

YORK CATHEDRAL.



THE likeness between the cathedrals of Lincoln and York is merely of a general kind and disappears when their features are examined; but added to the fact of their near neighborhood it suffices to bind them closely together in one's thought. Each is a vast three-towered but spireless church. Each stands in a town that was famous in the earliest times, and still seems large and living although outrivaled by those black hives of modern commerce which now fill the north of England. Each is the crowning feature in a hilly city and is distinctively a city church, only sparsely provided with green surroundings. When we think of the cathedral at Lincoln or at York we think almost solely of an architectural effect; and this can be said of no other except St. Paul's in London.

I.

THE history of York as a cathedral town begins much further back than that of Lincoln. The Normans first set up an episcopal chair in the place which centuries before had been Lindum Colonia of the Romans; but in the year 314 Eboracum of the Romans sent a British bishop to take part in the councils of southern Christendom, and where there was a bishop there must have been, in some shape, a cathedral church. In the fifth century walls and worshipers were swept away by English immigration. But the first preacher who spoke of Christ to the pagan English of York bore an even higher title than bishop. With him—with the great apostle Paulinus in the early years of the seventh century—began that archiepiscopal line which still holds sway in the northern shires. It is true that the new chair was almost immediately overturned by the heathen, that Paulinus fled to far-off Rochester and never returned, and that for a century there was not again a fully accredited archbishop and sometimes not even a bishop at York. Yet the right of the town to its high ecclesiastical rank was never quite forgotten through all those stormy hundred years, and from the eighth century to the nineteenth the "Primate of England" has sat at York while the "Primate of all England" has sat at Canterbury. The terms are perplexing, and their

origin sounds not a little childish in our modern ears.

When Pope Gregory sent Paulinus after Augustine to England, he meant that there should be an archbishop in the south and another in the north, and that each should have twelve dioceses under his rule. But no such orderly arrangement, no such equal division of authority, was ever effected. Rome gave the ecclesiastical impulse in England, but insular customs, wishes, and occurrences guided its development. The earliest bishoprics were laid out in the only practicable way—in accordance with tribal boundaries; and as these boundaries were lost to sight an existing chair was suppressed or shifted, or a new one was set up as local necessity or secular power decreed. And meanwhile there was bitter quarreling between the two archiepiscopal lines—the southern fighting for supremacy, and the northern for equal rights. In the synod of 1072 the Archbishop of York was declared by Rome to be his rival's subordinate, but about fifty years later Rome spoke again to pronounce them equals, and the unbrotherly struggle continued, waxing and waning but never ceasing, until in 1354 the pope discovered a recipe of conciliation. Canterbury's archbishop was to be called "Primate of all England," but York's was, nevertheless, to be called "Primate of England"; each was to carry his cross of office erect in the province of the other, but whenever a Primate of England was consecrated he was to send to the Primate of all England, to be laid on the shrine of St. Thomas, a golden jewel of the value of forty pounds. "Thus," as caustic Fuller wrote, "when two children cry for the same apple, the indulgent father divides it between them, yet so that he gives the better part to the child which is his darling."

To-day the Archbishop of York is simply the ruler of the few northern sees of England and the Archbishop of Canterbury the ruler of the many central and southern sees. Neither owes filial duty or can claim paternal rights, but Canterbury is a good deal the bigger brother of the two.¹

The most interesting part of the matter to a stranger's mind is that the verbal juggling of the Roman father should still be piously echoed although it is so many generations since any

¹ The province of the Archbishop of York now embraces the sees of York, Carlisle, Durham, Chester, Ripon, Manchester, Liverpool, Newcastle, and Sodor

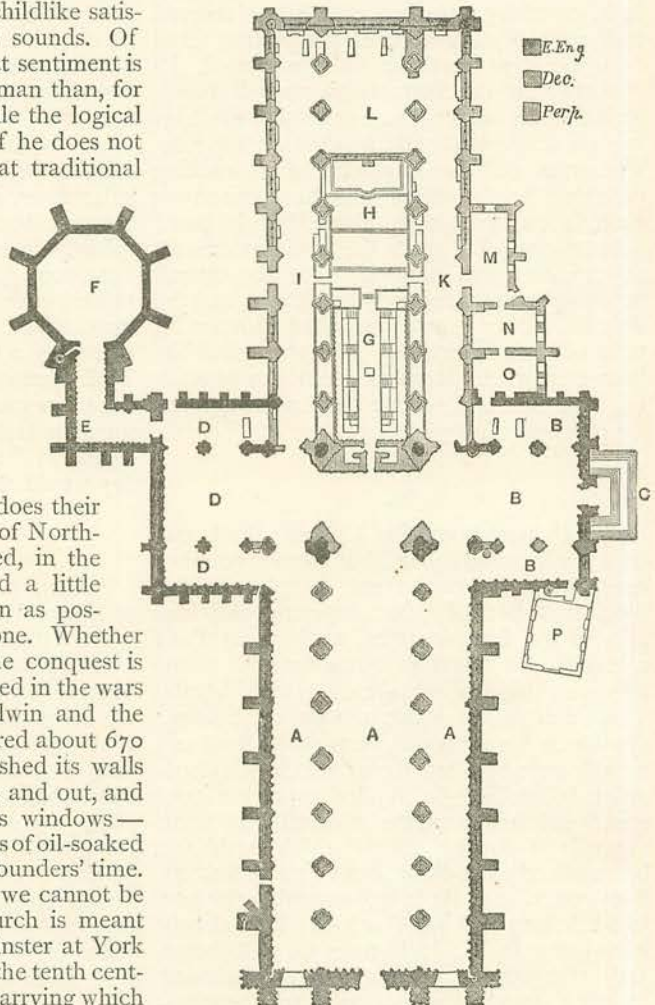
and Man. The bishops of Scotland were nominally subordinate to him until an Archbishop of St. Andrews was created, towards the end of the fifteenth century.

English primate was a darling child of Rome. No fact more clearly illustrates that singular characteristic of the English people which has been called the wish, but is in truth the power, to eat yet have its cake. It is a people progressive in intellect, conservative at heart, which can keep the form of things while altering their essence, can desire and secure the new yet clothe the change with nominal reverence for the old. We cannot fancy any strife to-day between the two primates of England, any jealousy or envy, and neither a leaning towards Rome in their hearts nor a love of shams and fictions. Yet we cannot fancy them for a moment content to be deprived of those illogical titles, which, when we come down to facts, are but badges of Rome's quondam rule, relics of ancient quarrelings, tokens of a childlike satisfaction in the pomp of empty sounds. Of course such anomalies prove that sentiment is stronger in the average Englishman than, for example, in the Frenchman, while the logical imagination is much weaker. If he does not insist, like the Frenchman, that traditional symbols be abandoned when the things they symbolize are given up, it is both because he loves ancient words and forms for their mere antiquity and because he feels no need to identify them with ideas, beliefs, or facts.

II.

As the archbishops of York trace back to Paulinus, so too does their cathedral. When King Edwin of Northumbria was about to be baptized, in the year 625, he hastily constructed a little wooden church, which, as soon as possible, he replaced by one of stone. Whether or no this church stood until the conquest is uncertain. It was greatly damaged in the wars which caused the death of Edwin and the flight of Paulinus, and was repaired about 670 by Bishop Wilfrid, who whitewashed its walls till they were "like snow" inside and out, and for the first time put glass in its windows—boards pierced with holes or sheets of oil-soaked linen having filled them in its founders' time. Of these facts we are sure; but we cannot be sure whether the cathedral church is meant when it is said that a certain minster at York was burned and reconstructed in the tenth century. At all events, however, the harrying which revolted York received at the Conqueror's

hand reduced its cathedral to ruin; and the first Norman archbishop, Thomas of Bayeux, rebuilt it from the foundations up. Archbishop Roger, who ruled in the time of Henry II. from 1154 to 1181, again reconstructed crypt and choir in a newer Norman fashion.¹ In the Early-English period the transept was renewed and the lower portions of the central tower, and in the Decorated period the nave and the west-front with the lower stories of its towers. At the beginning of the Perpendicular period a presbytery and retro-choir were thrown out eastward of the Norman choir; and then this choir was pulled down and rebuilt in a later Perpendicular style, the central tower was wholly renewed and finished, and the upper



PLAN OF YORK CATHEDRAL.

A, Nave and Aisles; B, South Arm of Great Transept and Aisles; C, South Transept Entrance; D, North Arm of Great Transept and Aisles; E, Vestibule to Chapter-house; F, Chapter-house; G, Choir; H, Presbytery and High Altar; I, K, Aisles of Choir and Presbytery; L, Retro-Choir; M, Record-room; N, Vestry; O, Treasury; P, Record-room.

¹ Or it is possible that Thomas merely repaired and altered the pre-Norman choir when he built his new nave and transept, and that Roger first really reconstructed it.

stages of the western ones were added. Thus, although no great catastrophe again overtook the church after the Conqueror burned it, gradual renewal did as thorough a work as flame—once for all its parts and twice for some of them. If nothing remains to-day of the old English cathedral—the “Saxon” cathedral—except a few fragments of its crypt built into the Norman walls, nothing above the crypt remains of either the Norman church of Thomas or the later Norman choir of Roger. Everything we see above ground is of later date than the advent of the pointed arch; and the main effect of the building, moreover, is determined not by its earlier but by its later existing portions—not by the Lancet-pointed transept, but by the Decorated nave and the Perpendicular east limb, stretching away in a vast, light, elaborate, and unusually harmonious perspective. And even the crypt has been sadly mutilated. Its importance in the Norman scheme still shows; for it extends as far to the eastward as the Norman choir extended and branches out into transept arms, and the fragments of its vaulting indicate a height which must have raised the choir floor some eight feet above the level that it holds to-day. But when the choir was rebuilt this vaulting was removed, that the church floor might be made level throughout, and the deserted spaces below were filled with a solid mass of earth, which only of recent years has been excavated. Merely a small area beneath the high altar was reserved and reconstructed for purposes of prayer.

