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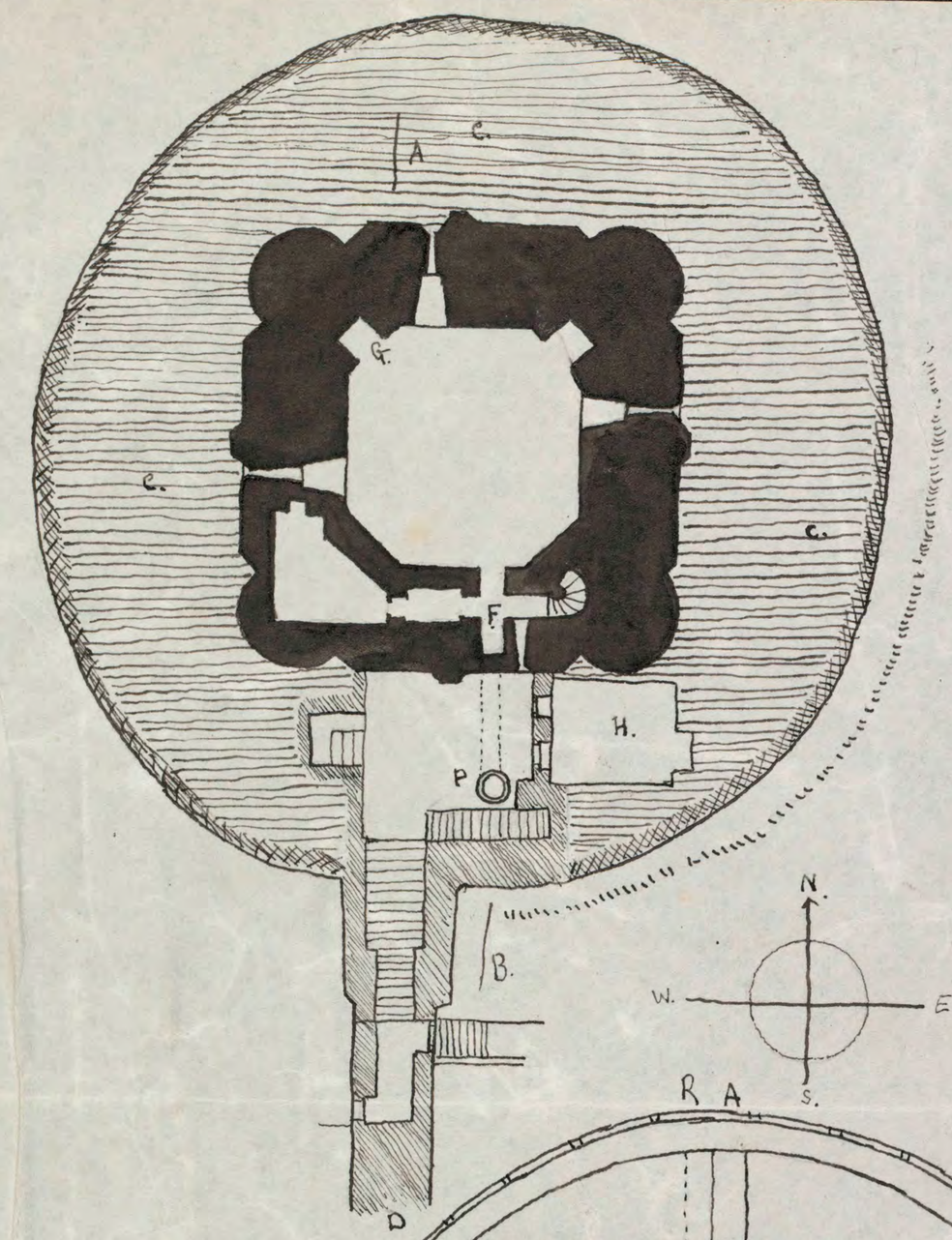
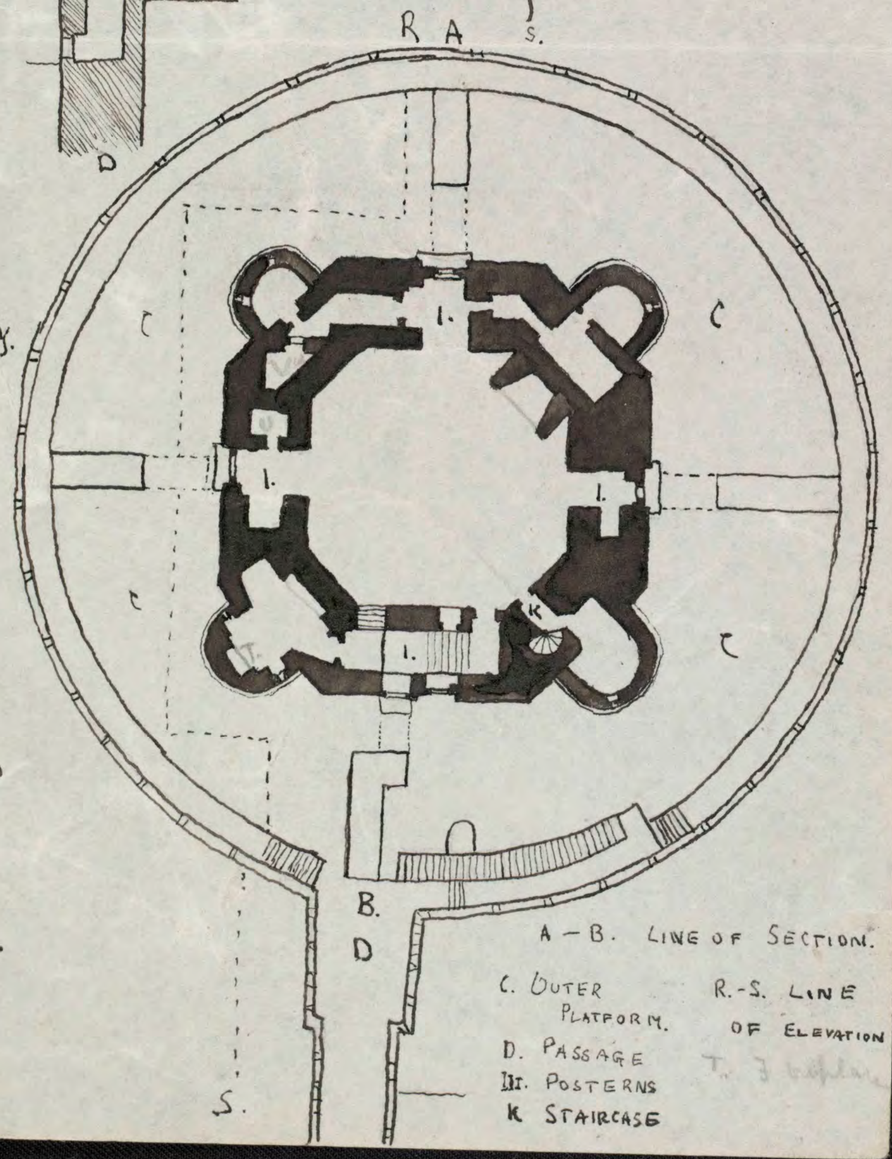


GROUND -PLAN.

A-B LINE OF SECTION
C. OUTER PLATFORM.
D PASSAGE, TO TOWN WALL.
F. DOORWAY.
G. OVEN.
H. CHAPEL.
P. WELL.



FIRST STORY.

THE KEEP AT PROVINS.

