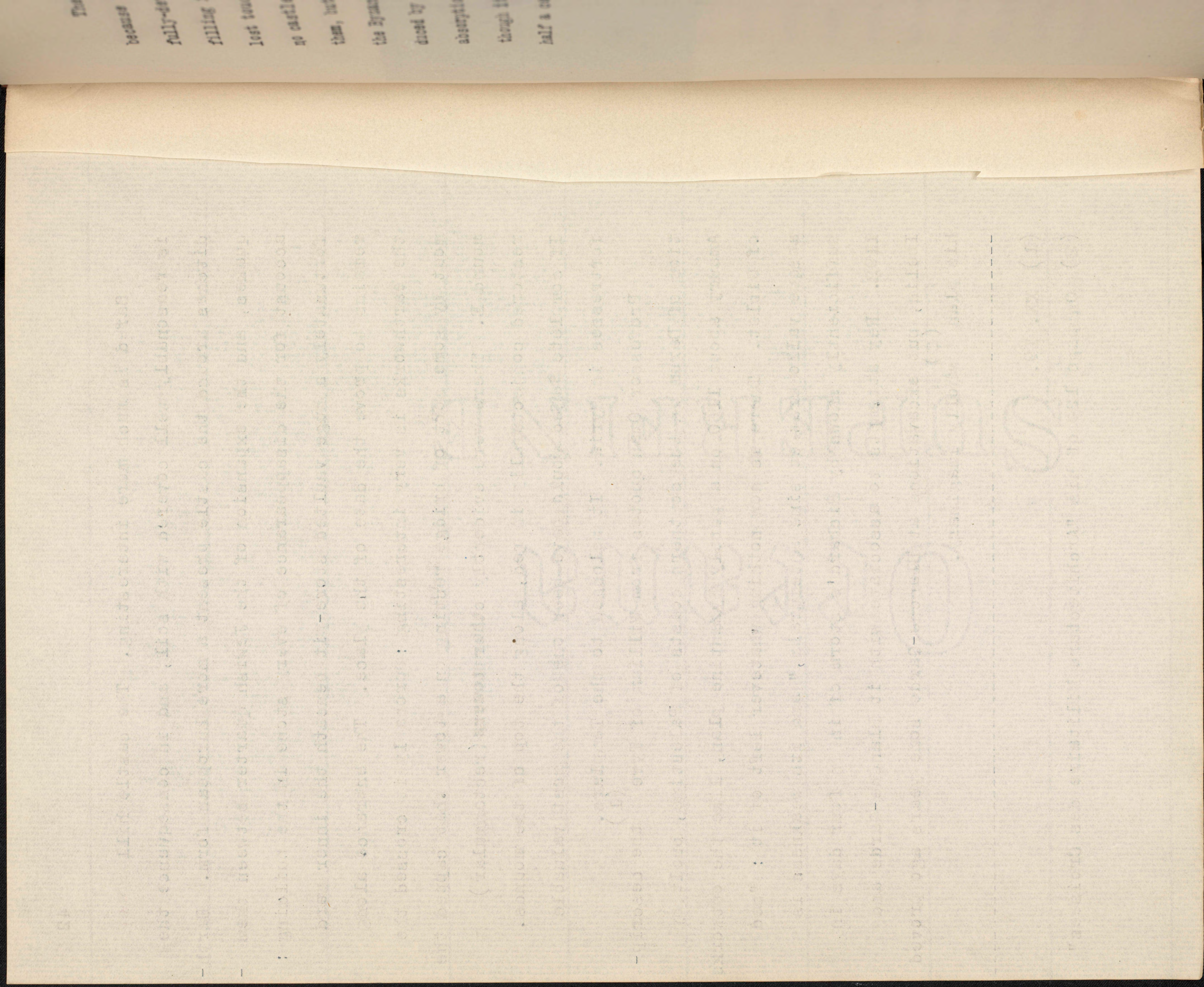
(1) XX. 19.

(2) On page 124 of his "Architecture Militaire des Croisées"



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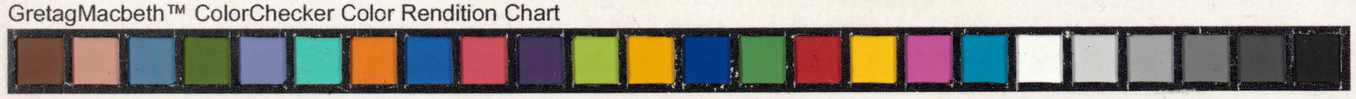

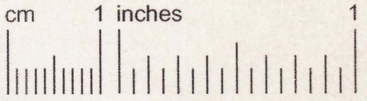

These few not very important castles have been dwelt on because they fill the gap between the square keeps and the fully-developed fortresses of the two great orders : and in filling it they show incidentally how entirely the East had lost touch with the West in military engineering. There is no castle in France with the least resemblance to any one of them, but there are numbers most clearly related all along the Byzantine frontiers. If these castles were the last produced by the Latins, the classical view as to their entire absorption in Byzantine ideas would be more than justified : though it would be worth noting that the absorption took over half a century to bear fruit.

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Kalaat - el - Atom (Iraq)
Babylonian temple
on the Euphrates
Small brick base
of ancient
temple
front

GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

The establishment of the military orders in all the frontier fortresses of the Latin Kingdom meant a new era in Syrian castle-building. It is only too evident in studying the works of the private holders of fiefs, even of important ones, that a lack of material resources, of money and labour, hampered their efforts most cruelly. Another obstacle to elaborate defence-works was the insecurity of tenure. Families were continually dying out, with the abnormal death-rate of Palestine through disease and accident, and besides this fiefs were continually transferred. The military orders were ideally fitted for such conditions. The members were celibate, and so easy to control, and without private interests : they had no heirs to search after, and no domain to preserve intact. Then the orders were everlasting, with an inexhaustible supply of the finest chivalry in Europe to draw upon in case of need. The military ability of the commanders, and of the simple members of either order is again and again brought out in striking contrast with the inefficiency of the laymen of the kingdom. There was a tradition, after a little, among the knights of the conduct of warfare against the Infidel, and each new-comer of repute vivified this tradition with the fruits of his own talent and experience. Most important of all, perhaps, the orders were very rich, not only in the precarious possession of one half the most fertile land of Palestine, but in property in Europe ; property which would

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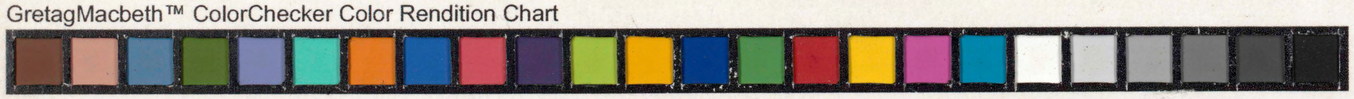

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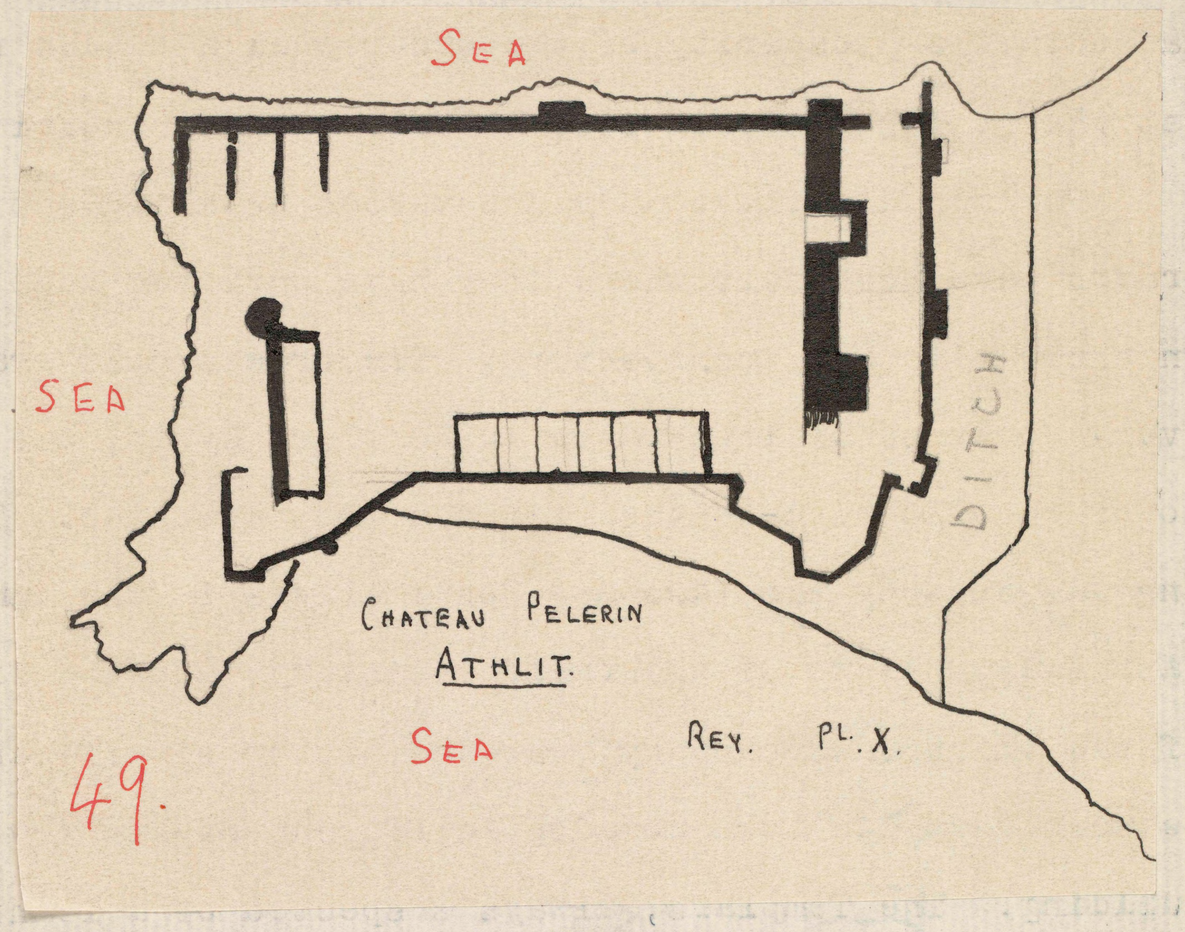
maintain the prosperity of the order when a sudden raid had set the nobles of Syria face to face with financial ruin.