III.

YORK'S west-front, like Lincoln's, looks out on a small paved square, but there is no other resemblance between them. In place of the illogical, unbeautiful, but imposing individuality of the Lincoln front, we have at York a logical and beautiful but somewhat unimpressive version of the French type of façade. Three rich portals admit into nave and aisles; the towers form integral parts of the front and a gable rises between them; much rich decoration is intelligently applied to accent constructional facts, and the main window is an example of flowing tracery which could not be improved upon did we hunt France through from end to end. It is incomparably the best façade in England, yet if we look a little closely it has patent faults. Its features are well chosen and arranged, but are not well proportioned among themselves nor in quite true relationship to the interior of the church. The windows are too large for the size of the portals; the

chief one is much too large for the nave it lights—a fact which appears more plainly when we stand inside the church; and a keener sense for the value of subordinate lines would have increased the apparent height of the towers by putting two or three ranges of small lights in place of each great transomed opening. Moreover, the scale of the whole work is so small that it lacks the dignity, the impressiveness, the superb power and “lift,” which we find in its Gallic prototypes. It is incomparably the best façade in England, yet it proves once more that Englishmen never quite succeeded where Frenchmen were most sure to triumph. Perhaps it was because the highest kind of architectural power was lacking; perhaps it was because the problem was really insolvable—because the long, low English type of church could not in the nature of things be fitted with a front dignified enough for the size of the building yet true to its proportions. But, whatever the explanation, there is not a large façade in England which thoroughly satisfies both eye and mind. Schemes of insular invention, as at Salisbury and Lincoln, are grandiose but illogical and awkward. The splendid paraphrase of French features at Peterborough is still more grandiose and very much more beautiful, but again illogical, mendacious. And the would-be faithful rendering of a French ideal which we find at York seems almost petty and pretty by reason of its smallness, and is not devoid of conspicuous faults. I think there is not a large façade in England which an architect of to-day would study as a model.

IV.

AGAIN, it seems thoroughly characteristic of England that although at York the façade is more distinctly emphasized than elsewhere as the place of entrance to the church, it is nevertheless not thus commonly used. When one seeks the minster¹ from the center of the town the approach is through the picturesque long ancient street called the Stonegate, which debouches on a wide stretch of pavement opposite the south side, and leads naturally to the great doorway in the transept end. But the fact is not unfortunate; for, entering thus, we see first the earliest portions of the fabric, and, moreover, this diagonal view into nave and choir is finer than a straight view along their enormous length.

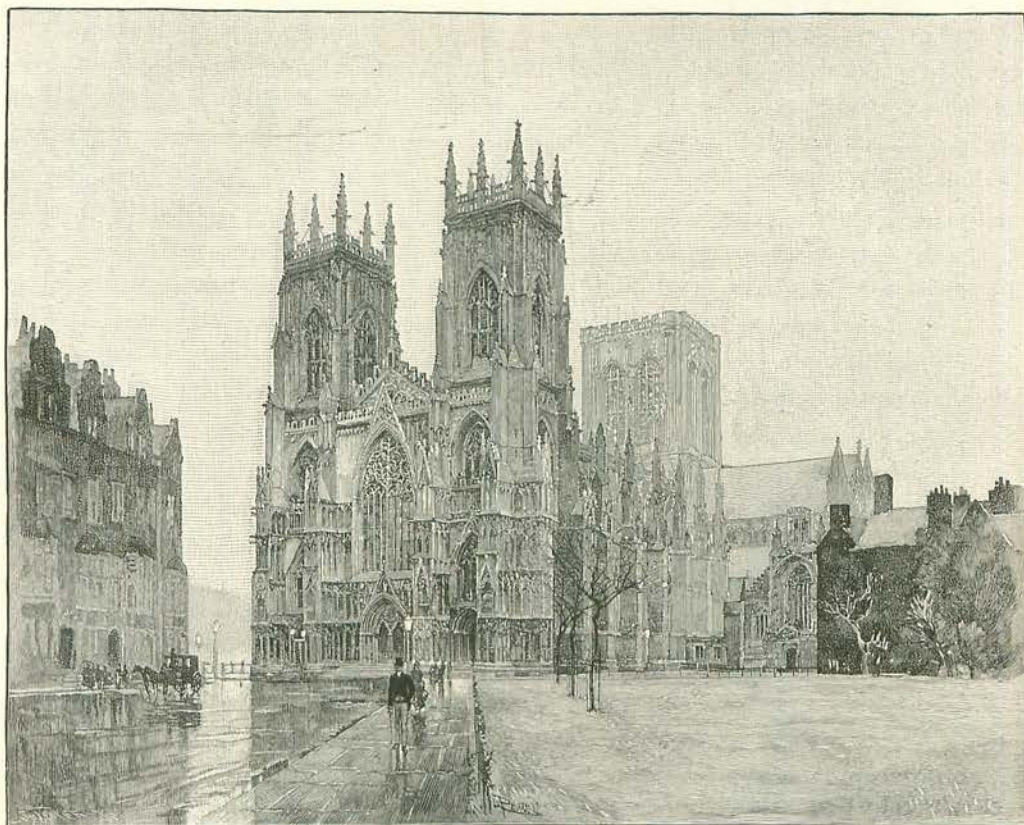
We see first the earliest portions of the church and, immediately before us as we cross the threshold, its most individual and famous feat-

¹ “Minster” is derived, of course, from the same source as “monastery,” and in strictness means a church owned and served by monks. But it gradually

came to be used for other churches of large size, and for ages York Cathedral has been more commonly called York Minster, although its chapter was a secular one.

ure—that splendid group of equal lancets which is called the “Five Sisters,” rising in arrow-like outlines to a tremendous height and filled with the soft radiance of ancient glass. Its glass is the great and peculiar glory of York, but none of the scores of gorgeous windows in

ster as they found it with regard to size. Each new construction meant enlargement, and when we compare a plan of the building of to-day with one of Thomas of Bayeux’s church we find that breadth has greatly increased while length has actually doubled. When the pres-



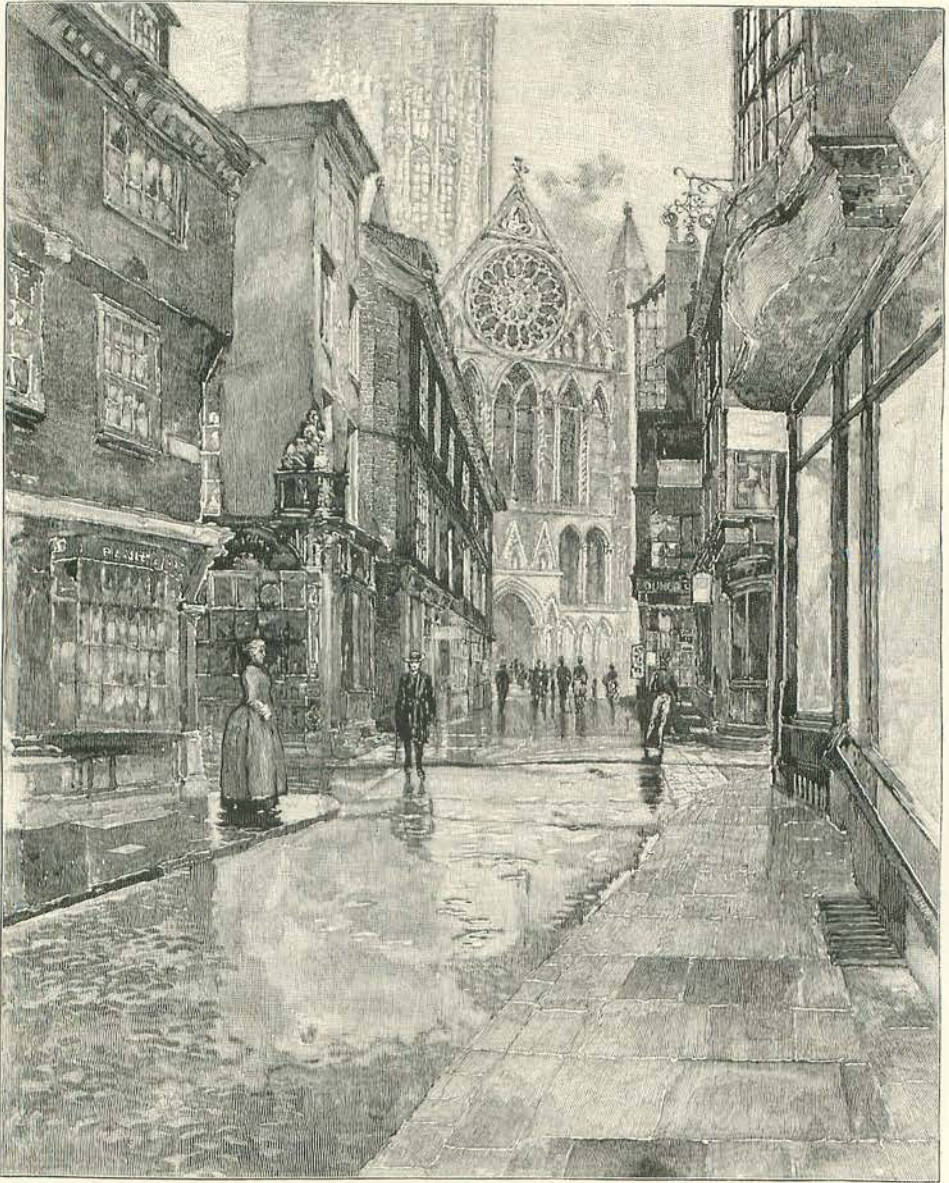
THE WEST-FRONT.

which many colors contrast and sparkle are more beautiful than these, where a pale-green tone, like glacier ice, is but delicately diapered with inconspicuous patterns of a darker hue. The transepts were built just before 1250, and the glass in these lancets cannot be of much later date. Above them is another group of five, but graduated in height beneath the vaulting. Opposite, in the end of the south limb, is the door through which we entered with rich blank arcades on each hand; two groups of two lights each above; three windows, the central of two lights, above these again; and a great rose in the gable.