A – B. LINE OF SECTION.
C. OUTER PLATFORM.
R.-S. LINE OF ELEVATION
D. PASSAGE
II. POSTERNS
K STAIRCASE

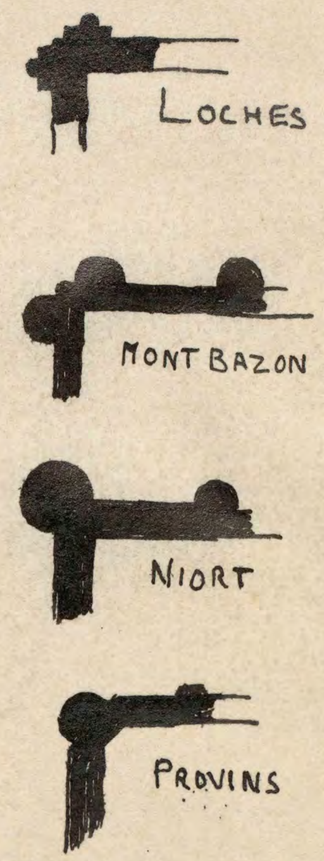
The modification of the first kind appears to have begun with some such process as that evident at Mitford near Morpeth, where one wall of the keep has been thrown forward in an obtuse angle. At Chalusset near Limoges (69) this spur is made practical use of, to provide extra thickness of wall on the most vulnerable face. The keep here is of course a very small one, but of quite a normal pattern for the centre of France. Huge keeps like Falaise or Arques are not found South of the valley of the Loire : they become narrow as at Luzech or tall and slight as at Marthon or St. Yrieix. This example at Chalusset is quite early, and is perhaps the fore-runner of the towers with spurs on weak faces, a type which appears in the Lower Seine valley at La Roche Guyon (70) and Château Gaillard (71) and elsewhere. They bear no relation to the half-hexagonal towers sometimes found in Byzantine fortresses, since there the projecting point is not exceptionally strong. There was no question of resisting with it the blows of a battering ram.

It had been recognised from the beginning that the undefended angles of Norman keeps were so many weak points, and that the remedy used by the Normans, shallow buttresses at each side of the corner, was inadequate. The pilasters become gradually more pronounced in Normandy ; a semicircular fillet runs up the centre as at Loches (72) :then at Montbazon (72.73.) large semi-circular buttresses are applied to the corners at each side, and one in the centre of the face. Finally

73.

3 MONTBAZON. — Le Donjon partie Sud-Ouest. — LL.

72



REINFORCED ANGLES OF KEEPS.

74.

247. NIORT (Deux-Sèvres) — Le Donjon.

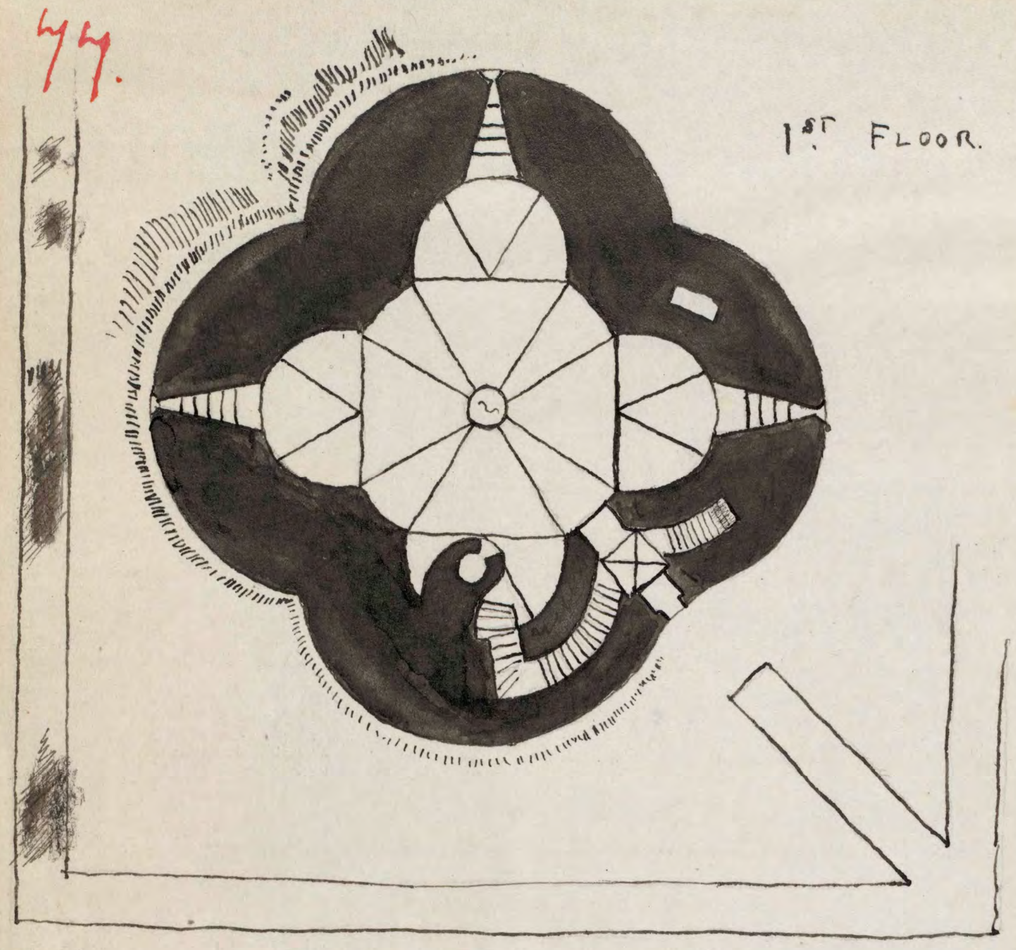
Inside Prown: a gallery half-way up the great domed central hall

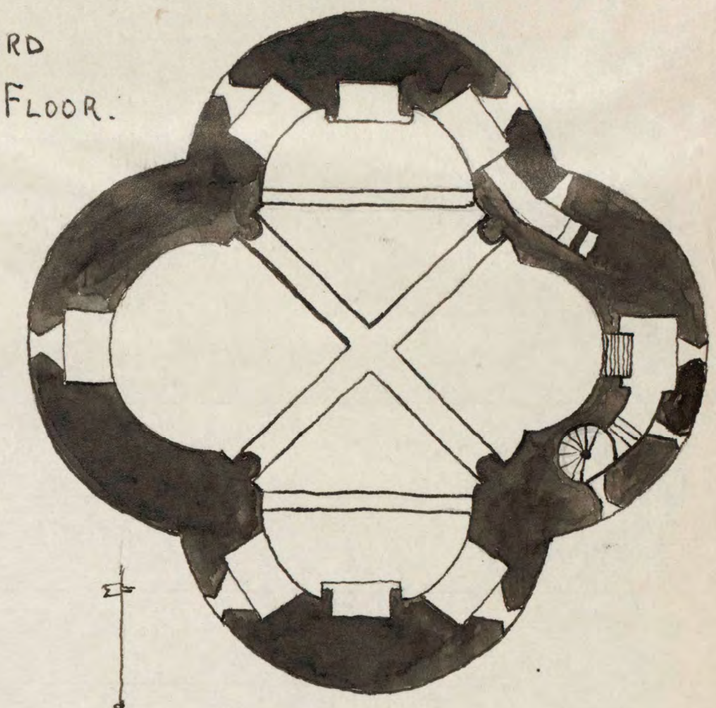
the type works itself out at Niort (72.74) in Poitou, where the two angle buttresses are combined and carried to the top of the tower as a circular tourelle. These keeps at Niort are exceedingly valuable. They were built early, apparently about 1180, and in spite of their shape are true Norman keeps. The tourelles are such only in name : in reality they are all solid, except one which from the first-floor level contains the staircase. The little buttresses on the face are also solid, to the top floor, and the entrance is 24 feet above the ground. It has a portcullis however.