Perhaps all these many and varied advantages of the orders were most felt where they have survived most clearly, in their military architecture. The orders held practically every fortress of importance in Northern Syria, and they added to or rebuilt nine-tenths of those they occupied. This building was done by Templars and Hospitallers in the same period, the last twenty years of the twelfth century, and the first half of the thirteenth century, but the bitter rivalry and jealousy between them led them to adopt different styles for their building. The Templars, always suspected of a leaning towards mysterious Eastern arts and heresies, took up the mantle of Justinian, as represented by the degenerate fortresses in ~~Southern~~ Northern Syria, and amplified it, in making it more simple. The Hospitallers, in harmony with their more conservative tradition, drew their inspiration from the flourishing school of military architects in contemporary France, and so the inborn antipathy of East and West, which more than any one thing has been the primary cause of all Crusades was demonstrated in the fortresses of the Latin East. The two schools of builders had entirely different ideas and principles, and the two classes of buildings are entirely distinct, without a link or compromise between them. It will be easier to consider first the castles of the Templars, as the smaller class,

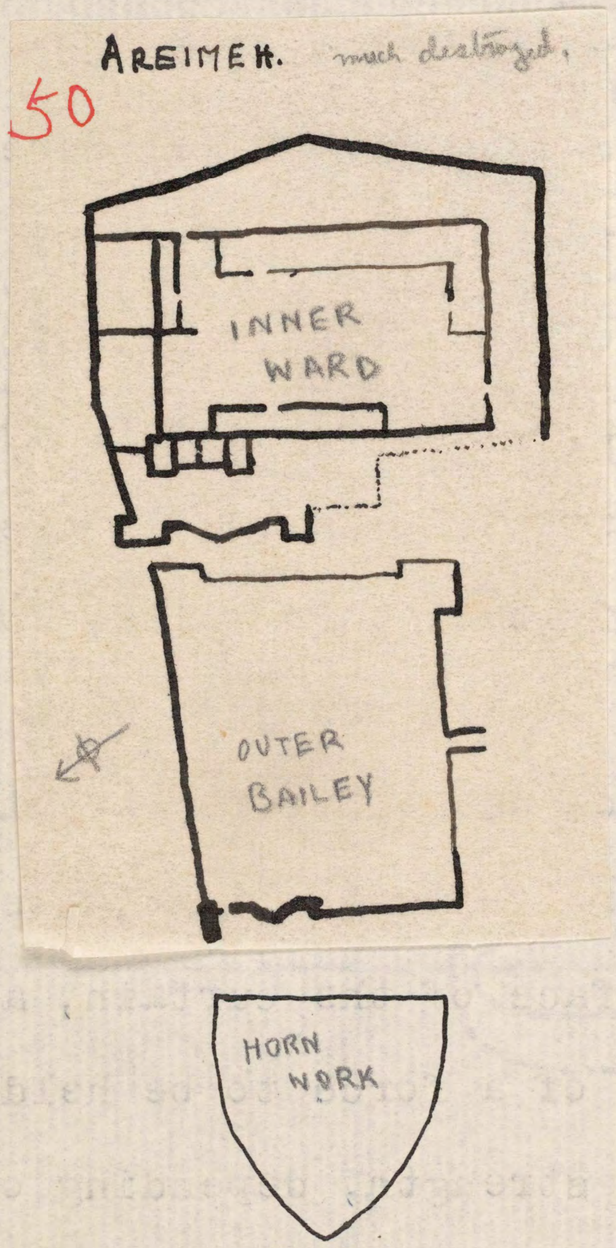


49.

and the one least fruitful of results.

The characteristics of the Templar style will be grasped at once if a plan (49) of Château Pélérin (Athlit أثليت) their chief stronghold be considered. They held possession there of a narrow promontory of rock and sand, eminently defensible according to mediaeval ways. Yet here the Templars, working in 1218, threw aside all the carefully arranged schemes of flanking fire, all the covering works, all the lines of multiple defence which were being thought out meanwhile in Europe. At Athlit they relied on the one line of defence - an enormously thick wall, of colossal blocks of stone, with two scarcely-projecting rectangular towers upon it. These were the keeps, the master towers of the fortress, and instead of being cunningly arranged where they would be least accessible, they are placed across the danger line, to bear the full brunt of the attack. One would expect them to be unusually massive, but they are in true Byzantine style of thin walls, compared with their curtain, and the hoard, which was just then being generally adopted, is not made use of to repair the weakness. The projection of these towers is very slight, insufficient to rake an enemy busied on the face of the curtain, and the little προτειχισμα in front is not of a force to be held alone. The strength of Athlit was brute strength, depending on the defenceless solidity of the inner wall, its impassable height, and the obstacle to mining of a deep sea-level ditch in the sand

One in plan 49 is shown solid: this because only the foundations are left


ARGIMEH. much destroyed.
50
INNER WARD
OUTER BAILEY
HORN WORK

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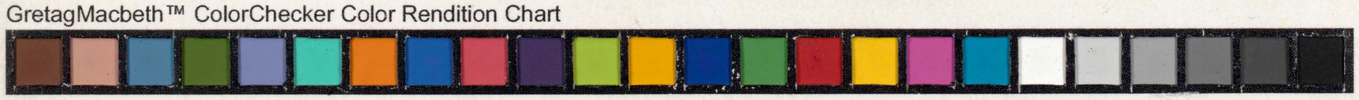

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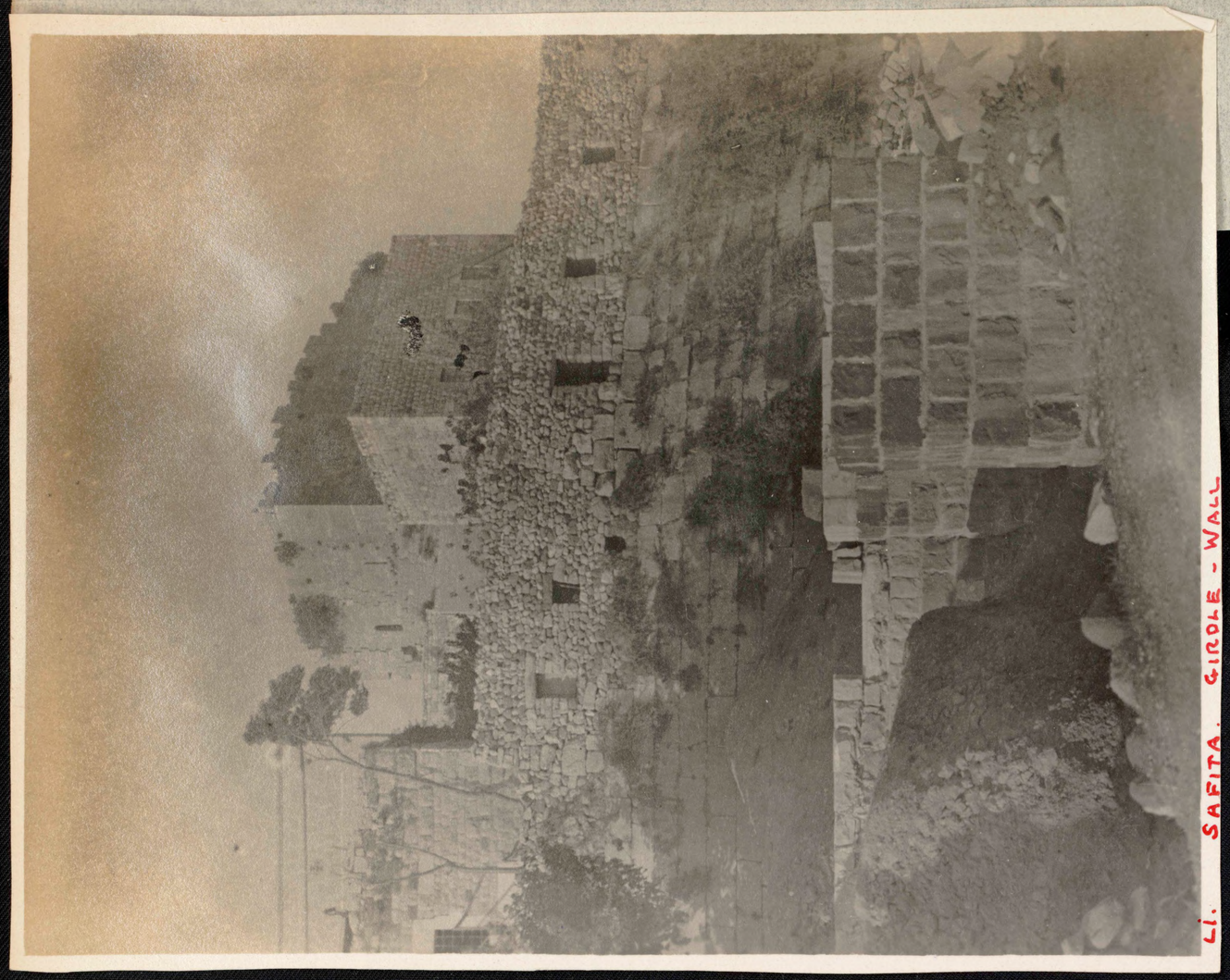

GretagMacbeth™ ColorChecker Color Rendition Chart

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and rock before the towers. The design is simply unintelligent, a reworking of the old ideas of Procopius, only half understood. Justinian, except in rare exceptions, had not intended his fortresses to stand alone, as the last refuge in a conquered country : they were temporary defences to assist the unrivalled Greek field-army. Given unlimited time and labour, anyone can make a ditch so deep and a wall so high of stones so heavy as to be impregnable : but such a place is as much a prison for its defenders as a refuge : in fact a stupidity. Such is Athlit.

Of The other still preserved Templar fortresses, that at Areymeh (عريمة)(50) is a little better. The Templars there inherited a Byzantine site, and merely rebuilt the inner ward. It stood on a hill so precipitous that attack could only be delivered on the horn-work to the West : and after that had been carried there was an outer-ward, cut off from the inner ward by a ditch. The plan explains easily the arrangement of the place. One might wish only for some curtain towers in an attack. Parts of the wall are a little bare against unexpected escalade, above all as they are mostly of very poor height. The horn-work too is not intended seriously.