In the arches which stretch between the main alley of the transept and its aisles to right and left an odd irregularity in span appears.

It is not to be supposed that the many rebuildings which went on at York left the min-

ent transept was built the Norman nave and choir were standing; and although their central alleys were as wide as those afterwards constructed, their aisles were extremely narrow. Therefore a narrow arch led from these aisles into each transept aisle, and the corresponding arch in the transept arcade was built of corresponding size, although the succeeding three, which completed this arcade, were given a much wider span. But when the nave came to be rebuilt with widened aisles each of these opened against the pier of the narrow arch in the transept: instead of standing parallel with the outer wall of the nave, this pier now stood midway of its aisle. It could not be moved and the arch it bore enlarged without some alteration of the arch beside it; but this alteration was promptly effected in the simplest way. The narrow arch and the one beside it were taken down and each was put



THE TRANSEPT AND CENTRAL TOWER FROM THE STONEGATE.

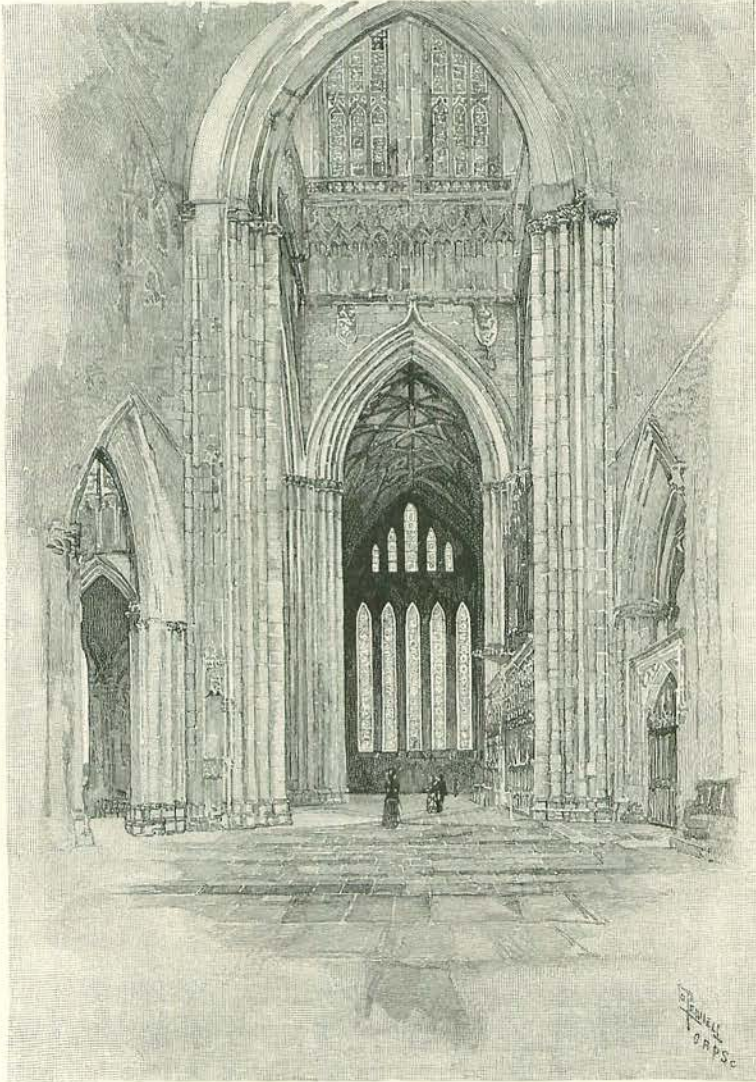
in the other's place. The same thing was done when, later on, the new choir was built; and all four smaller arches were then walled up, the better to support the new and massive tower. Thus to-day when we stand beneath the tower we see between the transept and each of its four aisles first a wide arch, then a narrow one walled up, and then again two wide ones, while in the triforium and clerestory above the original arrangement is preserved—first a narrow compartment and then three wider ones. (See the illustration on page 725.) Parallelism, unity, are of course injured by such a state

of things. But greatly though the medieval architect loved these qualities, he could sacrifice them when occasion bade; and we are forced to say that his treatment of the problem at York was the right one. It was more important that the arrangement should be right on the floor, where convenience as well as beauty was in question, than that the transept design should be preserved intact. And would it have been worth while to rebuild this part of the transept up to the roof in the interests of unity, as such rebuilding would have meant vast expense and inconvenience, would have

secured symmetry at a sacrifice of the beauty of the upper stories, and would have killed that evidence of the "reason why" which now is so attractive in its naive frankness?

In spite of the walling-up of the four narrow arches the vast weight of the Perpendicular tower had disastrous results. All the four great

of these eight arches could not have been successfully done. But in almost every church of size, as well as here at York, we see that skill by no means kept pace with ambition—that either accurate knowledge or a sensitive artistic conscience often must have lacked. The history of modern architecture, with all the sins

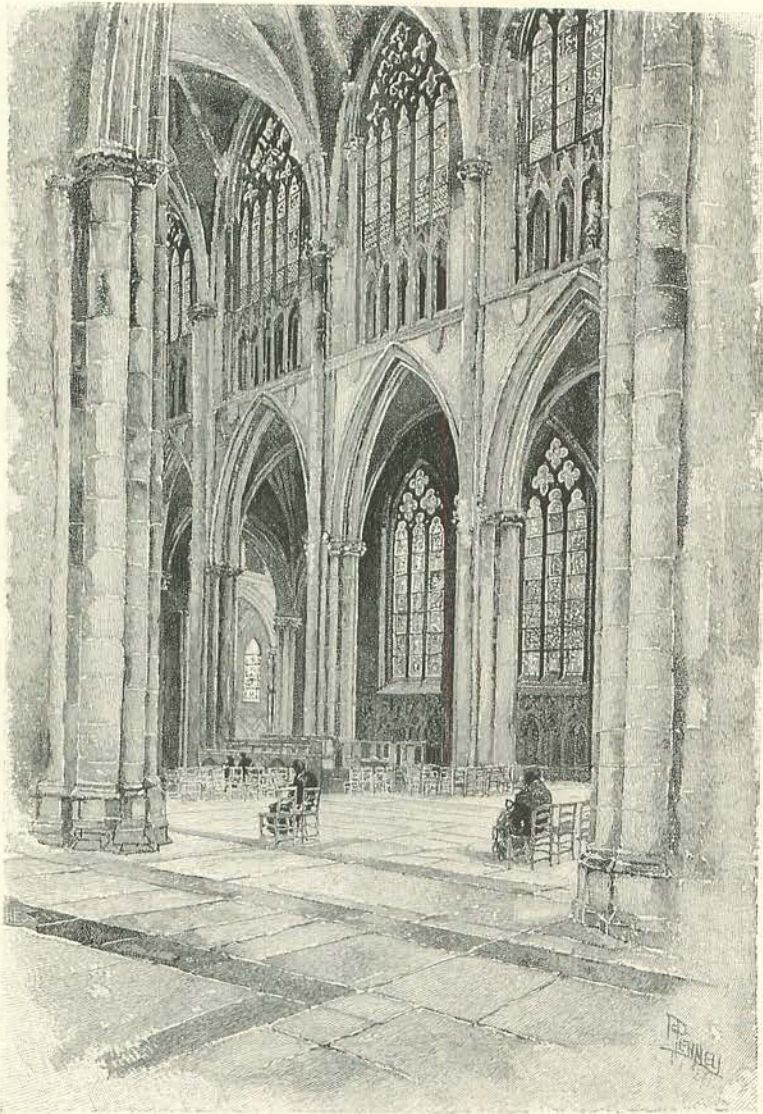


THE "FIVE SISTERS" FROM THE SOUTH TRANSEPT ENTRANCE.

piers, we are told, "sank bodily into the ground to a depth of about eight inches"; and this means, of course, that they no longer stood quite straight, and that neighboring walls and arches were dislocated too. Repairs have done something to conceal the damage, but it is still almost alarmingly apparent.