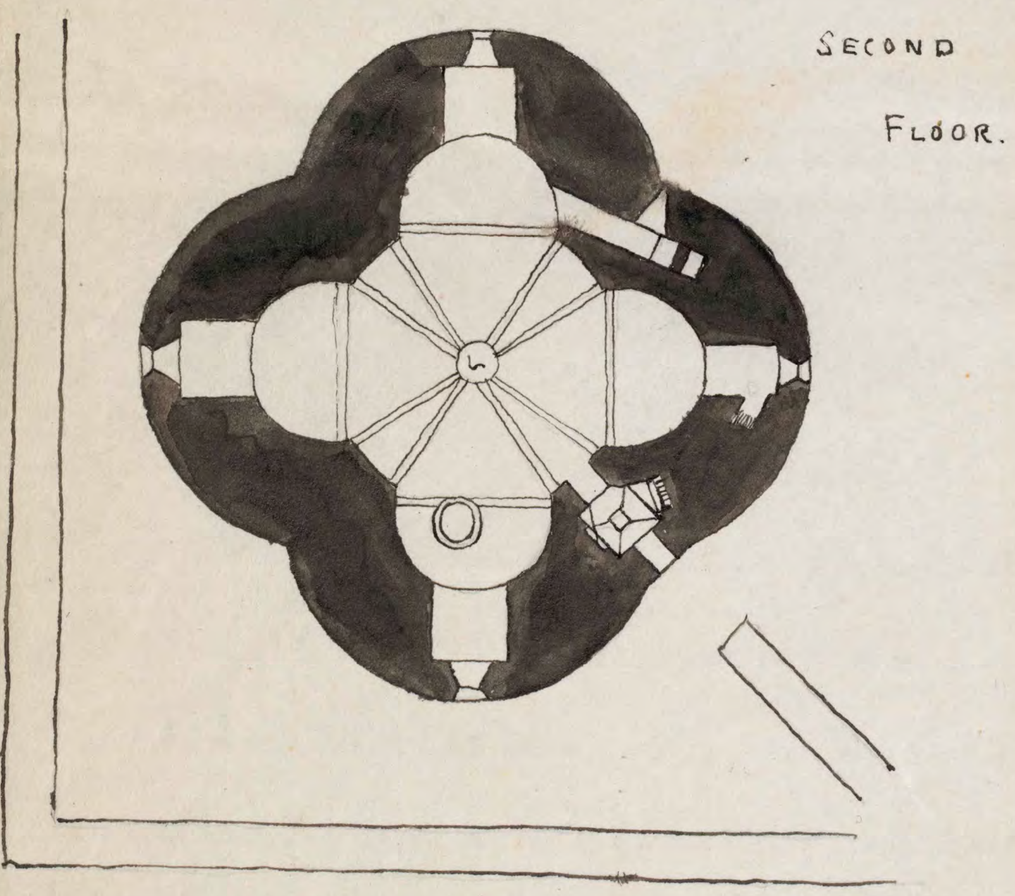
There are parallels to be found of the shape of Niort, but none of the peculiar arrangement whereby two identical donjons stand side by side, apparently without any very elaborate connecting works (74) The small building that now fills the gap is comparatively modern : that it is not a copy of the original is proved by the fact that it stultifies the great machicoulis thrown over between the buttresses above. At the same time there must have been some link between the two towers : to leave each in isolation would be ridiculous.

The base of the donjon at Provins 76 is probably of the twelfth century. In shape it is rectangular, but the corners have been chamfered off to make room for half-round buttresses of the same projection as the side walls. The upper part of the donjon has been so rebuilt as to be worthless : the doorways though are probably of the original design, and it is

47.







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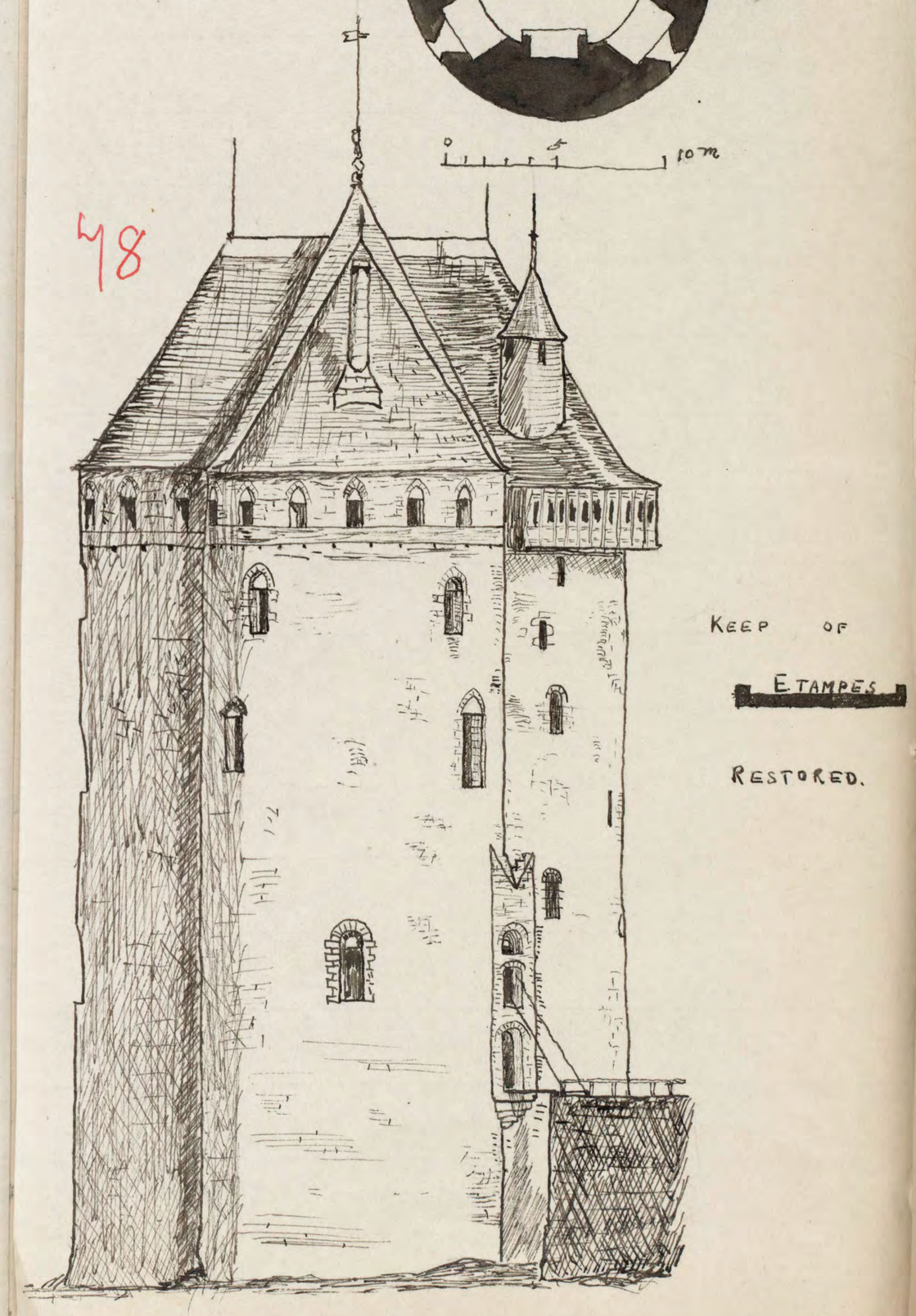
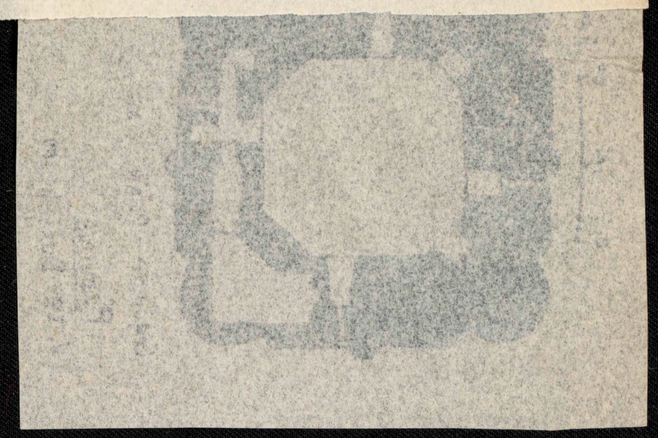