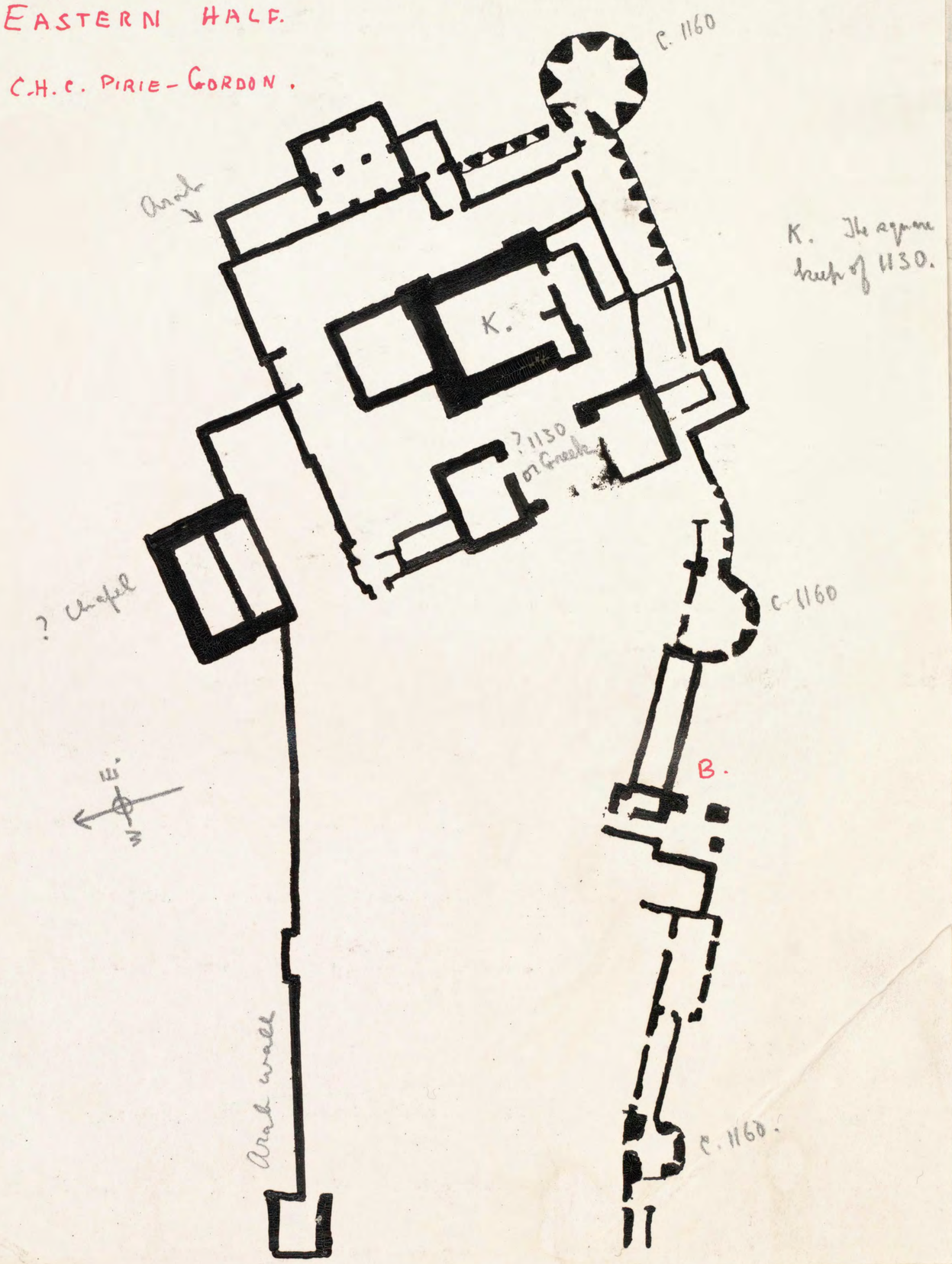
The Templars, in their very early days, built Safed, where nothing is left but an admirable series of ditches ; probably also the polygonal wall (37) that girdles the hill of Safita is due to them. It is a low wall to-day, (41) but may have

52.

BANIAS. (SUBEIBEH)

EASTERN HALF.

C.H.C. PIRIE-GORDON.



been once comparatively lofty, and it has a very great talus. Its numerous dead angles, undefended, are however the reverse of attractive. Tortosa was another great fief of the Templars: they seem to have occupied it in 1180, or the year after, when the great square tower, described in the siege of the place after Hattin, was already standing. For the rest, Tortosa is defended (29) by semi-circular ditches and slight curtain towers, apparently of the Byzantine age, for it was a fortress when the Latins came, and the present arrangement of ditches is almost the only possible one. The walls are little credit to their designer.

It is more pleasant to turn to the buildings of the knights of the Hospital, finding the beginnings of their work in parts of their castle of Banias, and tracing it down through Crac and Markab. From the beginning it is a style absolutely different from the pseudo-Byzantine in fashion in Syria when it was introduced, and it left no legacy behind it in the Arab fortifications of a later date, except conceivably in the box machicoulis so common in Arab work of the late thirteenth century.

Banias, which is the earliest Hospitaller castle that can be certainly dated, was destroyed by El Mu'azzam in 1218, after the Hospitallers had lost it finally in 1164. It was a much-disputed place, continually besieged by one party or other, on account of its very formidable position over the great

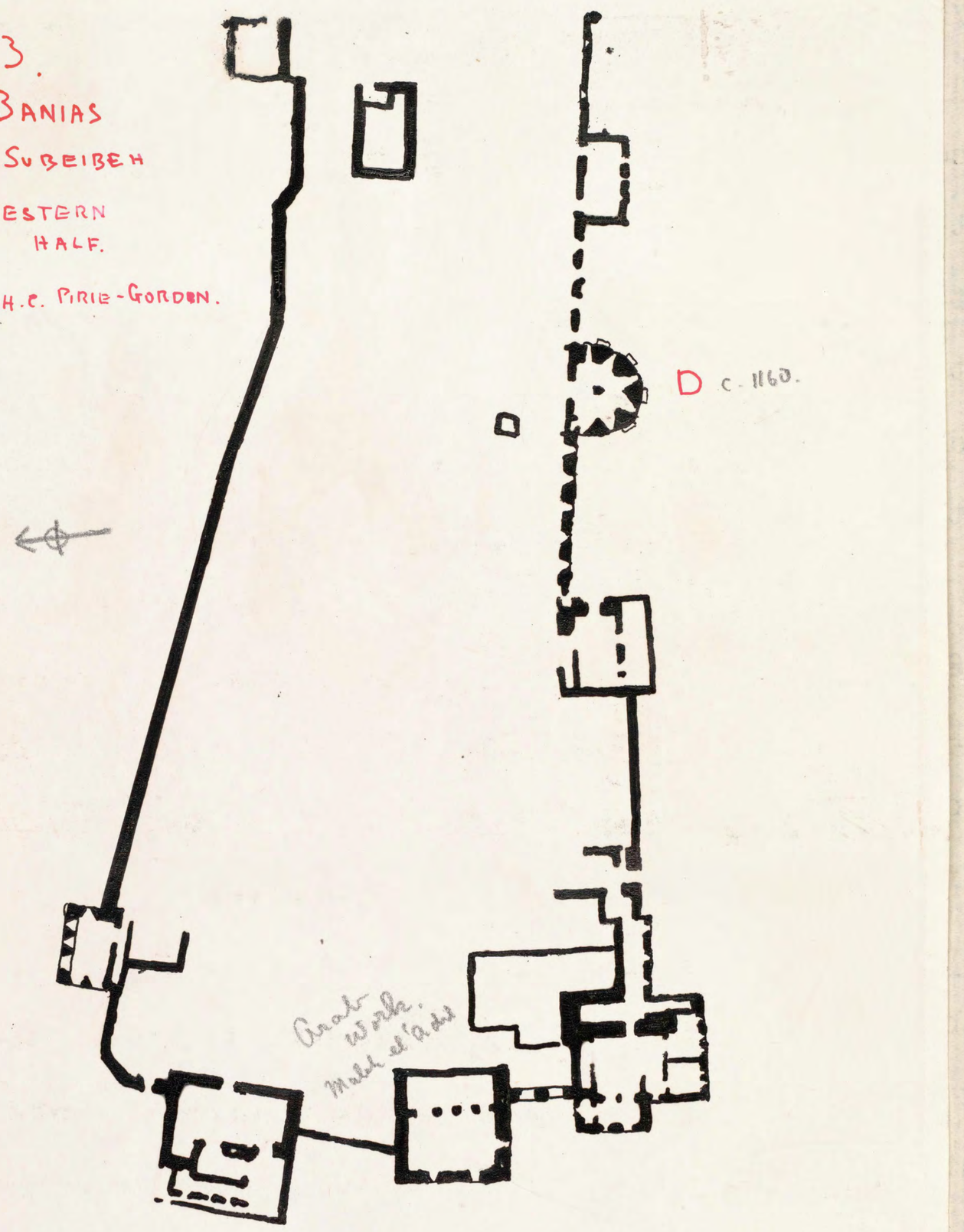
53.

BANIAS

SUBEIBEH

WESTERN HALF.

C. H. C. PIRIE-GORDON.



GretagMacbeth™ ColorChecker Color Rendition Chart
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Damascus road, and the springs of Jordan. The Franks first won it in 1129, and they held it for three years. During this time unquestionably they erected the large square keep, with pilasters at the angles, the only instance of such in Syria. The Arabs only held it one year, and then the Latins recovered it, and handed it over to the Hospitallers. The latter had thus twenty years of unbroken, though not undisturbed, occupancy. The plan (52·53) makes it evident that the large round tower on the South East of the keep, and the gallery beside it, are later additions. The style in which these and the round towers next to it, going Westwards, are built is undoubtedly Christian, and equally certainly European in origin. The Arabs never employed (the) round towers themselves, and there are other Christian features in the building that make a Mohammedan origin impossible.(1) It is worth noting also that the Hospitaller rebuilding has remained quite incomplete. The square keep and Byzantine-like forework and ditch are of one period homogeneously enough, and the four circular or semi-circular towers : the rest is Arab, and of comparatively late date. The rebuilding of the castle must have been proceeding when the Arabs recovered it, and this, if correct, would put