There must have been clever engineers in medieval times, or such a work as the shifting

and feeblenesses that it has to chronicle, shows us no such brilliant crimes against common sense, no such willful, daring attempts to achieve the impossible, no such disregard by one generation of the constructional intentions of another, as meet us on every page when we scan the records of medieval times. No disaster is more often noted in England than the falling of a central tower. When it fell it was either



THE NAVE.

because it had not been properly supported in the first place or because it had been finished or rebuilt on a substructure originally meant to bear a much lesser load. When it did not fall there are very often such signs of trouble as show at York, or such propping beams and arches as have met us at Salisbury and Canterbury and will meet us again at Winchester and Wells. And do we not know the extraordinary rashness of Peterborough's builders, who, upon scarcely any foundation, made their columns of thick cores of rubbish encircled by the thinnest skin of cemented stones? No facts could bear clearer witness to a want of knowledge or a want of conscience—if, indeed, these two qualities can be dis severed

when building is concerned. Yet how flatly their witness is denied in the once universally accepted dogmas of the Ruskin creed! Architectural conscience died, this creed declares, with the death of Gothic art. It would be truer to say that it was reborn with the birth of Renaissance ideals. We may grant the loftier aim, the more splendid genius, to Gothic-building generations; but if conscience means, in architecture, that nothing shall be attempted which cannot be carried out, and carried out to last,—that whatever is done shall be perfectly well done,—then its possession must be denied them. We may prefer the one temper of mind, the one outcome, or the other; but it is ignorance or special pleading to confuse

them in drawing up our verdict, and to say that where we see the greatest beauty there perforce must be the greatest virtue.

v.

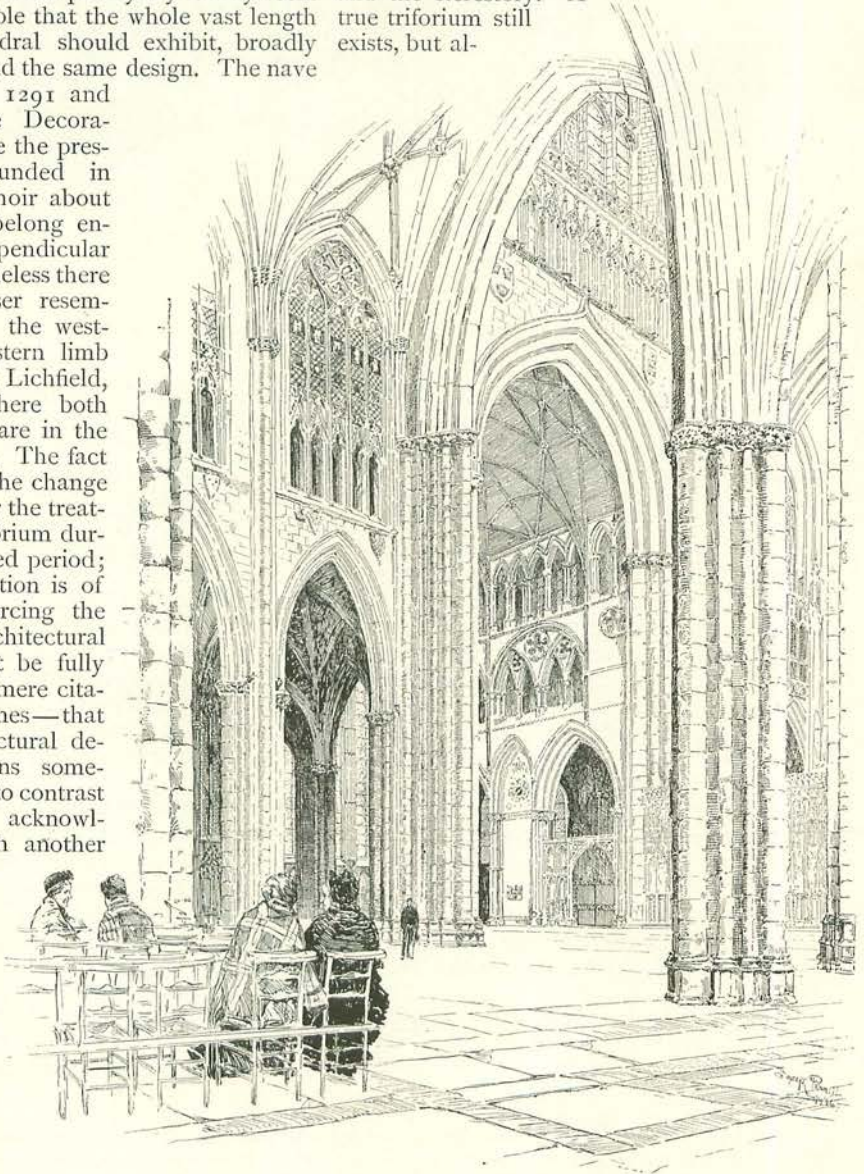
REMEMBERING the widely separated dates of nave and choir and presbytery it may seem doubly remarkable that the whole vast length of York Cathedral should exhibit, broadly speaking, one and the same design. The nave

was begun in 1291 and finished in the Decorated period, while the presbytery was founded in 1361 and the choir about 1380 and both belong entirely to the Perpendicular period. Nevertheless there is a much closer resemblance between the western and the eastern limb than there is at Lichfield, for example, where both nave and choir are in the Decorated style. The fact is explained by the change which came over the treatment of the triforium during the Decorated period; and the explanation is of interest as enforcing the truth that architectural character cannot be fully determined by a mere citation of typical names—that to study architectural development means something more than to contrast a work in one acknowledged style with another that exhibits a different style. There was never a decade when changes were not wrought, and sometimes a most important constructional change did not coincide with that alteration in style which in later

periods chiefly meant new decorative devices and new patterns in the windows.

In Norman and in Early-English years the triforium was a lofty independent story equaling or surpassing the clerestory in importance. Such was still the case in the earlier part of the

Decorated period, as when Lichfield's nave was built. But before the close of this period the triforium shrunk into a feature of distinctly minor importance. In the nave of York (as our illustration shows) the height from floor to roof is not divided, as before, into three great horizontal divisions, but into two—the pier-arcade and the clerestory. A true triforium still exists, but al-



THE TRANSEPT FROM THE NAVE.

though conspicuous it is no longer constructionally independent—it is merely a reserved portion of the clerestory design. Above the heavy transoms which divide the windows the lights are glazed and look upon the outer air, while below them they are open as an arcade



THE MINSTER FROM THE SOUTH-EAST.

upon a dark, narrow passage. In the choir of Lichfield, which is also a late-Decorated design, the triforium is much less slightly marked — a mere open balustraded walk running across the base of the clerestory windows; and once the innovation was made, the tendency was more and more to suppress the triforium in favor of the other stories. So when we find in the Perpendicular east limb of York the same arrangement that the nave displays, we feel that a rather uncommon desire for unity must have swayed its builders; and, indeed, a recorded resolution of the archbishop and chapter, dated 1361, which declares that “every church should have its different parts consistently decorated,” does not speak the general temper of medieval builders.¹

The nave is plainly treated and somewhat thin and cold of aspect; but it is taller than any nave we have seen and a little broader too, and these facts give it unwonted dignity and grandeur. We rejoice in the absence of the almost tunnel-like narrowness which we have so often found, and rejoice, too, in that height of ninety feet, which, were we on continental soil, would seem all too low.

The least satisfactory part of the nave is the

western end. In the center is a door with a traceried head and a gable which rises quite to the sill of the great window, while the top of this window touches the apex of the vault. A cornice-string, which continues the window-sill to right and left, divides the wall into two parts, and above and below it the whole surface is covered by a rich paneling of small traceried and canopied niches, once filled with many figures. There is no vital relationship between door and window: they are merely superimposed and hardly seem to belong to a single architectural conception. The strong horizontal line made by the cornice-string and accented by a difference in the design of the paneling above and below it as greatly detracts from unity as from verticality of effect. The window is much too large for the door, and its gracefully arched head does not harmonize with the obtuser arch formed above it by the end of the vaulted ceiling where it abuts against the wall.

It is a pity indeed that so exquisite a window should thus have the air of not belonging in its place. It is by far the finest in all England, and there is none finer in the world. Built between 1317 and 1340 it marks the apogee of the Decorated style, when geometrical had

¹ As a rule, in early churches the passage back of the triforium arcade was as wide as the aisles, was roofed at the level of the clerestory string-course, and lighted by large windows in the external wall, so that an exterior view presents three ranges of windows almost equal in importance. And, as a rule, when the triforium came to be of less importance inside, it was backed by a dark passage over which the roof sloped away without windows, and an external view thus shows but two ranges of openings. But we cannot so depend upon rules as to be sure, from an exterior, what the interior design will be — a fact which proves that the development of medieval art, at least in England, was less “logical,”