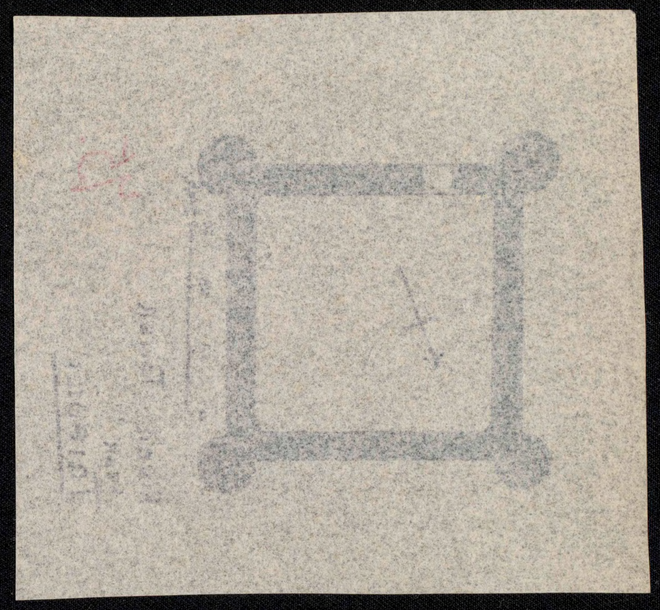
KEEP OF ETAMPES.

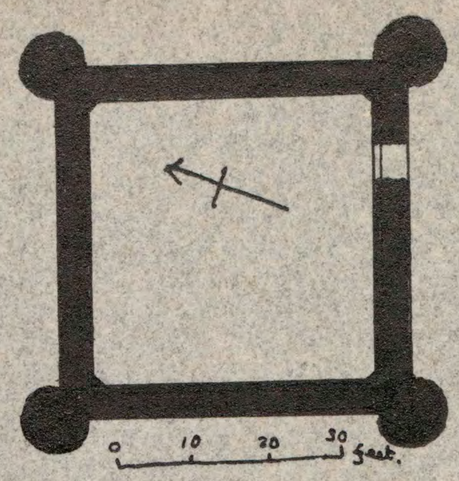
RESTORED.

KEEP OF ETAMPES.

Prom,
Chemin du nord, second
Plan

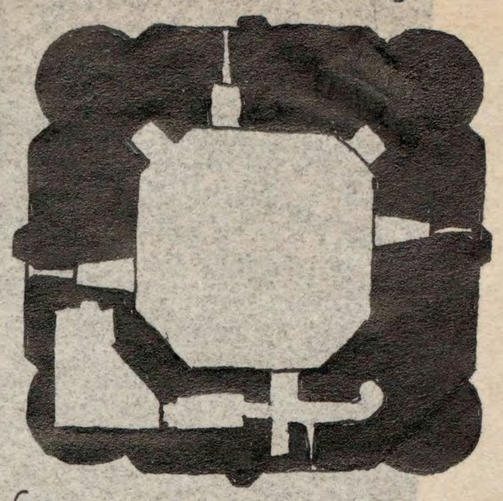






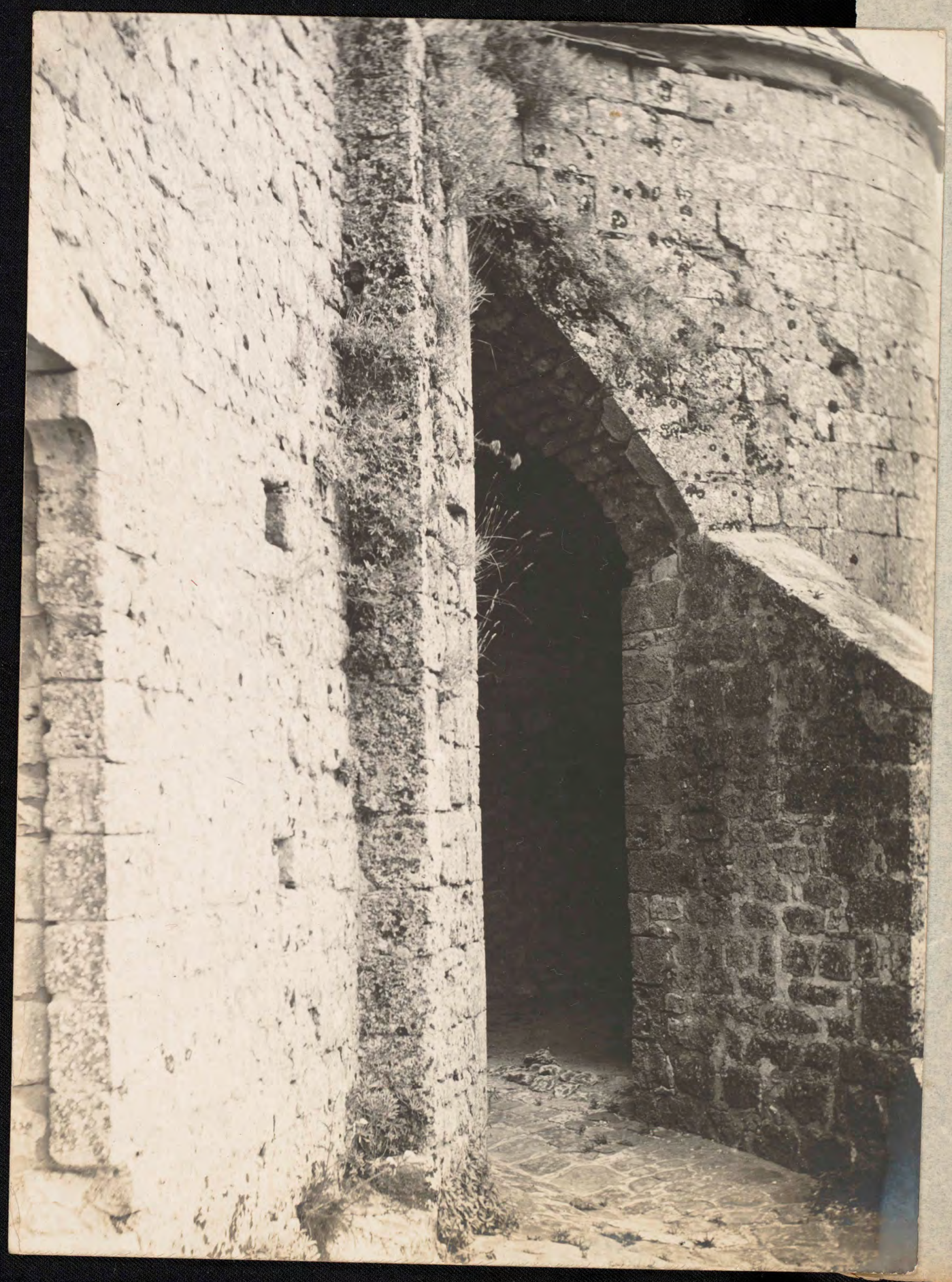
RIVER TOWER
NEAR
TRIPOLI

45.



GROUND-PLAN. OF
PROVINS
V. LE. DUC. p. 100.

46.