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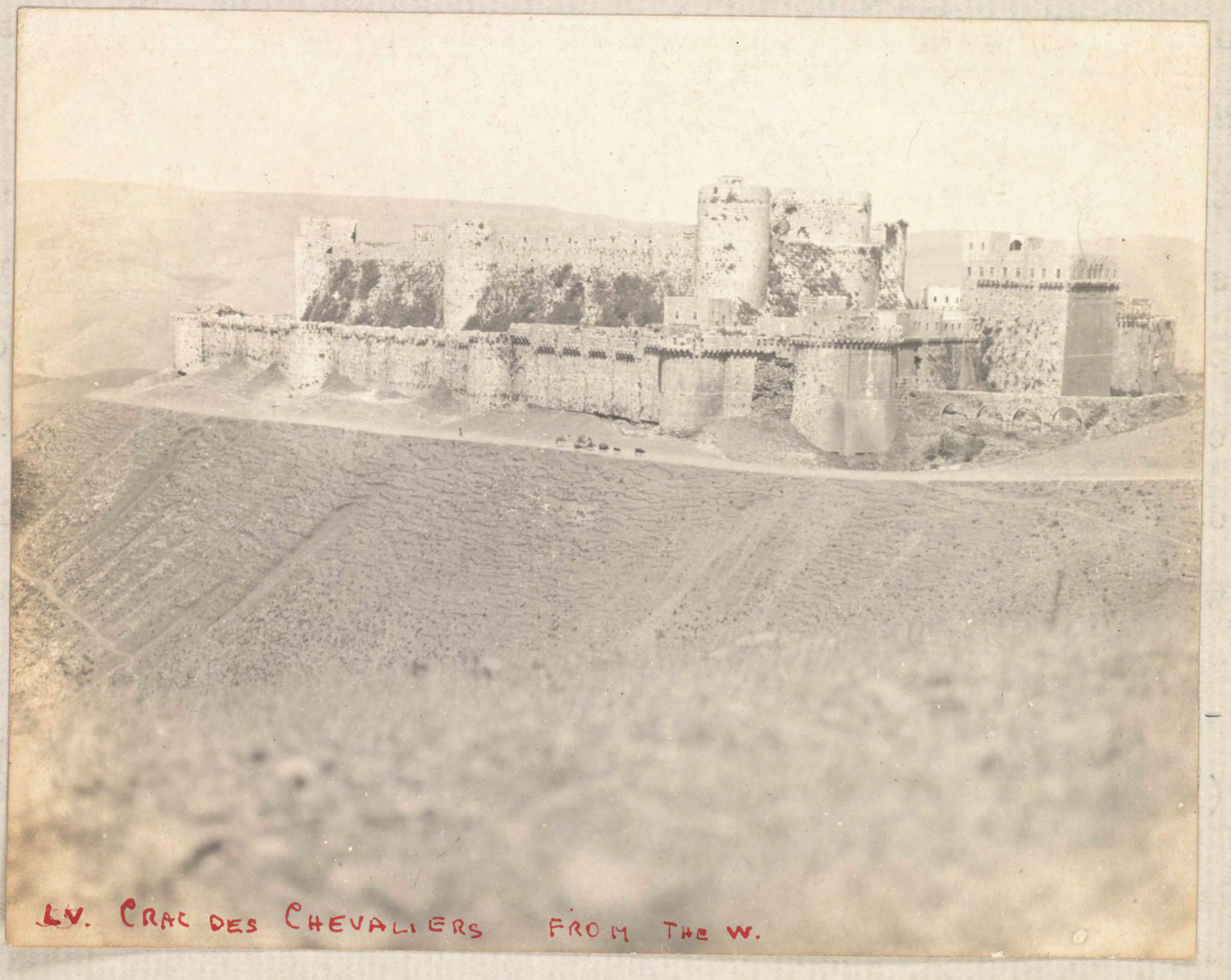
B.

(1) The gate is what C. H. C. Pirie-Gordon has named the "Hospital" gate.

54. Machicolis at Banias.



LV. CRAC DES CHEVALIERS FROM THE W.

the part remaining about the year 1160. On one of the towers (D) 53 are some machicoulis (54) and they were evidently in the original plan : there are no signs of rebuilding. Their pattern is not quite an ordinary one, since there were only a few, spaced with wide intervals around the top of a very large tower. At the same time they were unquestionably machicoulis, and not at all rudimentary in design. The common view of course is that machicoulis were invented in Syria owing to the lack of wood for hoarding ; but on the other hand they are comparatively rare in the East and the Templars, who represent the native style of building, never adopted them at all. The design of the buildings of the Hospital were on the French model, and there machicoulis have a very distinct Provencal or North-Italian feeling. (1) Banias was probably the first castle the Hospitallers put up in Syria, and yet their architect must have had frequent opportunity of building machicoulis, since only by use could their distinctly decorative quality have been developed. They do not appear on any other Crusading castle in the country : and when the Arabs adopted machicoulis they were not of this shape.

The earliest machicoulis

The other two great Hospitaller castles in the north, Crac des Chevaliers (Hosn el Akrad حصن الاقراد, Kalaat el

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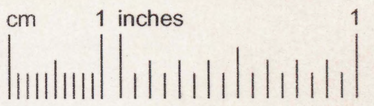
(1) According to Mr. Letheby who saw the photograph.

GretagMacbeth™ ColorChecker Color Rendition Chart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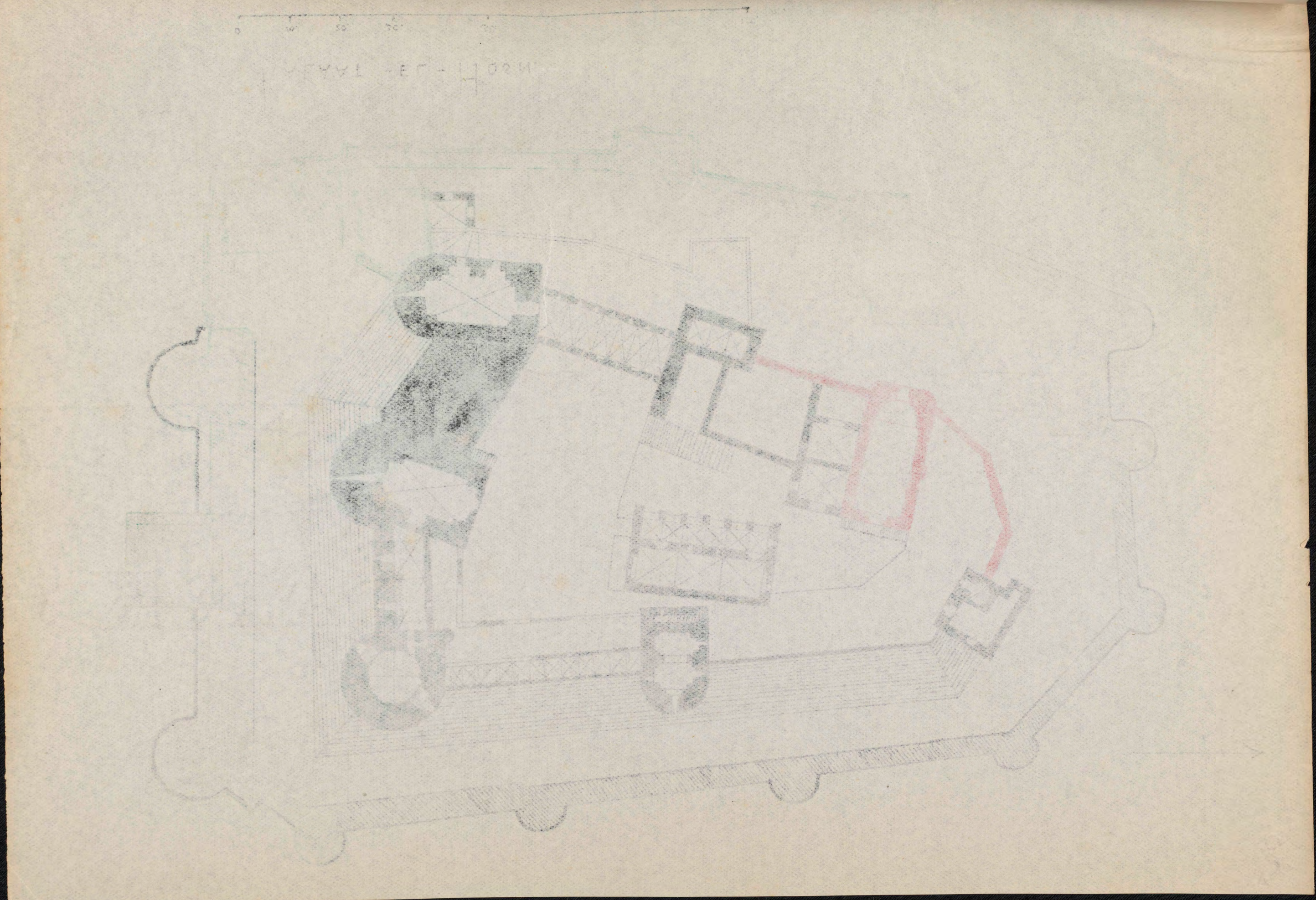

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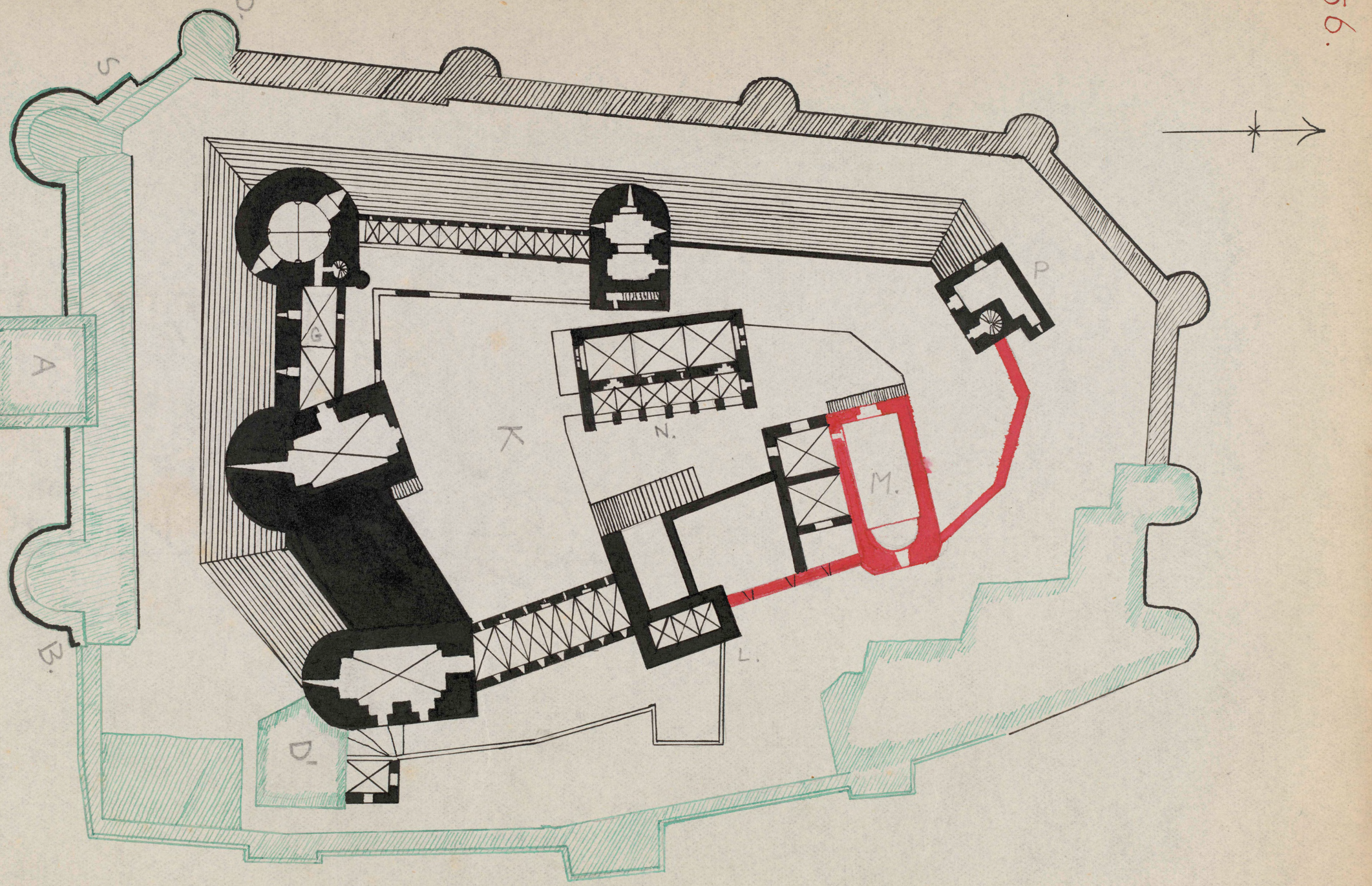

KALAAT -EL- HOSN.