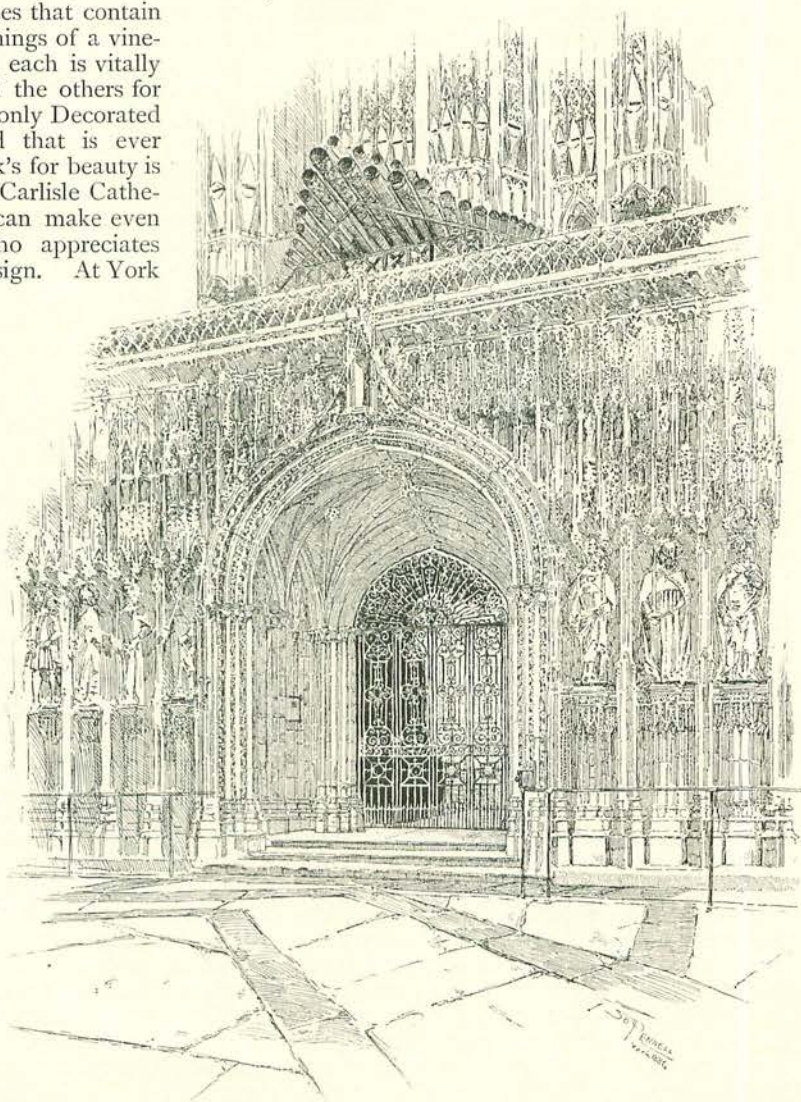
more dependent upon personal or local preferences, than we often suppose it was. In the very early Lancet-Pointed choir at Ripon, for example, there are but two ranges of windows and the tall triforium opens on a dark passage; the same is the case in the Lancet-Pointed nave and the Decorated presbytery at Lincoln, and in the Decorated nave at Lichfield; while in the late-Decorated choir at Ely there are three ranges of magnificent traceried windows and the triforium passage is as open and light as in the earliest Norman churches. In the Decorated as in the Perpendicular work at York there are dark passages and two external stories only.

been developed into flowing traceries and had not yet stiffened into any approach to Perpendicular types. There is a suggestion in it of the flamboyant forms of France; but it is not really flamboyant—it is a most characteristic and flawless example of the later flowing style. Eight tall narrow lights are finished as eight little equal trefoiled arches; above these the delicate rising lines develop into four groups of two arches each, and again above into two groups of four arches each, while flowing lines then diverge to form a heart-shaped figure in the center of the window-head, supporting another of smaller size and supported on each hand by an egg-shaped figure. All the lines which form these figures and fill them with lace-like traceries are as beautifully adapted to the spaces that contain them as are the veinings of a vine-leaf to its lobe, and each is vitally dependent upon all the others for its own effect. The only Decorated window in England that is ever compared with York's for beauty is the east window of Carlisle Cathedral; and no one can make even this comparison who appreciates the essentials of design. At York the entire window is a unit in conception and effect, despite its multitude of parts; but at Carlisle the main mullions are so disposed that we seem to see, under the great arch of the head, two narrow windows placed side by side with a still narrower one between them. It is a beautiful window, but not so beautiful as the one at York, and by many degrees less excellent as a logical piece of design. Correctly speaking, the York window is a modern work, for it was entirely rebuilt some years ago; but the original was carefully copied stone by stone and its an-

cient glass reset. The windows in the aisles and clerestory of the nave show an admirable but constantly repeated geometrical design.

VI.

IN the four huge piers which support the central tower the original Norman piers were kept as cores and covered with masonry to correspond with the new work in nave and choir. The powerful connecting arches are singularly graceful in shape, and between their tops and the great windows of the lantern runs a rich arcade. The vaulting of the lantern, 180 feet above the floor, is also very elaborate—a net-work of delicate lines like interwoven tendrils.



THE CHOIR-SCREEN.

The screen which shuts off the main alley of the choir is the most splendid that remains in England. It dates from the year 1500 and still preserves most of its sculptured figures, chief among them a series representing the kings of England from William I. to Henry VI. Lower and less massive screens shut off the choir-aisles; and the east-limb thus protected is used for the service. The nave has been fitted up for occasional preaching, but most of the time is left desolate to memories of a banished faith and echoes of the sightseer's whispering voice. Within the screens the real majesty of the minster first bursts upon the sense. The design, which looks cold and somewhat uninteresting in the nave, looks superb and splendid here where rich work in paneling, tracery, and sculptured ornament abounds; and it is improved by the closer station of the piers and narrower form of the arches which they bear. This is much the longest east-limb in England, absorbing very nearly half the length of the church and measuring $223\frac{1}{2}$ feet, while Lincoln's, which comes next in size, measures 158. Many elaborate tombs remain in the presbytery and the retro-choir.

Between choir and presbytery the long succession of three superimposed stories is broken on each hand by the great arch, springing to the roof, which admits to the minor or eastern transept. Such a transept exists, as we have seen, in two or three other English churches, but its arrangement at York is unique. It is not an addition to the east-limb, but a transept built wholly within it — of one bay only to north and south, not projecting farther than the line of the aisle-walls, and thus not showing on a ground-plan. Yet it is almost as effective as though it were longer, for its tall arches give great dignity as well as variety to the vast perspective, and its ends are filled each by a single window rising from near the floor quite to the ceiling — fitting companions for the giant at the east end of the church.

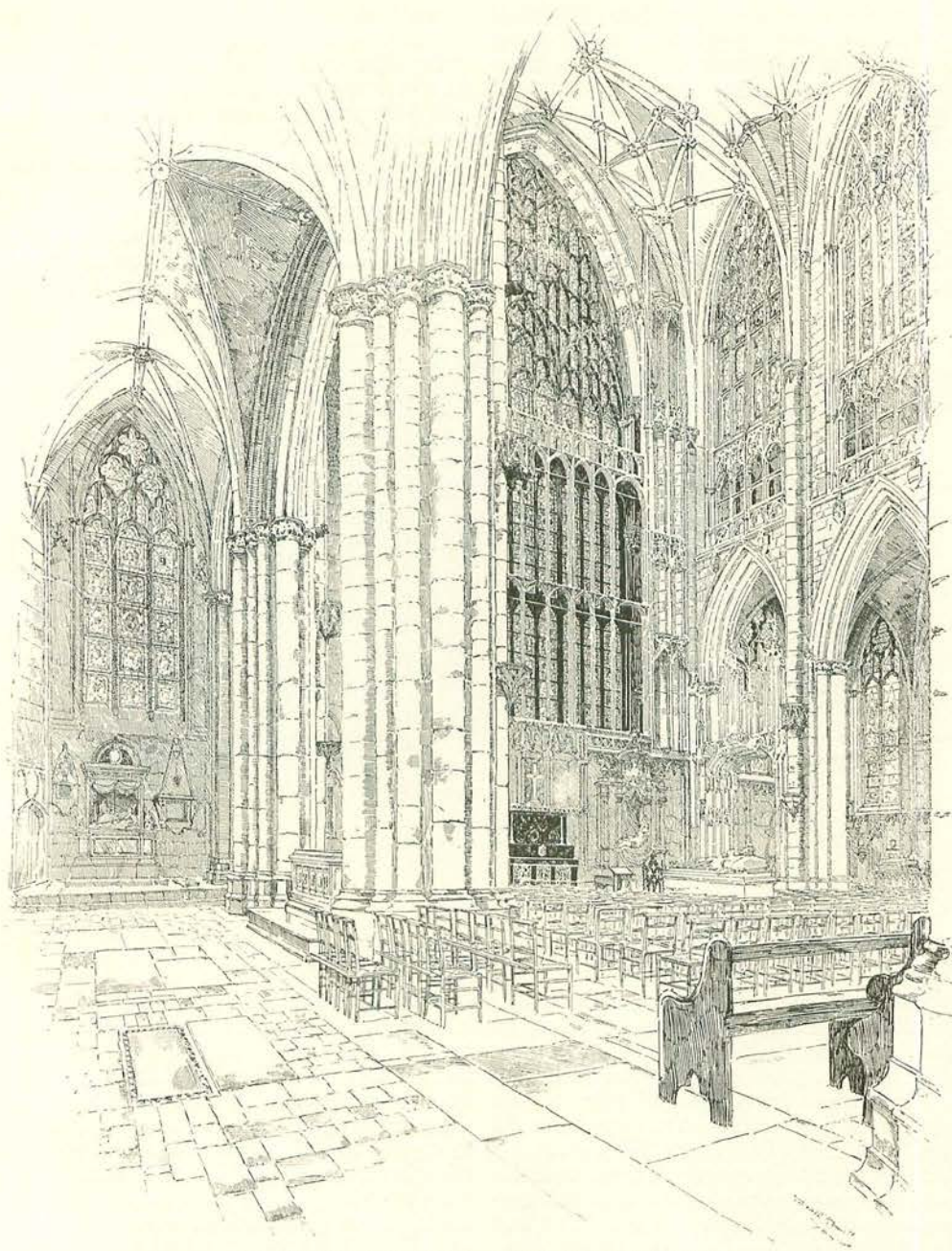
With the exception of the corresponding window in Gloucester Cathedral this east window at York is the largest single opening in the world — seventy-three feet in height by thirty-three in breadth. By contrast with its far-off rival at the west end of the nave it well explains the difference between Perpendicular and Decorated Gothic, while the aisle window (likewise shown in the illustration on the opposite page) explains the transition from the one to the other. It may seem at first sight as though "perpendicular" was the wrong word to give to the newer style, since strong repeated lines cut windows and walls into horizontal sections. But this device gives rise to many superimposed successions of short perpendicular lines; and in the window-heads

these so entirely control the design that the few curved and flowing lines which accompany them play a very minor part in its effect. In fact the term "Perpendicular" has been adopted to express not so much a greater effort after verticality in a general sense as a preference for ranges of short straight, upright lines, and is to be set against the term "flowing," which describes the last phase of the Decorated style.