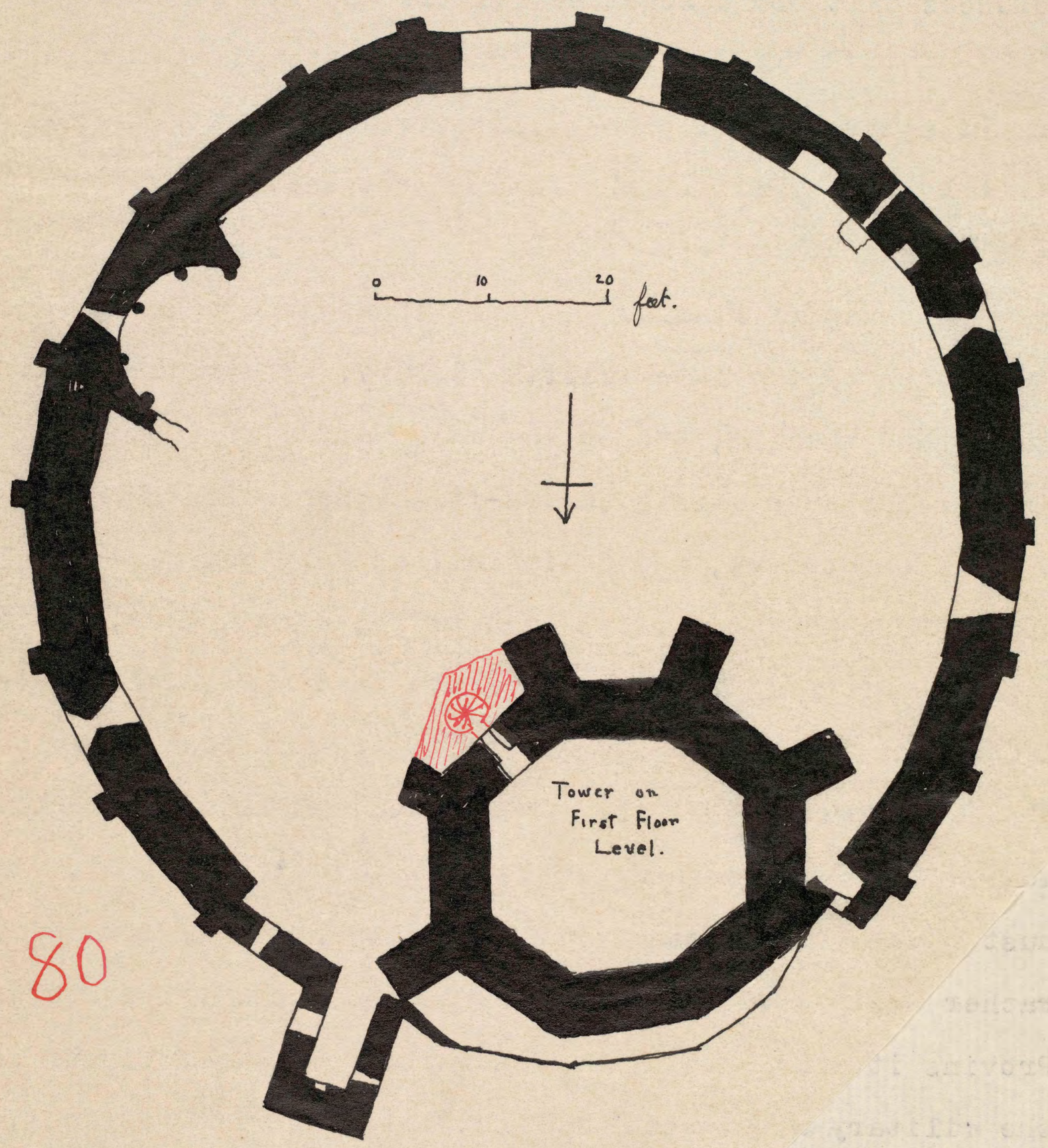


interesting to note the generosity of the architect, in providing four entrances for a tower 46 feet square. They are on the first-floor level. With Provins may be compared a little tower in Syria,(75) one of the links in the chain of defences that bound together Tripoli and its seaport (El Mina

ال مينه

It is almost the only attempt at variation on the square tower plan still surviving in the East : one can only conclude that the Latins were unfavourable to fancy designs.

The keep of Etampes (77.) is perhaps the most astonishing production of the late twelfth century. The square tower had been found wanting, and so the imagination of its architect conceived the idea of a quatre-foil tower which should be equally commodious, and a little less helpless before an attack. He kept the massive base of the Norman keep, and the entrance high in the air, but above that the shallow projection of the leaves was turned to account most ingeniously inside and out. When the tower stood complete(78) with its hourdage of oak, not far short of 100 feet in height, it must have been no mean fortress : though it was commanded rather badly from the hill-side at the back. With Niort and Provins it will show the extraordinary life and vigour in the military architecture of the latter twelfth century, an age which had outgrown the keep and was casting about for something more efficient to fulfil its purpose.



80

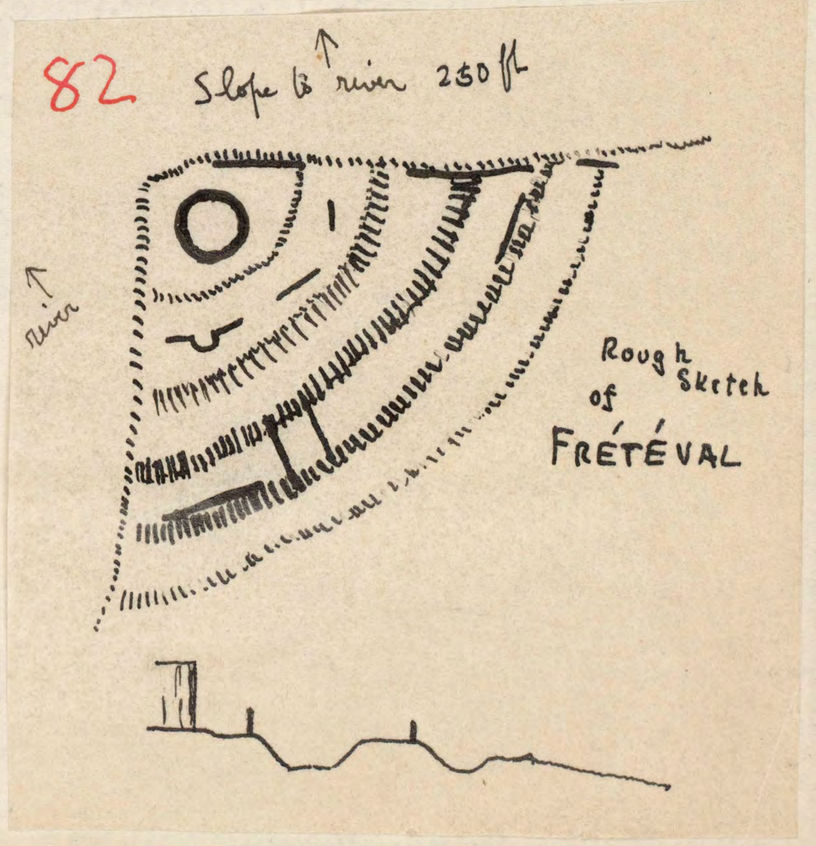
Gisors.
The Shell Keep.

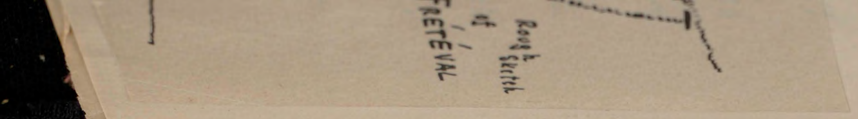
The best solution of the problem (which was not discovered till after polygonal towers had been tried and found wanting) proved to be the circular keep, standing isolated and self-contained in a moat of its own. Philip Augustus built multitudes of these, and Richard of England a few : finally Enguerrand de Coucy set the seal of his approval upon it. One of Richard's keeps, at Montreuil Bonnin (79) near Poitiers is almost certainly earlier than his Crusade. The entrance is 30 feet in the air, and the staircase is straight instead of winding. The contemporary outworks and ditch show that Richard did not despise such helps to perfection. A nearer example of an eccentric circular keep will be found in Conisborough in Yorkshire.