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LVII. Frac
Pont-

Hosn قلعه الحصن) and Margat (Markab مرقب) both date mainly from the thirteenth century. At the same time Crac, as a finished example of the style of the Order, and perhaps the best preserved and most wholly admirable castle in the world forms a fitting commentary on any account of the Crusading buildings of Syria. It cannot compare for a moment with Coucy in France, or with Caerphilly in its science of defence, but is more impressive than both since it is neither ruin nor show place. A few years back it withstood a siege on the part of a neighbouring district with complete success, and were Baibars to reappear he would think it as formidable as of old.

There are signs of two or three periods of construction (56). In the inner ward the wall (marked red) from the tower of entry L to the tower with buttress-machicoulis P including the chapel M appears earlier than the rest of the inner ward. Of the outer ward the whole south front is Arab, and the ~~eastern~~ Western side so far as tower D. In the siege of the place in 1271 by Baibars the central tower A was entirely destroyed, and probably other parts of the outer line as well. The lower part of the three half-round towers on this stretch of wall is old. The upper parts were rebuilt by Baibars, and Malek-es-Said Bereke-Khan. Kelaoun built the square tower A, and Baibars the gate-tower D! The rest of the outer ward is Hospitaller work, though later in date than the inner ward.

LVII. CRAC from the E.

Arab work in Green

French speaking from Rey

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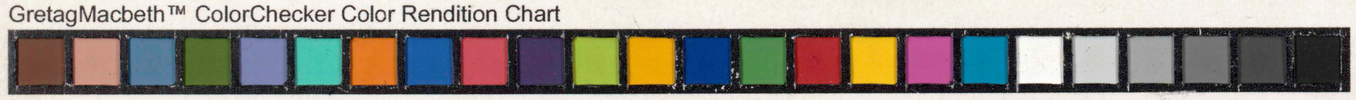

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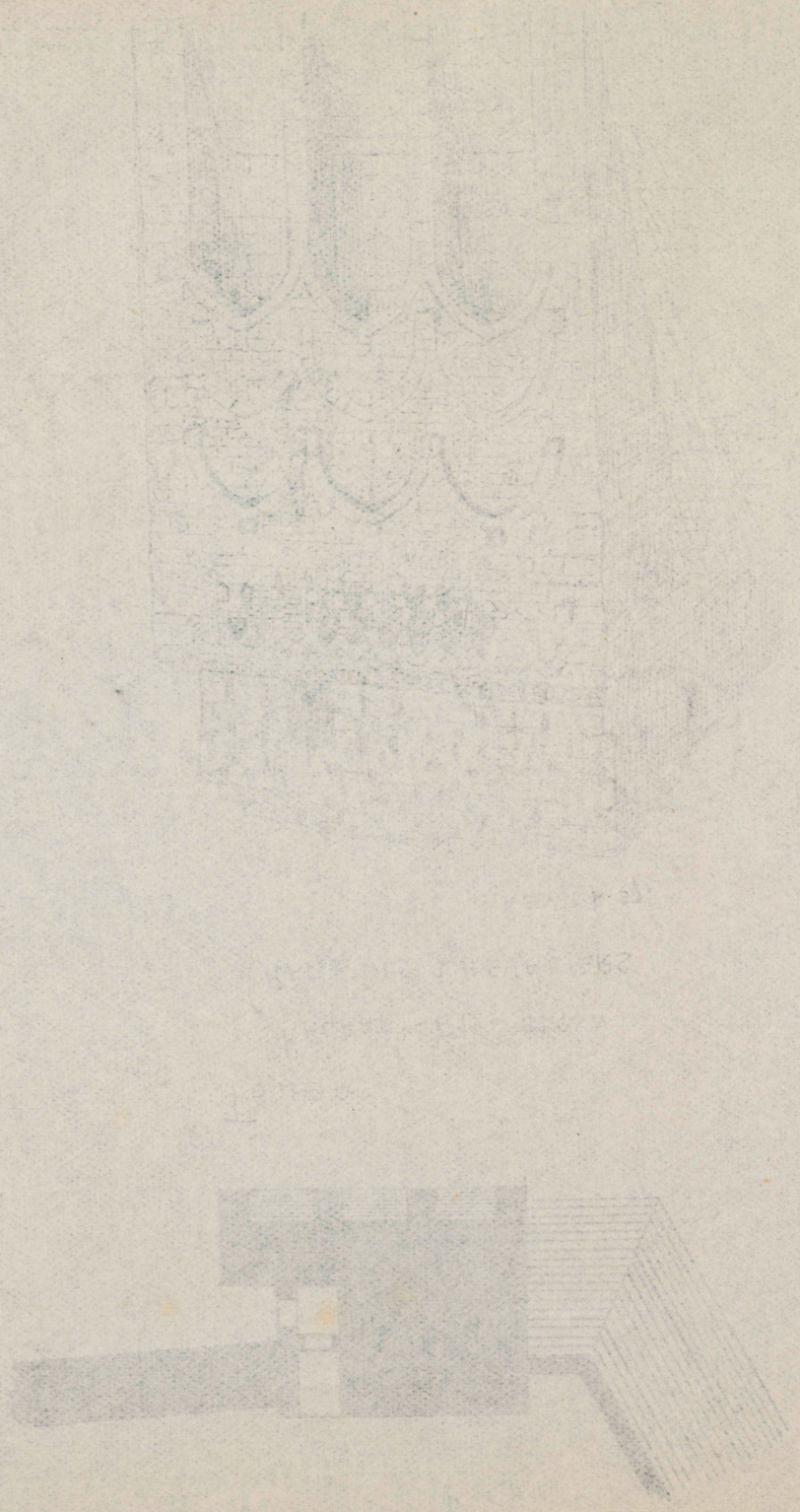

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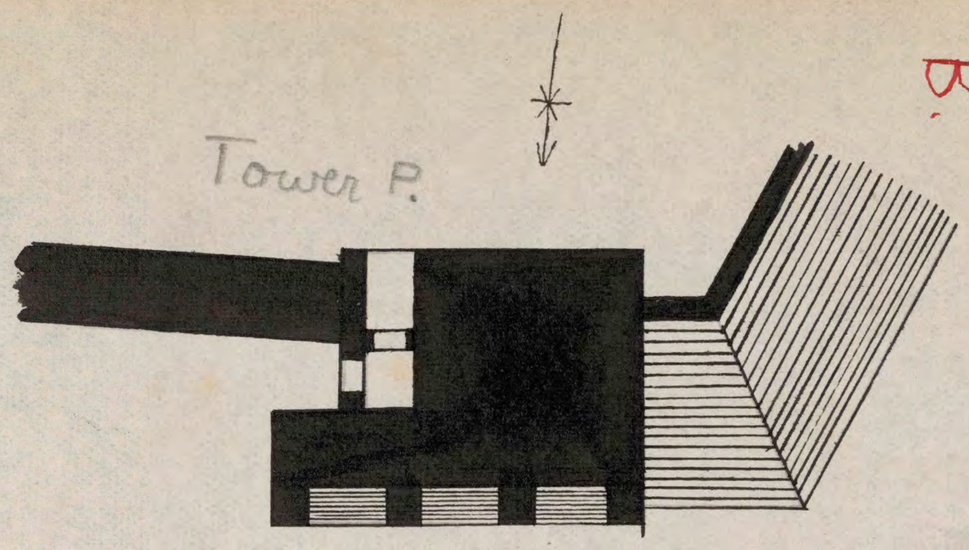
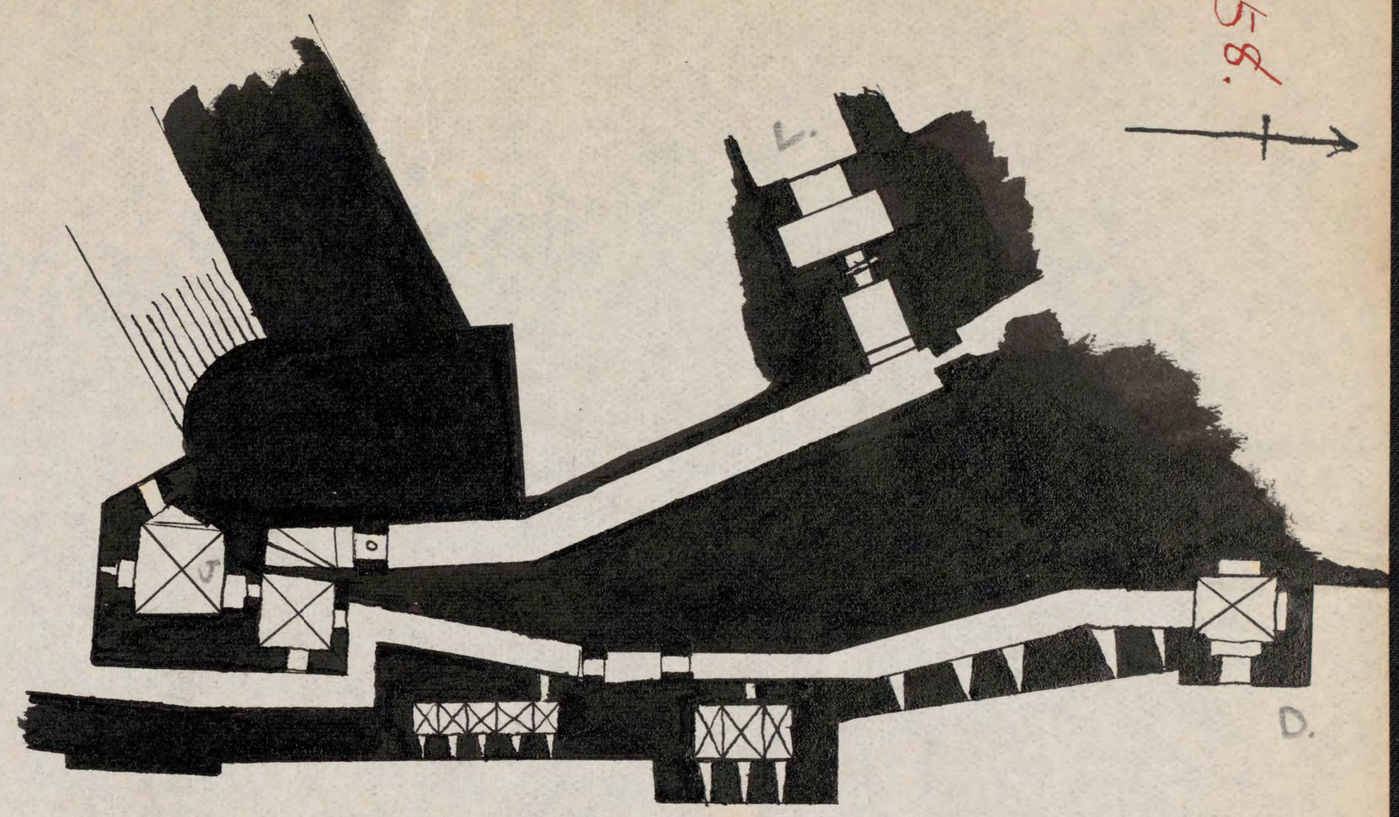


Tower P.