The retro-choir at York was the Lady-Chapel, and the Virgin's altar stood immediately below the great east window. Retro-choir, presbytery, choir, and nave are covered and always have been covered with wooden ceilings in imitation of stone vaults, but their aisles, together with all portions of the great transept, are vaulted with stone. In 1829 the choir was set in flames by a maniac who had concealed himself overnight behind a tomb, and the roof was entirely destroyed, as well as the organ and carven stalls. In 1840 another fire, of accidental origin, consumed the roof of the nave and greatly injured the lantern; but everything was restored as nearly as possible — given the skill of that not very skillful time — to its original condition.

The chapter-house stands near the north arm of the greater transept and is entered through a fine vestibule. In date and style it corresponds with the main portions of the nave and is earlier than the west-front, belonging to the geometrical period of Decorated Gothic. Seven of its faces are filled with large windows of simple yet admirable design, beneath them running a row of seats covered with tall elaborate canopies. In the eighth face is the double arch of the doorway, then a pediment filled with paneling, and then blank traceries on the wall which match the seven windows. There is no central column, but the roof, borne in the eight angles on lovely clustered shafts, makes a clear sweep from wall to wall sixty-seven feet above the floor. With the exception of one church in Prague and one in Portugal and the lantern of Ely Cathedral, we have here the only Gothic dome in the world. But our admiration for both the English examples is lessened, alas! by the knowledge that their roofs — so strong yet light, so nervous yet delicate in effect — are of wood instead of stone.

This is perhaps the most famous chapter-house in England, and on its walls we read a painted Latin legend to the effect that as the rose stands among flowers, so this chapter-house stands among the chapter-houses of the world. Very likely many visitors think that the boast reads none too boastfully. Yet I fancy there will be some to agree with me in preferring certain earlier chapter-houses — especially the one at Lincoln. These beautiful windows



THE EAST-END FROM THE NORTH AISLE OF THE RETRO-CHOIR.

at York seem to absorb almost too much space, to make the effect almost too fragile and airy; and even the magnificence of an octagon sixty-three feet in diameter, with a clear floor and a flying roof, is less individual, less interesting, less beautiful, than one where rises "like a foamy sheaf of fountains" a central clustered column with its branching stream of ribs. The tendency of Gothic art was ever to accomplish

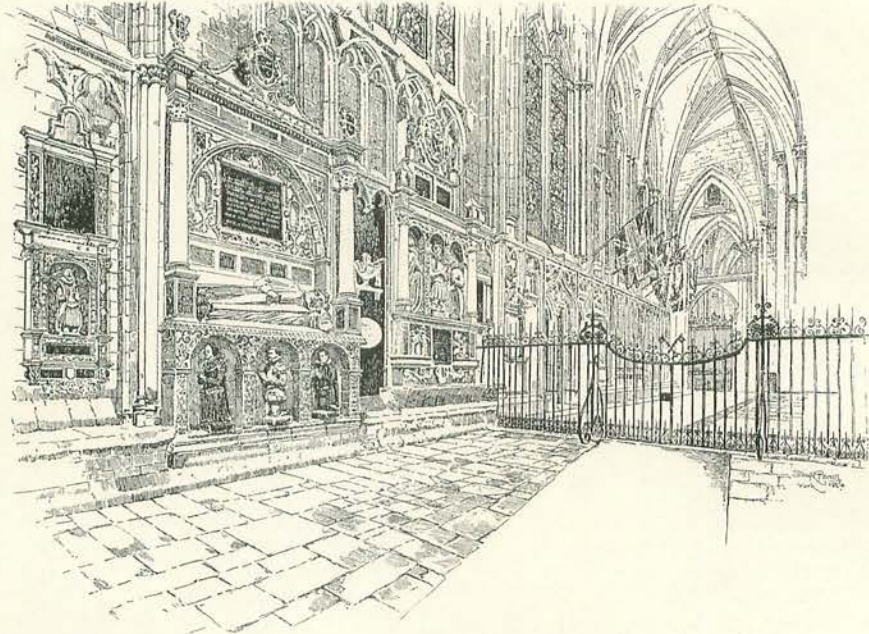
things with less and less revelation of the way in which they were accomplished—to build to loftier and loftier heights with lighter and lighter walls, and more and more to concentrate the points of support. In the chapter-house at York we see the final outcome as regards this class of structures, but an outcome less entirely pleasing to mind or eye than one in which constructional devices are more

frankly shown. Yet it has one great advantage over all its rivals. Nowhere else do we find so beautiful or well-arranged a vestibule, bringing us out into the light, lovely room through a rich but dim and solemn passage-way, the effect of which is vastly increased by the sharp turn it takes.

VII.

PERHAPS nothing in all England makes so strong an impression on the tourist as the interior of York. But it would be difficult to

"tone" to many continental churches even when no actual coloring exists, and a glare of white light or hideous cacophony of modern hues fills the enormous windows. Columns and walls and floors are as barren at York as elsewhere, and although many tombs remain, without its glass it would seem even colder and emptier than most of its sisters. But its glass, thrice fortunately, has been almost wholly preserved. Nowhere else in the island can we learn half so well as here what part translucent color was meant to play in a Gothic church.



TOMBS IN THE SOUTH AISLE OF THE PRESBYTERY.

overestimate the degree to which its singular effectiveness depends upon its riches of ancient glass. Architecturally considered there are other interiors more individual, more beautiful, even more imposing, and many others more interesting to the student's eye. But the great and general fault of English churches is that they have been entirely reduced to architectural bone and sinew — that they lack decorative warmth and glow, life and color, and the charm which lies in those myriad accessory things piously preserved elsewhere by the lingering faith of Rome. All the varied tools and trappings, altars, shrines, and symbolic trophies of the rich Catholic ritual have been banished; much of the furniture is gone; all the walls are bare of paint; scores of tombs and chantries have been shattered to bits, and thousands of sculptured ornaments and figures have fallen beneath the ax. A painful cleanliness has replaced those time-stains which give

Not all the windows show the old glass, nor is it always in the position it originally held; but the exceptions are few, and the most conspicuous results of modern manufacture fill the smaller lancets above the "Five Sisters" and those in the opposite end of the great transept. In one or two of the nave windows parts of the glass are even earlier than that in the "Five Sisters," dating from about 1200, and having been preserved, of course, from the earlier building; and elsewhere we can follow the development of the art through a period of four full centuries. The west window, glazed about 1350, is a gorgeous mosaic of ruddy and purple hues, shining, in the intricate stone pattern which shows black against the light, like a million amethysts and rubies set in ebony lace. The colossal multicolored eastern window and the two of similar fashion in the minor transept are vast and fair enough for the walls of the New Jerusalem, and so too the



THE MINSTER FROM THE STREET.

exquisite sea-green "Sisters"; while wherever we look in the delicately constructed eastern limb it seems not as though walls had been pierced for windows, but as though radiant translucent screens — fragile, yet vital and well equal to their task — had been used to build a church and were merely bound together with a net-work of solid stone. For the moment we feel that nothing in the world is so beautiful as glass and that no glass in the world could be more beautiful than this.

If, however, we know French glass of the best periods, we remember it, when the passage of first emotions leaves us cool enough to think, as being still more wonderful. In these pages it would be as impossible to discuss all the differences between French and English glass as to trace the variations that marked styles and centuries in England, or to describe the patterns before us, which, although blending at a distance into a Persian vagueness of design, are varied and admirable pictures when we see them somewhat closer. Only this may be said: blue is the most brilliant of all colors in a translucent state, the one which gives stained glass a quality most different from that of opaque pigments; blue is more prominently used in the best French glass than any other

color, while in England it rarely dominates in a window, and is often almost altogether suppressed in favor of green and red and yellow and brownish hues. The general tone in English glass is often rather soft and thick—a little oleaginous, so to say, or treacle-like; less clear, crisp, sparkling, gemlike than ideally perfect glass should be. To my mind the very best English windows are apt to be those of the latest Gothic period, when the background of architectural motives is softly grayish in tone and throws out with exquisite effect the brilliant little figures which were then preferred to the large figures of earlier times. But it is not glass of this description which most fully shows the royal splendor that is within the compass of the art.

Yet though we may say that there is still finer glass in the world than all but the very best of that in York Cathedral, as a whole York's glass is quite fine enough to reveal the true power of mediæval glaziers and the potency of their handiwork as an aid to architectural effect. Indeed, the lesson it teaches is that Gothic stained glass was much more than an adornment to architecture. Historically and æsthetically it was in so strict a sense an architectural factor that we cannot

really appreciate a Gothic church if we think of it as a mere skeleton of stone. During a long period glass itself was the cause and reason of architectural development. As the achievements and ambitions of the glazier grew, the architect modified his scheme to suit the new possibilities of beauty thus supplied him. Not because windows were bigger was more splendid glass produced; it is truer to say that because glass was growing more and more splendid were windows increased in size. Thus when the revolution was complete great deep-toned windows held so prominent a place in the architect's primary conception that to judge this conception apart from them is to judge not merely a naked but a mutilated thing. Of course as much is not true of Norman buildings. Here arches, piers, and walls are all-important; windows play a very restricted rôle: the paint which has flaked off from their stones is a greater loss than the glass which has perished from their openings. But as Gothic art developed, the openings soared and widened till to say *windows* meant almost to say *walls*; and when we see these walls in thin white glass instead of rich with the intense color which means vigor and solidity as well as loveliness, it is like seeing a "skeletonized" leaf instead of a leaf filled with its fresh green tissues. A Perpendicular church was actually meant to look as I have said it does look when its glass is present—like a vast translucent colored tabernacle merely ribbed and braced with a sterner substance. To remove its glass thus means a great deal more than to destroy decorative charm. It means to ruin even the architectural idea.