The shell-keep alternatives to the large square tower are wonderfully numerous, but that at Gisors is so very well known and so typical that there is no need to give any description of them. It was built by Henry II (80) but since his time the large door has been pierced in the wall, and the ungainly turret crushed in between two of the buttresses of the octagonal tower : this octagon has itself been rebuilt from the first floor level. A similar instance of shell-keep and tower within is at Bôves near by. The keep of Gisors is a small one, standing as it does on an artificial mound, but there is one at Pujols, (87) on the Dordogne near Bordeaux which encircles the top of a natural hill, and is of very

81. Chateau Gaillard: from the river.

82 Slope to river 250 ft



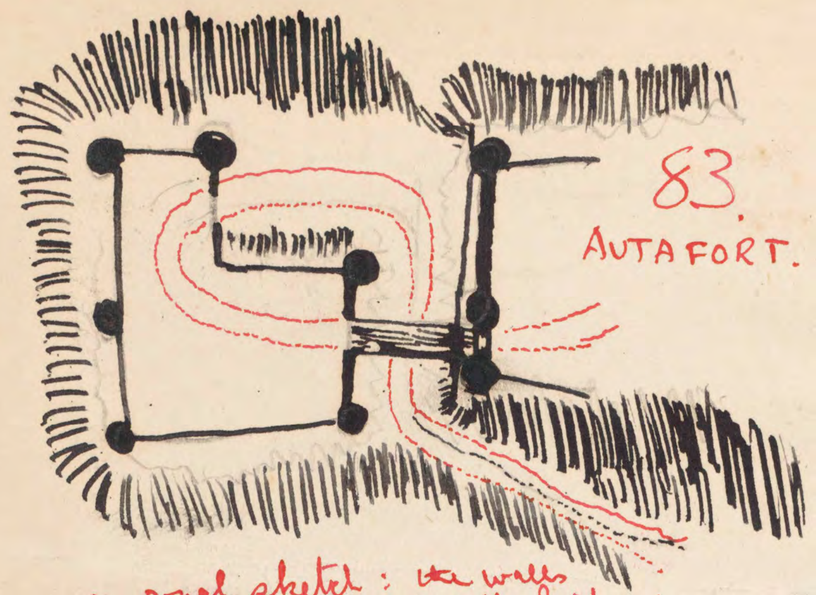


It's full of Mairie village school

considerable size. There are no signs of outer works, or of inner defences.

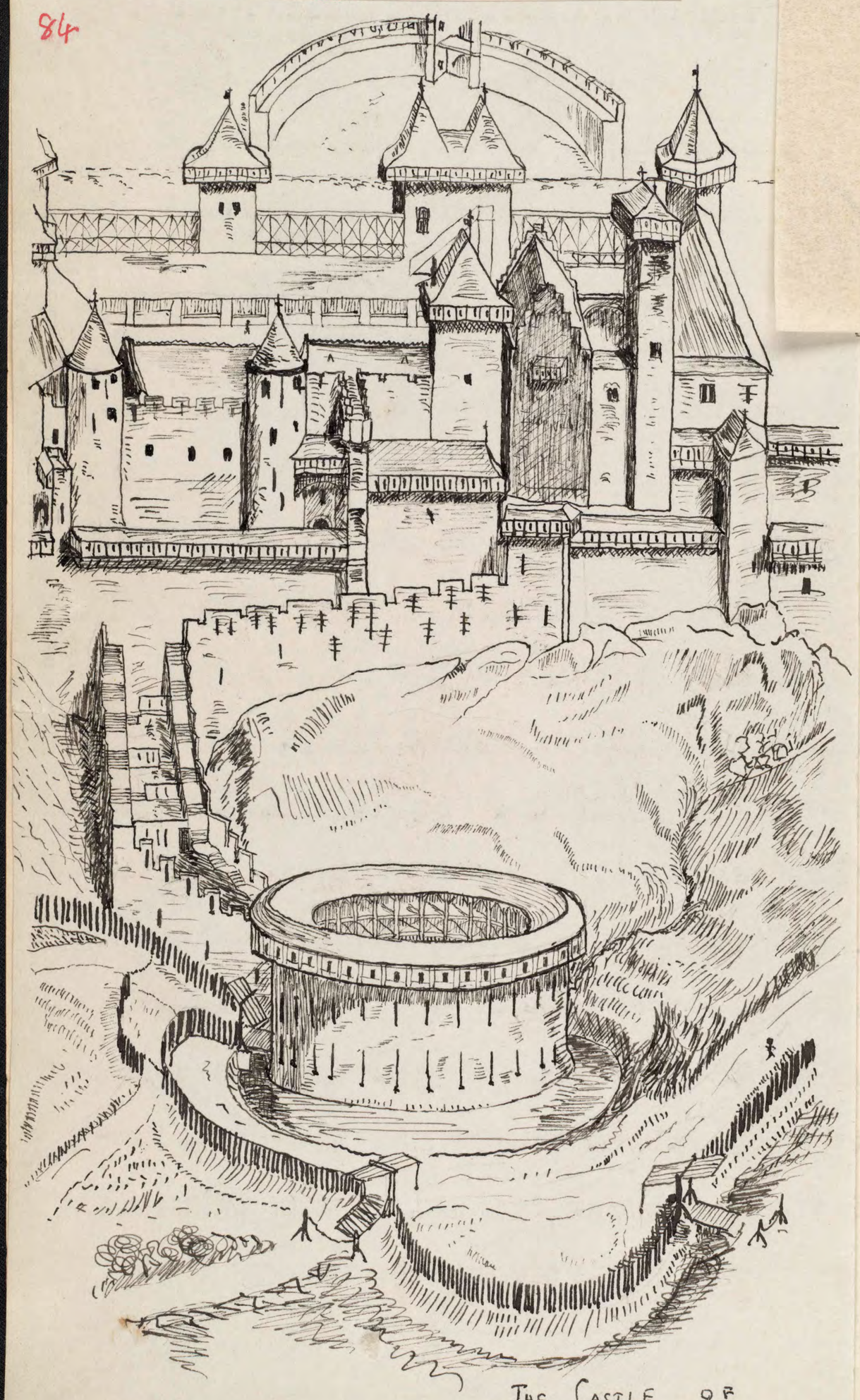
It is a mistake to limit the activities of the twelfth century builders to donjon-towers and shell-keeps. They were well accustomed to putting up more complex fortifications. To assert that the conception of a concentric castle had to be learnt from Byzantium, and imported laboriously into Europe just in time for the building of Chateau Gaillard is to fly in the face of all probability. The architect of the "early pointed" period, who from his own intelligence was performing in church-building wonders that have never been surpassed in any age or country, was probably capable of the calculation that two walls were stronger than one or three than two. Had he not been he could have looked at any earthwork, or at any Norman keep-and-bailey castle : he might even apply at the nearest monastery, and be told of the advantages of the triple wall praised by Lampert of Herschfeldt. The monks might even lend him a copy of the Vegetius that Geoffrey Plantagenet studied with such profit in his sieges.

Multiple castles as a matter of fact were built in Europe at all periods, becoming stronger and stronger with improved arts of attack. At Frétéval (82) the twelfth century architect ran a light stone walling round the top of existing double earthworks : at Taillebourg he carved out ditches in soft rock across a promontory running out into the marshes of the Charente. At Chinon he did the same on a



a very rough sketch: the walls are quite imaginary; but the bridge + ditch are undoubted.