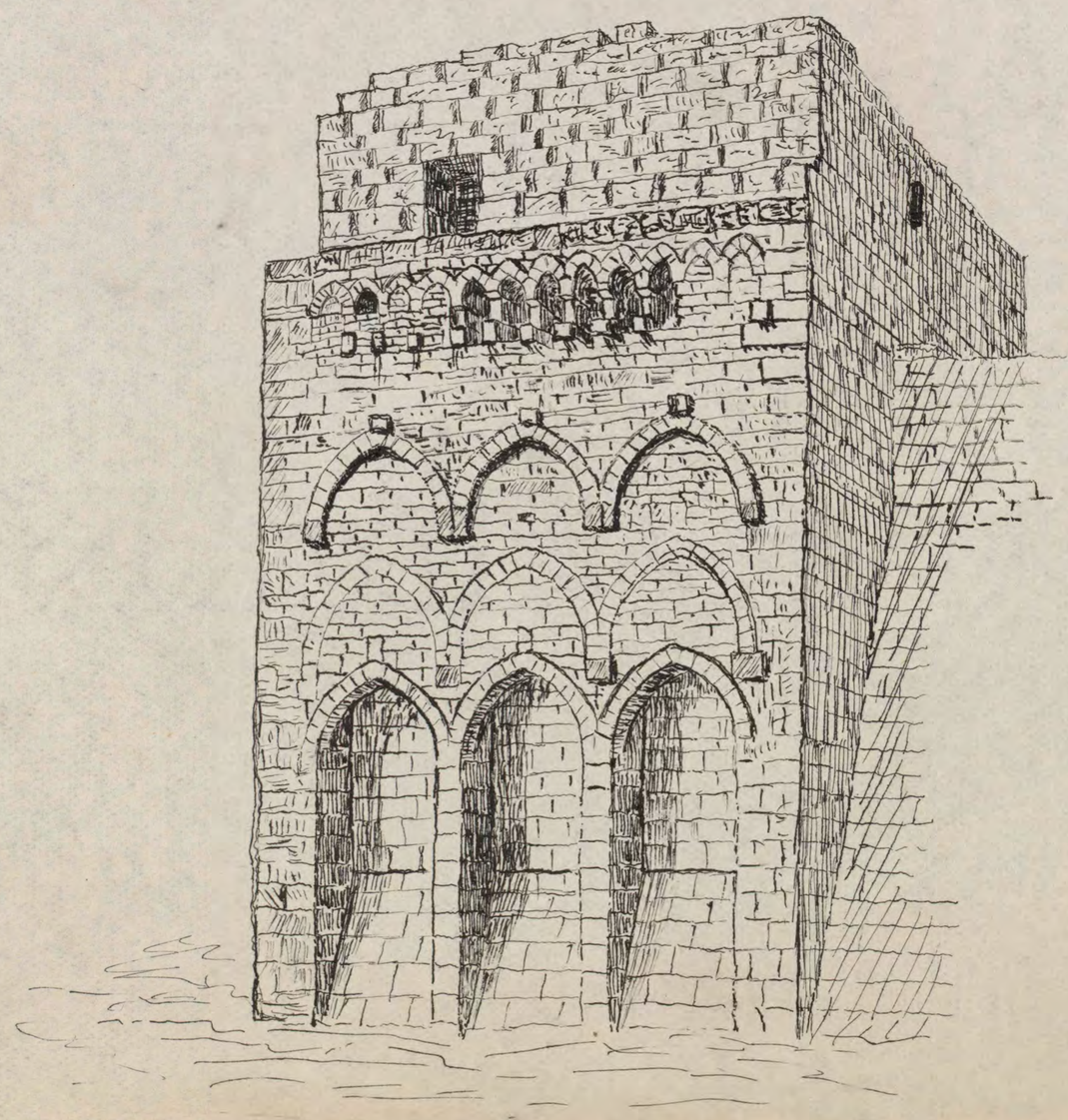
TOWER. P.
KALAAT - EL - HOSN
CRAC DES CHEVALIERS
REY. p. 57.

58.



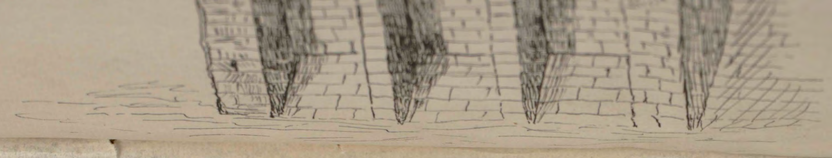
D.

0 10 20 30 40 50 m.



?

THE ENTRY.
KALAAT - EL - HOSN.
CRAC DES CHEVALIERS
REY. p. 47.



GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

Plate 55

Photo showing the [illegible] of the
LIX. temple of Ramses II, Thebes.

LIX. The hypostyle hall of the temple of Ramses II, Thebes.

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cm 1 inches 1

The castle is entered (58) at D by means of a plain gate, and then a vaulted passage, almost dark, as far as the tower J, where is a large trap-machicoulis in the roof and other defences. To reach the inner ward one must go further, to the tower L, also in a dark vaulted passage, ascending steeply. To surprise this entry would therefore be extremely difficult.(1) There are only three or four loopholes to give light and air, and the change from the glare of the sun without is most confusing. The upper gate has a portcullis, but generally it is very like the Hospital gate at Banias : through it one enters a small courtyard, opposite the great hall of the castle N. Another flight of stairs gives on the upper court K still unemcumbered with houses.(56) From it lead up more steps to G, the platform uniting the three great towers that together form the donjon. They overtop by many feet any other tower in the fortress, and are magnificently built of huge blocks of stone. The governor of the province now inhabits them, and his harem and his divan, and his own private rooms rather obscure the arrangement of the Eastern half of the platform. The Western half of it, G^1, was however vaulted (LIX)

Plan 56

Photo LIX.

From these towers the great wall, known to the Arab historians as "the mountain" slopes outwards and downwards

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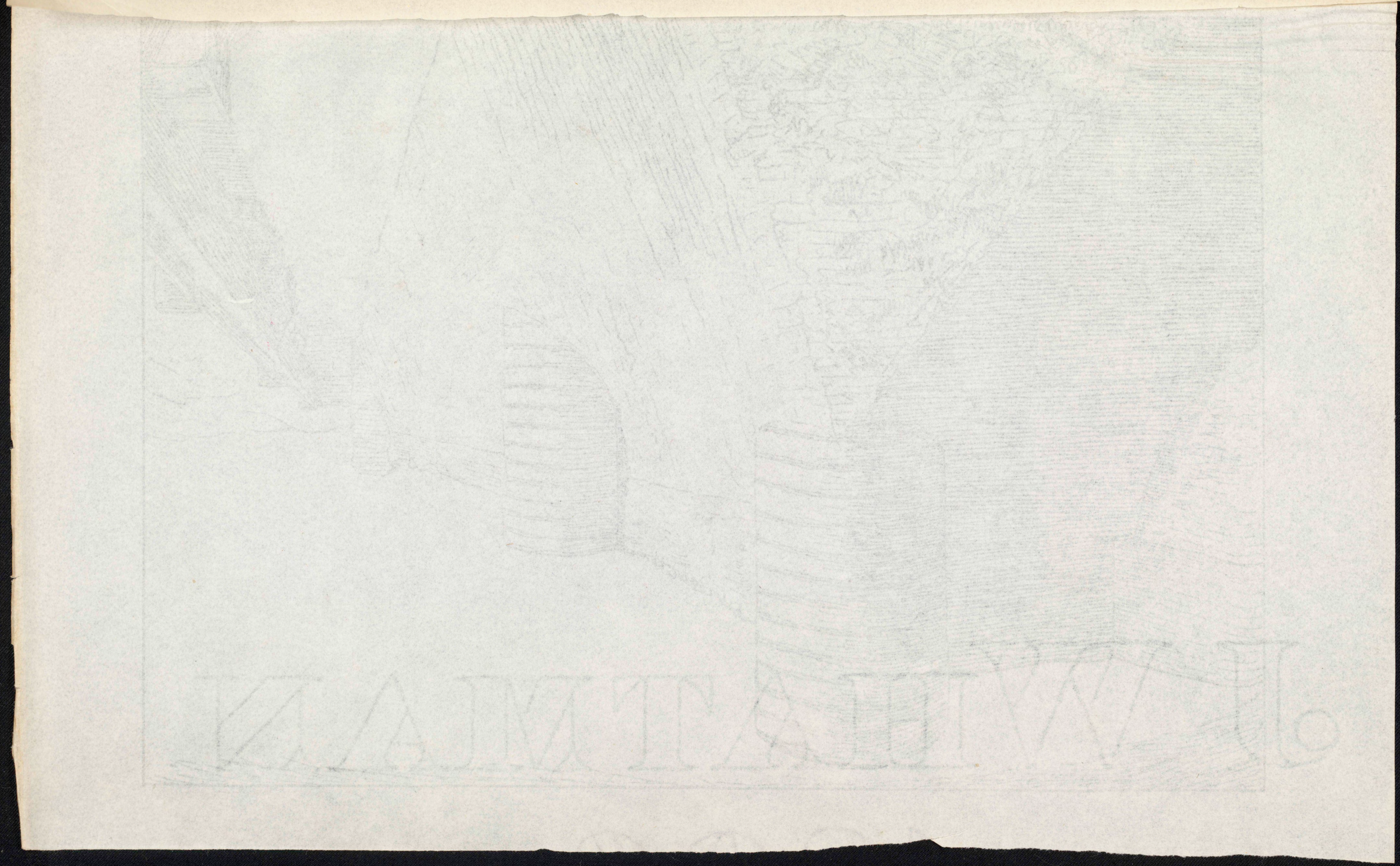
(1) It is not easy even to-day to stumble up the uneven steps, in a litter of pariah dogs and goats.

Lx. The great tower: Rue des Chevaliers: looking E.