Nowhere at York are the windows more deeply splendid, more radiantly fair, than in the vestibule of the chapter-house and the wonderful room itself. If only their influence might be felt apart from the teasing drone of the verger's explanatory repetitions! Curry favor with him by patient listening at first and he may consent to leave you to beauty and silence while he takes his flock back into the church. But after a moment he will be with you once more, the flock a new one but the drone the same, and the self-satisfied gesture which accents the words, "*Ut rosa flos florum, sic est domus ista domorum.*"

VIII.

THE story of the Archbishops of Canterbury means the story of their nation; but through the centuries when they were at their greatest their titular town lay quietly outside the scenes in which they figured. Not so with York. The focus of life in the north of England, its name comes constantly to the historian's lips, and

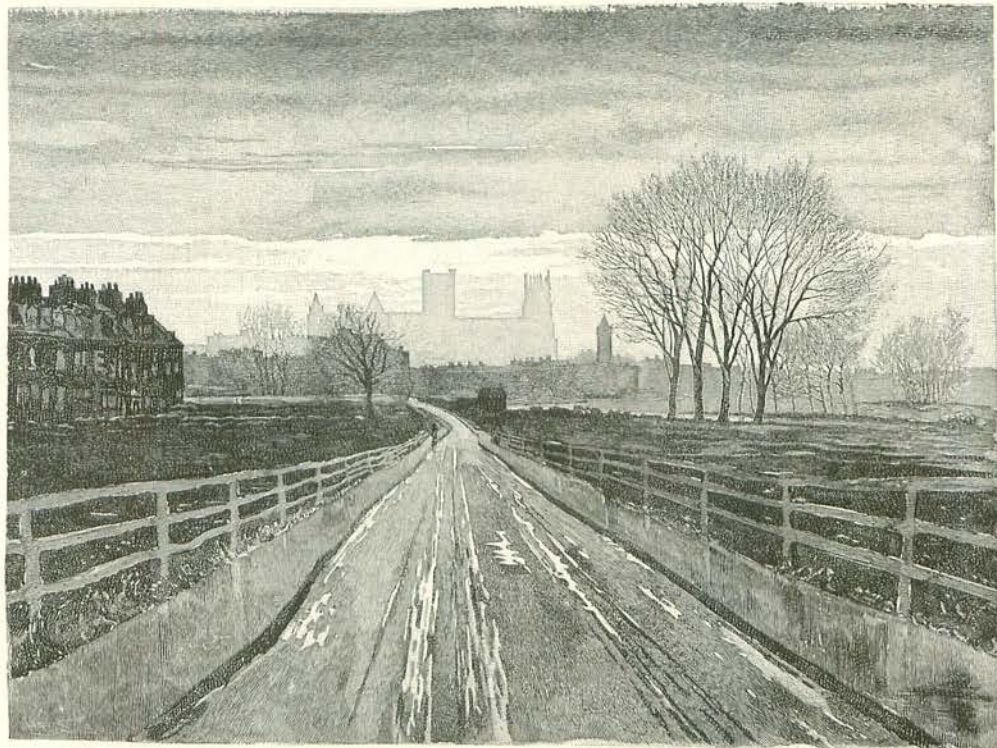
countless famous Englishmen there did famous deeds.

If we credit legends we may believe that the city was already in existence when King David reigned in Israel, but its clear history as Eboracum begins with the Romans—with Agricola who subdued or founded it, with Severus the emperor who died there and Geta his son, Constantius Chlorus, and Constantine the Great. Then, after a century of darkness, comes the shadowy figure of Arthur the Briton keeping his Christmas at Eboracum, and after another century of conflict, Edwin the Englishman and his baptism by Paulinus. Four hundred and fifty years later comes William the Norman, the sword in one hand, the torch in the other; then Henry II., receiving homage from Malcolm of Scotland; King John, visiting the city sixteen times; Henry III., signing his alliance with one Scottish king and marrying his daughter to another; Edward I., holding a parliament; Edward II., fleeing from Bannockburn; Edward III., in 1327, marching against the Bruce, and the next year marrying Philippa of Hainault in the cathedral; Queen Philippa, in 1346, marching to that victory of Neville's Cross which the monks of Durham were to watch from their tower-top; and Richard II. in 1389. In 1461 Henry VI. went out from York to the battle of Towton, and his conqueror entered it to return again as Edward IV. for his coronation in 1464. When Edward died his brother Richard was at York, and though he went at once to London he came back to pompous ceremonies while his nephews were being murdered in the Tower. And Flodden Field sent its representative in 1513—the slain body of James IV. of Scotland. York was distinguished in the Reformation as the center of the rebellion called the "Pilgrimage of Grace," and saw the execution of its ringleader, Robert Aske, and also the execution of Northumberland, who led the Catholic revolt in the time of Elizabeth. In 1640 Charles I. summoned a council of peers at York, hither removed his court in 1642, and here welcomed his wife when she brought him supplies from France. In 1644 the city was invested by Fairfax, with Cromwell serving as a lieutenant in his army. Prince Rupert's arrival raised the siege, but after the battle of Marston Moor the city surrendered to the Parliament forces.¹ Thus the two bloodiest battles ever fought by Englishmen against Englishmen were fought within sight of York—Towton and Marston Moor; and up to the time of the Restoration no city save London knew more of the course

¹ Members of the Fairfax family were put in charge of York by the Parliamentary party, and to them the minster owes its preservation from the ruin which was worked elsewhere.

of national life. It has been the birthplace, too, of spirits conspicuous for good or evil—not, indeed, as once was claimed, of Constantine the Great, but of Alcuin, the mighty scholar and friend of Charlemagne; of Waltheof, Earl of Northumberland, “hero and martyr of England, . . . the valiant and devout who died by the sword at the bidding of Norman judges”; of Guy Fawkes; of Flaxman the sculptor, Etty the painter, and the astronomical Earl of Rosse; of George Hudson, king of the railway, and of a host of minor sapient Dryasdusts.

with Thomas of Bayeux, the rebuilder of the cathedral church. The third who followed him was Thurstan, conspicuous in the struggle of York against Canterbury and of the monastic against the secular clergy; conspicuous too as a leader in the wars against the Scot—mounting the banners of St. Peter of York, St. John of Beverley, St. Wilfred of Ripon, and St. Cuthbert of Durham on a cart and leading them to the great victory called the “Battle of the Standard.” He died in 1140, having given up miter and sword to become a monk at Cluny,

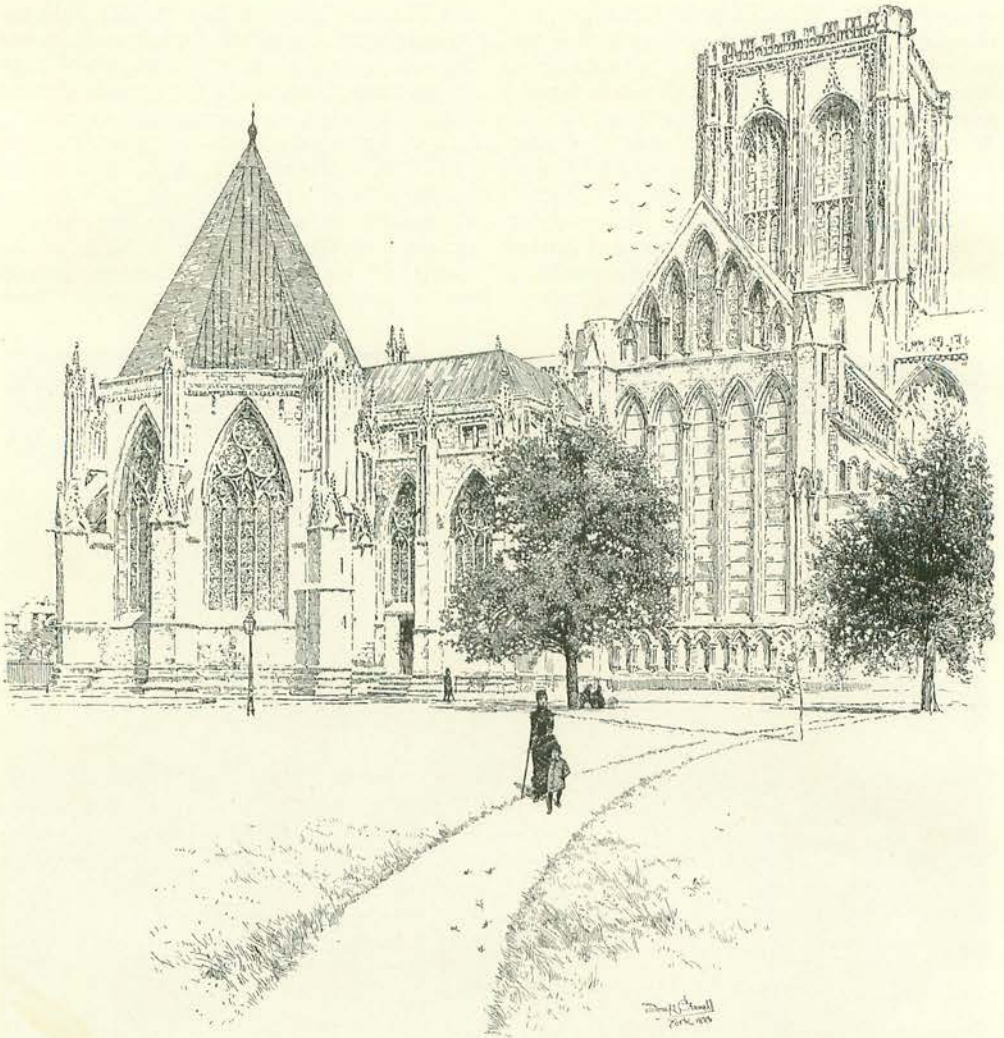


THE SKY-LINE OF YORK MINSTER FROM THE NORTH.