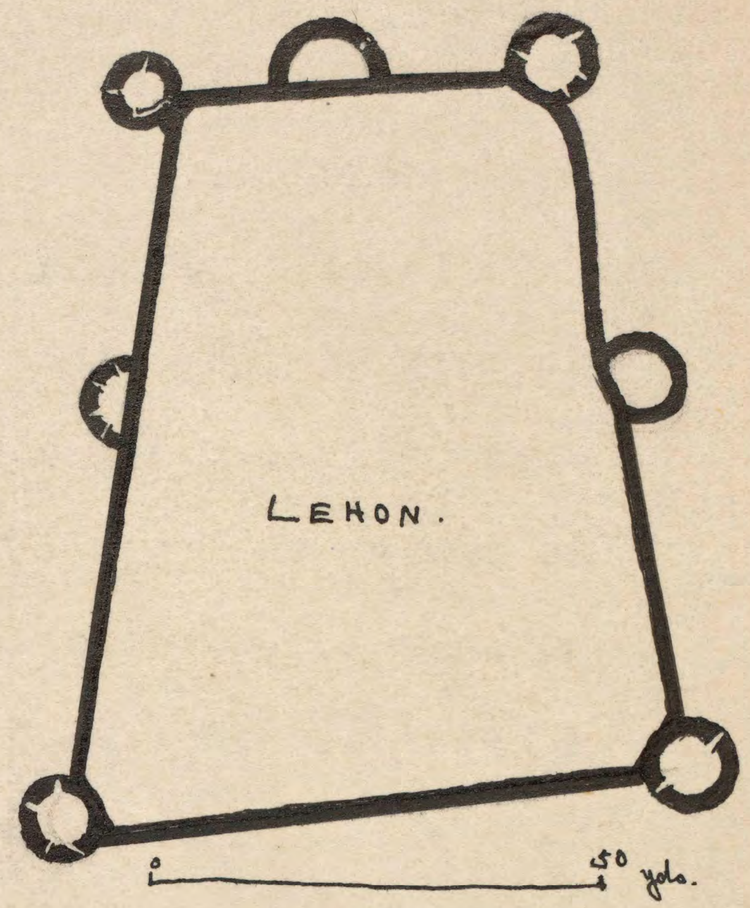
84

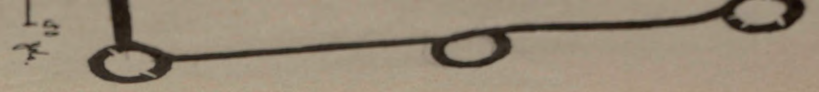


THE CASTLE OF CARCASSONNE

(RESTORED) V. LE DUC.

85.





hill-side. At Hautefort (83) near Perigueux he cut one ditch across the neck of the ridge of hill, and led the entry along it through an outwork and then over it by a bridge. There is really no necessity to assume that the architects of these and a hundred similar fortresses went to the trouble and expense of visiting the Holy Land, to learn from the Byzantines how to labour the obvious.

The kind of building erected within these ditches one may gather from the castles of Carcassonne, (84) and Lehon, (85) or the much-repaired "tour du Moulin" at Chinon. There would be plain curtain walls with hoards, and lofty round towers at the angles ; if the place was large enough there would be salient towers, half-round, along the curtain as well. Very complicated defences were not required so early : they came in as they were required, for military architecture is less a series of miraculous improvements than a steady development along existing lines. The square keep was an exception without precedent, and without result : when it had been overpassed the evolution of the form outlined in earthwork was resumed.

A few details must be cleared up as far as possible. In the vexed question of machicoulis one can come to no decision. The ordinary type are found apparently first in France round three sides of a little tower in the castle of Montbron near Chalus in the Limousin. (86) The tower is evidently Italian

87.


62. - PUJOLS (Gironde)
Les Remparts et l'Hôtel de Ville
Gourdin, édit., 40, rue Paul-Bert, Bordeaux

88


AVIGNON — PALAIS DES PAPES
Tour des Anges vue de la cour extérieure
Cliché BARTESAGO
App. Photographiques
MOURET, Photo, Avignon

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89
Hérault — 177 - AGDE
Cathédrale Saint-Etienne

Romanesque (which is not surprising in twelfth century Limoges) and so they are linked in a manner with the more finished machicoulis at Banias in Syria. The box type is found at Pujols, (87) in the hollow of the shallow pilasters at the angles of the polygonal shell. There are too many of them to have been insertions: These are probably earlier than the similar ones at Crac des Chevaliers ; but marvellously inferior. Further they line the walls of Aigues Mortes built for Philip the Fair by an Italian contractor, at intervals of from 80 to 100 yards, (which means that they are mostly sham): and there are five on the tour de l'Aubespin at Montbard in Burgundy, of the early fourteenth century. It is wisest not to propound theories on such evidence.

c. f. page 54

The large buttress-machicoulis are found at Niort, where they are a manifest addition of a later century, (68) at Château Gaillard, (96) round the church of Agde of the late twelfth century, (89) on the Papal palace at Avignon, (88) in the walls of Southampton, and at Les Saintes Maries in the Camargue, where every other arch rests on a console.[1] This is a most illuminating list - if it proves anything it is that numerically Europe has the advantage over the East : also that they were not the property of one school of architecture or of one country.

Cf. page 28

Of other Byzantine features, the drawbridge pier is to be seen at Tonquedec in Brittany Country (13th century) and at Chepstow:

(1) As in the cathedral [XIIth Cent] at Le Puy.

91.
Grassol
looking
over
Rhone
valley.

90. Crussol.

while square towers are only used on very rare occasions: There are a few in the walls of Provins, a medley of every shape of tower conceivable : round, pointed, square, and re-entrant towers jostle one another in 300 yards of wall. The architect, whoever he was, was trying experiments.

Crussol in the Rhone valley opposite Valence is the only castle of France presenting many Greek features. The gate (90) is quite Byzantine, and any curtain towers there may be are square :(91) but the walls are so thin that a chemin de ronde had to be carried on the butt-ends of the rests for the hoards, and the whole place was evidently trivial. The donjon was square, and reasonably solid : the other walls were only to enclose a village. The place does not resemble in the least anything European.

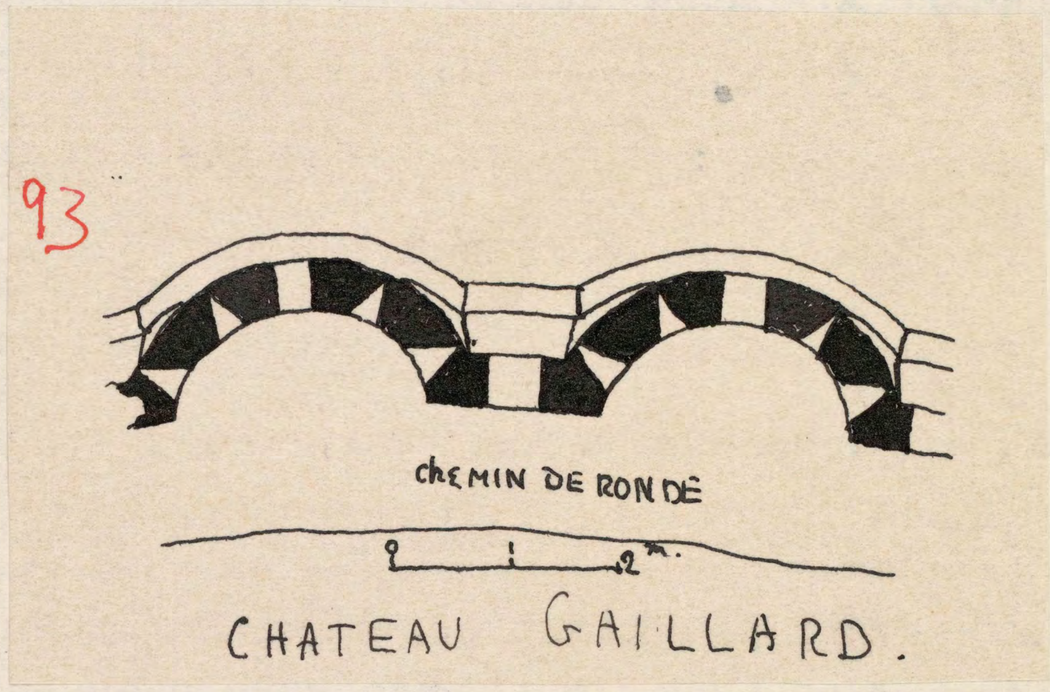
It was a Byzantine habit to corbel out ~~machicolations~~ the chemin de ronde