GretagMacbeth™ ColorChecker Color Rendition Chart
cm 1 inches 1



GretagMacbeth™ ColorChecker Color Rendition Chart

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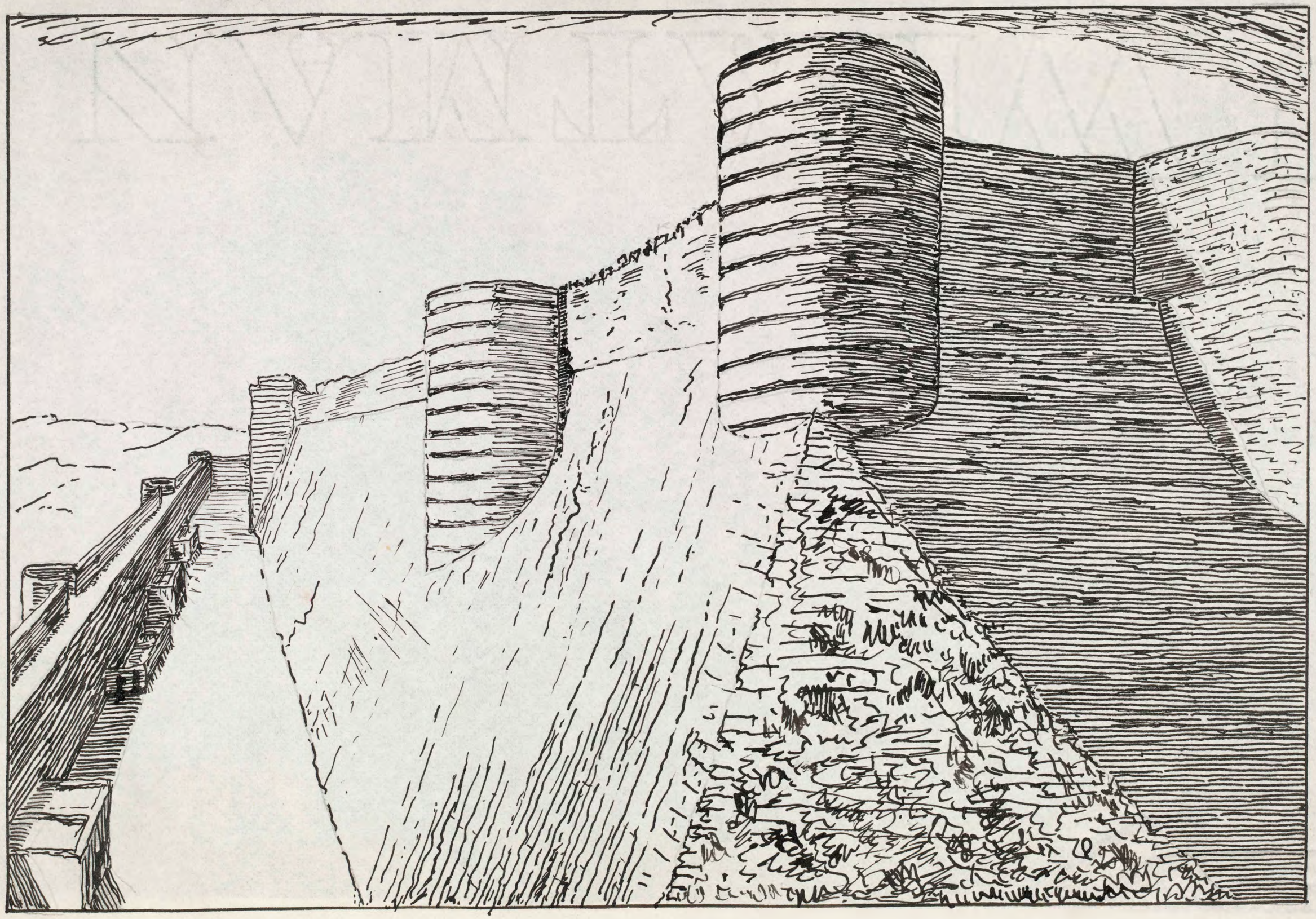
GretagMacbeth™ ColorChecker Color Rendition Chart
cm 1 inches 1



61. The W. face of the inner ward: Cour des Chevaliers.

for more than 80 feet to the thick greenish mud and water of the moat. Below tower E it runs out in an enormous spur and then at right angles it turns along the whole Western front until it is lost in the rectangular tower P.

The reason for making the wall with so great a batter and such thickness - nearly 80 feet - is a little hard to find. Against an earthquake it would be useful perhaps, though no part of Crac has been damaged by one : the castle stands on rock, so mining was not greatly to be feared and half the thickness would have been secure against any ram that ever was imagined. It had however one advantage against ordinary attacks in the absence of machicoulis : assailants could never get underneath the fire of the defenders on the fighting platform : and this after all may have been the real purpose of the construction. On the other hand it had ~~the~~ the drawback of making easy escalade. (1)

In the matter of machicoulis Crac is most comprehensive. The ordinary pattern as used generally from the thirteenth century in France is employed in the outer line of wall from tower S to tower B, and elsewhere on the outer line. Then from tower S northwards the wall contains near the top a

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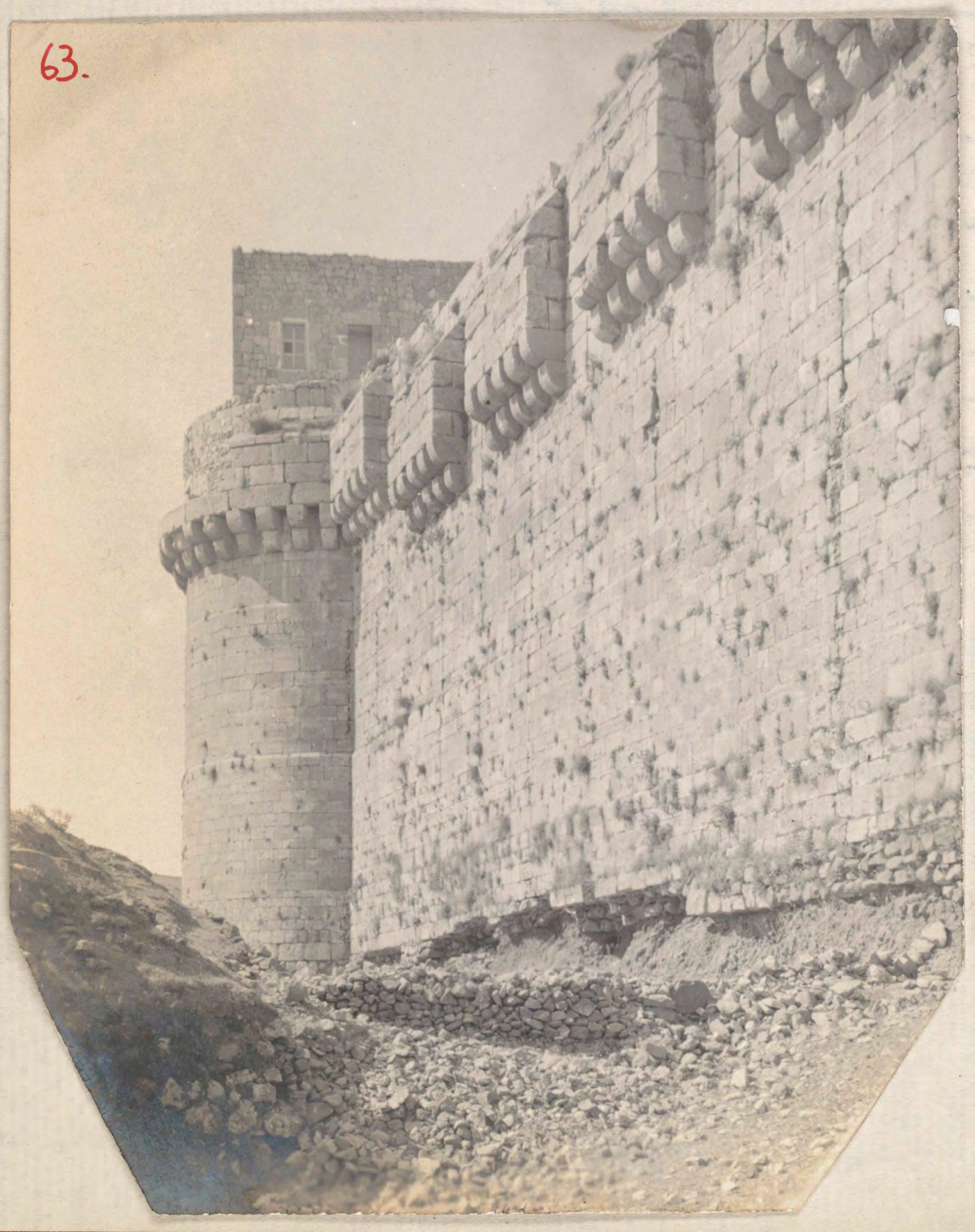
(1) I was able, barefoot, to climb up more than half-way (c 40 ft.) though with some little difficulty.

Box - Machicoulis,
Cour des Chevaliers

63.



Kom el Ahmar (Hermopolis Parva) looking
from Bir marabuenin [illegible]
the S.W. Kom (the mound of
Kalaat el Ahm. looking S.

GretagMacbeth™ ColorChecker Color Rendition Chart
cm 1 inches 1

62

GretagMacbeth™ ColorChecker Color Rendition Chart

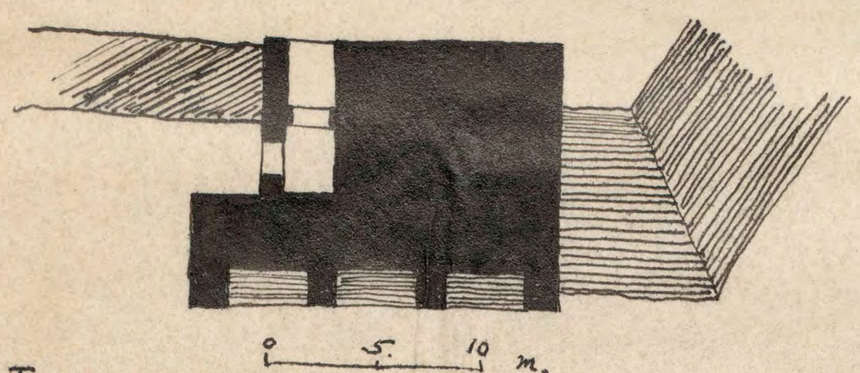
cm 1 inches 1

vaulted gallery, with openings at intervals into small chambers, corbelled out from the face of the wall. (62 · 63). They resemble the latrines common in France in appearance, but are defensive in intention. Each is of a size fitted for one man, or two at a pinch, but freedom of movement would be very severely hampered when working in a room only 18 (sixteen) inches wide. No kind of bow could be used. The openings would be available only for dropping stones. If a gallery in a wall is to have machicoulis this is of course the only possible pattern : but the whole thing is not very effective to Western minds, accustomed to the unbroken ring of corbelling along the top of the wall. In the East however the tops of towers could not be roofed in, and so the covered machicoulis were the better form. The Arabs adopted them whole-heartedly in Aleppo, and Damascus and elsewhere, and presumably the credit of their invention lies with the Hospitallers of Crac des Chevaliers. At least they have not been found in earlier buildings of the Latins.

No timber or slates

A third and still more interesting form of machicoulis exists on the tower P of the inner ward. (64) It is composed of buttresses applied to the face of the tower, and arched over at a height of some 30 feet. The front wall of the tower is then carried on them, with a peculiar double system of relieving arches relieving nothing. On top of all seem to have been machicoulis of the corbelled pattern.