There is therefore no room in all this for any borrowings from Constantinople or the Templars in French architecture down to Chateau Gaillard. This unfortunate place is always quoted as an example of the influence of the Crusades on mediaeval castle-building ; the opportunity of strengthening the statement possible in Richard's visit to the East is too good to be missed. On the other hand quite certainly there is nothing like Chateau Gaillard in the East. "Un des plus bians chastians en terre, et des plus fors" as Guillaume Guiart describes it, it is nevertheless (or therefore) Northern

92.

Chateau Gaillard

93



94.

Chateau Gaillard inner ward.

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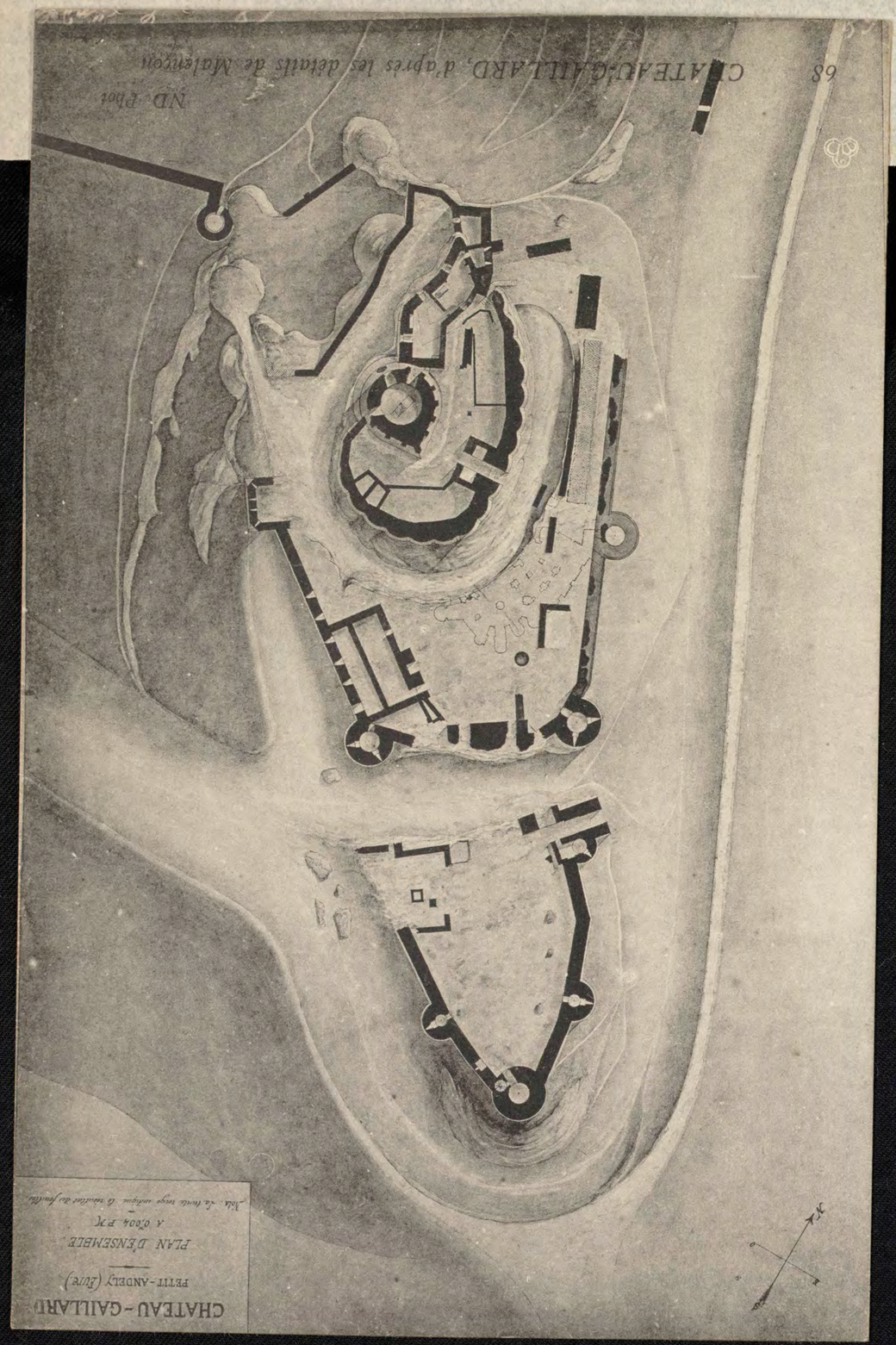

68 CHATEAU-GAILLARD, d'après les détails de Malenfeyn

ND. Phot

French in design, and North French in execution. Richard undoubtedly devised it himself : all authorities agree upon that, and throughout it shows a unity of purpose that could only have been secured by a consummate master of war absolutely uncontrolled. Its plan (92) shows an outwork with round towers, of quite ordinary character, behind a deep rock-cut ditch; and the outwork is cut off from the castle itself by another ditch, less deep. The outer ward has round towers everywhere except at one angle, where attack was absolutely impossible : most of the rest is destroyed, so that no gate can be identified. Within the outer ward, in the manner of Hautefort, is a deep moat, with the ribbed walls (93.94.) of the inner ward rising sharply up from its edge. These ribbed walls have never yet been found anywhere else on earth. Viollet le Duc describes them most effectively, but cannot find a parallel. Semi-circular buttresses are common enough, and one finds a suggestion of Richard's plan in St. Remi at Rheims or the Cathedral at Albi or in the now destroyed donjon at Conde sur Noireau described by De Caumont. Probably Richard invented the idea : certainly no one copied it, so it cannot have met with approval. Inside all these walls is the donjon, (95) a small round tower with a spur, (41.) and crowned with buttress machicoulis. It was entered on the first floor, but is too small to stand a siege. (96) (1) Richard of course made it

Not destroyed only hidden by a villain. Taout it in 1910

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(1) In Viollet le Duc's restoration the figure of a man climbing the stair is about 20 inches high.

The donjon Chateau Gaillard

GretagMacbeth™ ColorChecker Color Rendition Chart

cm 1 inches 1

96

96

wonderfully strong, with its enormous talus (95) and massive walling : but his garrison were not able to make use of it against Philip Augustus. The day of very small castles had gone by.

One detail of Chateau Gaillard, the horizontal striping of the walls by alternate courses of light and dark stone, is thought to be Byzantine on the analogy of some towers in the enceinte of Constantinople. Unfortunately no account of Richard's visit to that city has been preserved.
Chateau Gaillard is no exotic growth, but a development of the multiple castle of the style of Taillebourg and Hautefort in the hands of an engineer of genius. There is no evidence that Richard borrowed anything, great or small, from any fortress which he saw in the Holy Land : it is not likely that he would do so, since he would find better examples of everything in that South of France which he knew so well. There is not a trace of anything Byzantine in the ordinary French castle, or in any English one : while there are evident signs that all that was good in Crusading architecture hailed from France or Italy. A summing up of the whole matter would be the statement that "the Crusading architects were for many years copyists of the Western builders."

c.f. Oman in p. 532.