Plan 58.B.C.



TOWER

REY. p. 57.

64

CRAC DES CHEVALIERS
[KALÂAT EL HOSN.]

See also 58. B. & C.

65

The mason-work of the tower is quite like that of the great sloping wall, but nothing parallel with these great machicoulis is known in Syria : and in Europe very few exist (page 63:) of the same pattern. They ought to be immensely superior to the ordinary tiny machicoulis, for the size would allow if necessary of a whole beam of wood being thrown down. It was perhaps less stable . . . the destruction of the lower part of the buttresses might cause the whole to collapse . . . . but whether for this or other reason it never found favour. In this particular instance a postern is concealed behind it.

One was found lately by Miss G. Bell in a 7th Cent. palace near Baghdad.

Markab is much more French even than Crac. The outer work on the east was rebuilt by Kelaoun, but all the rest might be a part of unrestored Carcassonne. The narrow lists between the walls, (66, 67) the Chapel, and the great round tower 66 are simply typical of the ~~last~~ best period of French architecture. To describe it is not necessary, for Rey's plans and drawings present a faithful picture of the main features of the castle : and he also emphasises the thirteenth century character of the whole. It was only right that the creator of the "last word in Syrian castle-building" should return to the West both for the general design of his fortress, and the particular architectural details, just as the first builders, the men of Saone or Safita, had done. The only people wholly independent of Europe had been the Templars, and their style was practised only by themselves, and died with them. All the

66 Markab.
looking S.

67.

67. Markab
looking E.

Marshall, E. front. looking

S. E.

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cm 1 inches 1

GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

best of the Latin fortifications of the Middle Ages in the East was informed with the spirit of the architects of Central and Southern France.

Next time give photos of all places described, + in particular the battlements.

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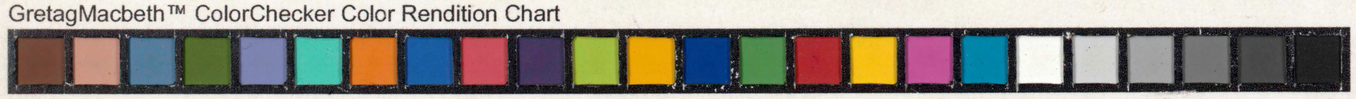

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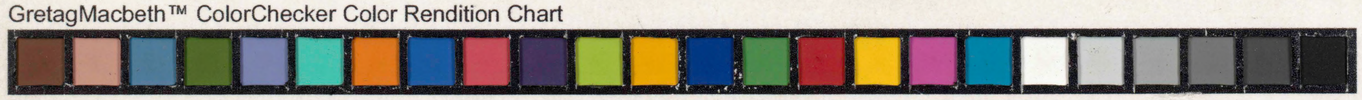

cm 1 inches 1

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cm 1 inches 1

WESTERN MILITARY ARCHITECTURE in the SECOND HALF of the TWELFTH CENTURY

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cm 1 inches 1

Robinia pseudo-acacia

GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

68. night, the machine.

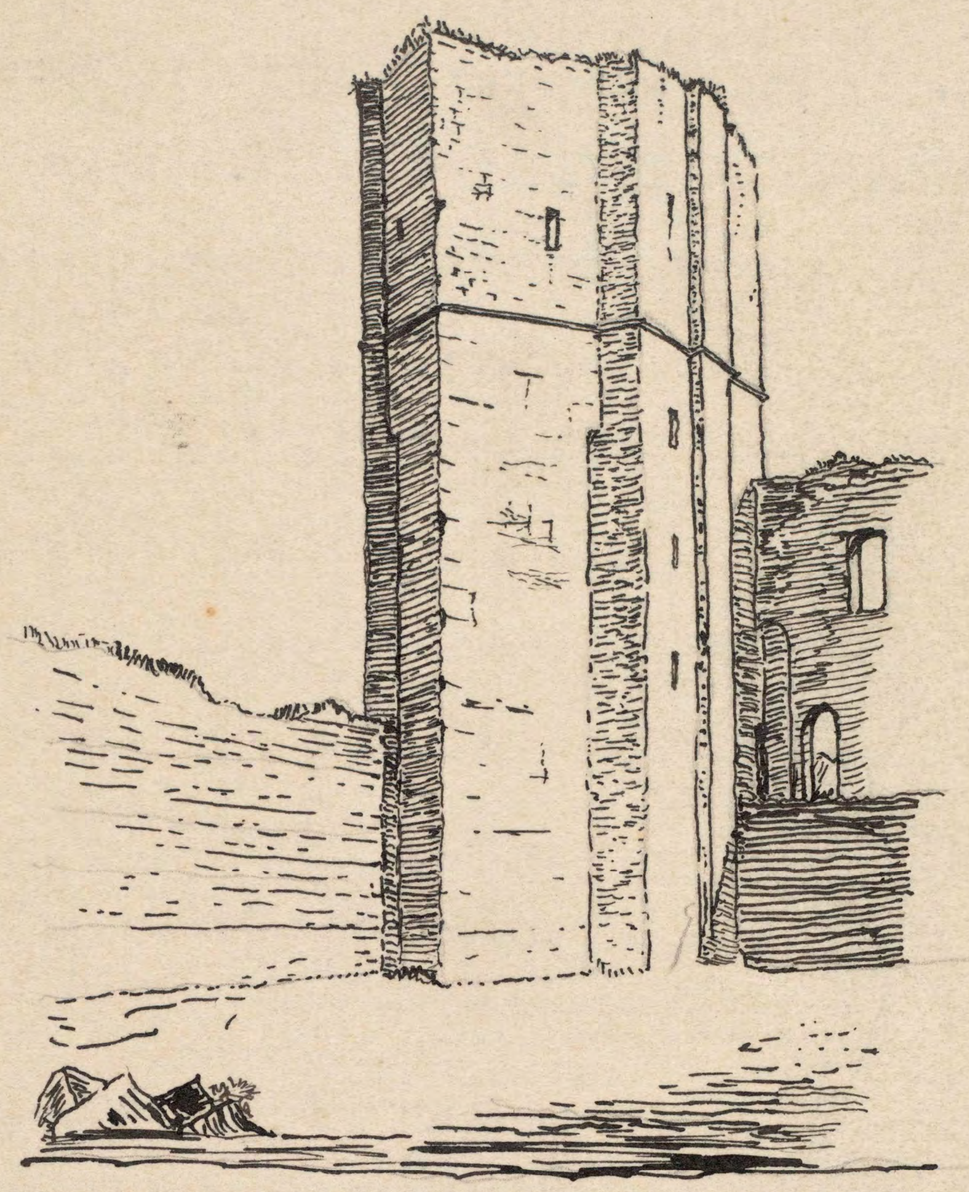
GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

All this section very good, though too little writing: too much left to photograph

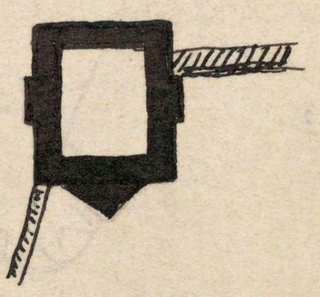
Progress in military architecture in Europe depended on the elimination or at least the modification of the square keep form, and accordingly from 1150 there are on record many and varied attempts to improve it, or to give it less prominence in the scheme of defence. The idea that a donjon or last resort of some kind was absolutely necessary persisted strongly through the greater part of the thirteenth century : probably only the introduction of cannon drove it from the field. Long before this time, however, the capture of the outer and inner wards of the castle had meant the surrender of the whole.

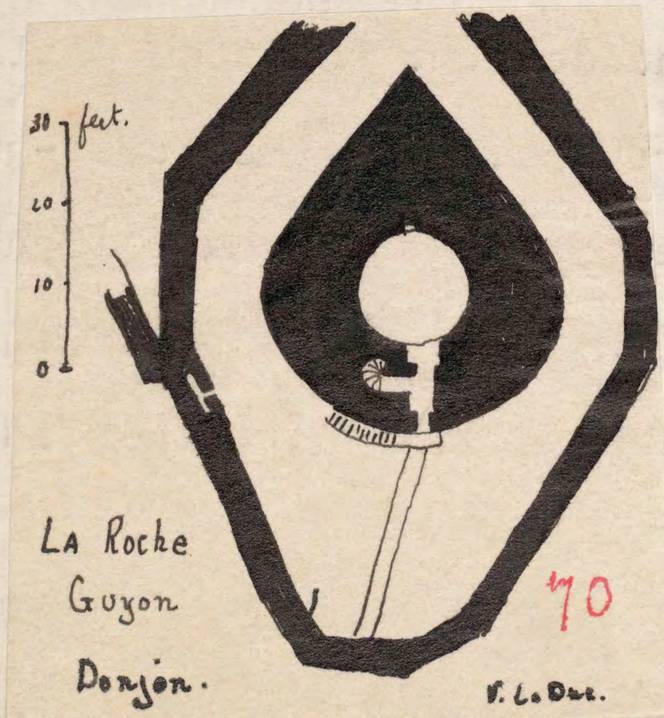
Modification of the Norman keep took two forms. In the one case a donjon was retained as the more important part of the castle, though its shape was not a perfect square with undefended angles : in another the great keep of passive resistance was swept away entirely, and a light shell keep, with or without a little tower inside it, took its place. In the second instance as time went on the size and importance of the shell increased : until it formed the inner ward of the castle, and the tower inside became the donjon. Château Gaillard is the finished result of this process. In other over-grown shell keeps there is not trace of any tower within them at all: in fact the donjon idea has been eliminated. Château Gaillard did not attain to this pitch of perfection, though in practice its keep proved useless.



CHALUSSET.

69.



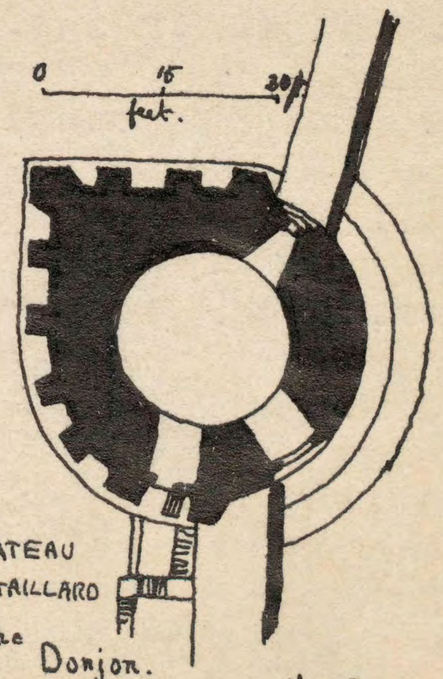


LA Rocke
Guyon
Donjon.

70

V. Le Duc.

71.



CHATEAU
GAILLARD
The Donjon.

V. Le Duc
Dictionnaire