Then on the roll of York's archbishops what a famous company!—Paulinus; St. Chad, the great founder of Lichfield (who was not archbishop, yet for a while bishop at York); St. John of Beverley, rivaled in sanctity on this northern soil by St. Cuthbert of Durham only; Egbert, to whom the history of Bede was dedicated; Ealdred, the friend of Edward the Confessor and then of the rebel Tostig, and the primate who placed the crown on Harold's head, in the same year on William's, and two years later on Matilda's, and then died of a broken heart because of the ruin that the Conquest worked in Yorkshire—an expressive figure with which to close the line of the pre-Norman primates of the north.

The Norman line begins, as I have said,

and was followed by William Fitzherbert, a descendant of the Conqueror, who was canonized as St. William of York. Just why this honor was accorded it is hard to understand. Truly, William saved hundreds of lives by a miracle when a bridge fell into the Ouse; but miracles were plenty in those days, and perhaps the wish of the mighty diocese of York and the “money and entreaties” of his friend Antony Bek, Prince Bishop of Durham, had more to do with his saintship than had personal merit. The cathedral of York was dedicated to St. Peter; but to share a patron with the Church at large and to have no private collection of bones for purposes of pomp and revenue—this in no degree contented a great twelfth-century “house.” So William Fitzherbert was canonized; his body



THE CHAPTER-HOUSE, "FIVE SISTERS," AND CENTRAL TOWER.

was fittingly enshrined, was translated to the new presbytery in later years, and, let us hope, faithfully did its part towards paying for its resting-place.

After the saint-to-be came Roger, whom Becket called all manner of names because he took the part of King Henry, and whom Becket's friends accused of complicity in his murder. Roger was certainly no saint, though doubtless no assassin; for he was the "York" whom the well-known anecdote describes as plumping himself down in "Canterbury's" lap when the southern primate had taken the seat at the papal legate's right hand in council at Westminster, and being thereupon beaten and trampled and hounded away to the cry, "Betrayed of St. Thomas, his blood is upon thy hands!" Yet he was a great scholar and a great builder, constructing, among many other things,

the new choir of his cathedral. Roger was followed by Geoffrey Plantagenet, reputed the son of King Henry and Fair Rosamond. Then came De Grey, the friend of King John in his struggle with the people; and then — with lesser men between them — Greenfield in the reign of Edward I., Melton in the reign of Edward II., when York was for a time the real capital of England, and from 1352 to 1373 Thoresby, who built the presbytery of his church and accepted with thanks the title of "Primate of England." In 1398 Scroope, who is the *York* of Shakspeare's Henry IV., was consecrated. In 1464 there came to the chair a Neville who played a prominent part in the Wars of the Roses, but is better remembered for a feast he gave, when 330 tuns of beer and 104 tuns of wine were drunk and everything in the world was eaten down to "four porpoises and eight

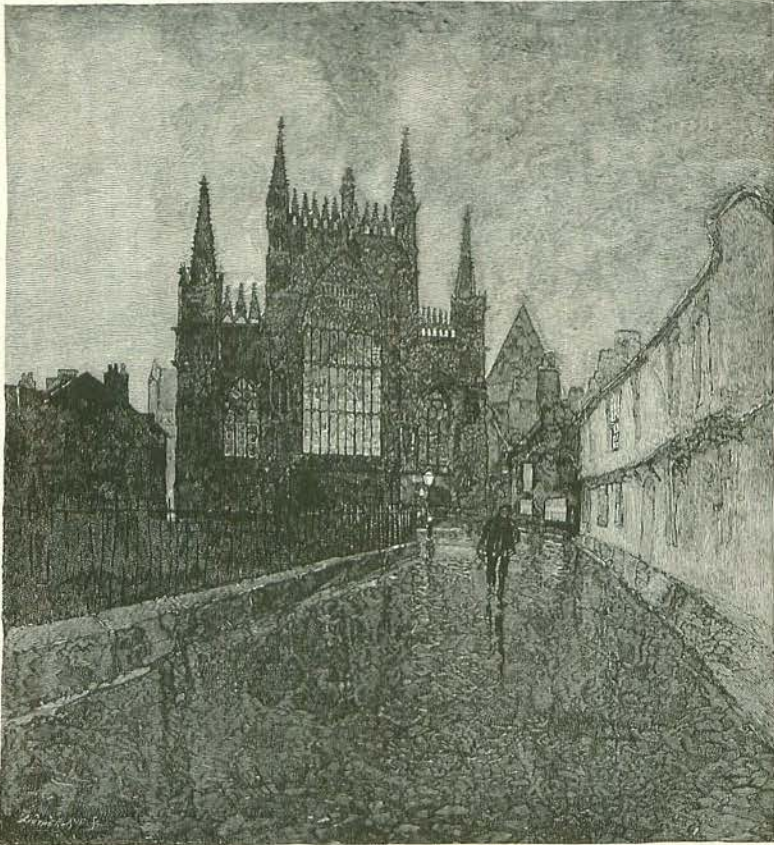
seals." And in 1514 came the most famous primate of all — Wolsey the cardinal, who at first held Durham's see with York's, and then, giving up Durham's, held Winchester's with York's, and after his disgrace came back to live near York and to die at Leicester.

IX.

IN its ancient walls and gates and bridges, its many churches of many dates, its Norman castle and fifteenth-century guildhall, the exquisite ruins of St. Mary's Abbey, the long low streets of gabled, timbered houses, and

length is not supported by adequate height in the outer roof or in the towers, while the fact that this length is equally divided between nave and choir increases the monotony of the skyline. It is, of course, an immensely impressive skyline; but to my eye it is the least beautiful that England shows in any of her great churches if Winchester and Peterborough be excepted.

Coming nearer we still find that Lincoln need not fear the contrast. The west doorways are very grand and very lovely, but elsewhere there is much less decoration than at Lincoln, and the simpler plan gives no such



THE EAST-END AT NIGHT.

the splendid archiepiscopal palaces and lordly homes that dot the neighboring country, York clearly shows the tread of time from Roman days to ours, and the handiwork of all the races and generations that have made it famous. But there is no room here for a survey so extensive. Only a line or two can be given to the external aspect of its greatest structure.

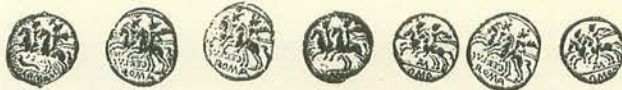
From a distance York Cathedral has by no means the beauty of Lincoln. It stands well, but not so well as Lincoln, and its excessive

picturesque perspectives or rich effects of light and shade. Nor are the towers satisfactory in proportion or design. They are very big, yet sadly stumpy, and the total lack of finish to the central one is as distressing as the exaggerated battlements around the western pair. But the south transept-front is magnificent: one of the finest impressions we get in England is when we perceive it first through the long low vista of the Stonegate. And we find a very splendid group when we stand on the green to

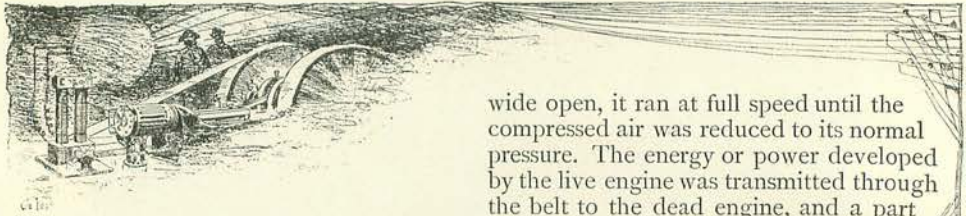
the north of the church — formerly the archbishop's garden, but now open and turfed around the relics of the shattered palace — and see the chapter-house, the "Five Sisters," and the central tower. Whatever may be thought of its interior, no chapter-house is so beautiful as this outside, with its well-designed buttresses and lofty roof and the great elbow of its vestibule. Nor could it be better supported than by the simple aspiring lines of the transept windows and the massive bulk of the tower behind them. Seen from the east the

chapter-house forms part of another admirable composition, where it stands in contrast to the long reach of the two-storied choir broken by the vast height of the window in the minor transept. The east-front of the church is typically English and good of its kind, though not to be compared with those produced in earlier days when windows were smaller but more numerous. The immense fields of glass that later Gothic builders used are of course less happy in effect outside a church than inside.

M. G. van Rensselaer.



SOMETHING ELECTRICITY IS DOING.



SEVERAL years ago, at one of the exhibitions of the Massachusetts Charitable Mechanic Association in Boston, there was a display of small steam engines, many of which were supplied with steam and were in motion. One exhibitor, who had a portable boiler with engine attached, did not use the steam supplied to the others, and his exhibit would have been "dead," or idle, had he not put a belt from a neighboring engine to his own. Most of the spectators did not notice this device, and imagined the engine was really at work on its own account. At the hour for closing the hall, when all the steam was shut off and the various engines came to rest, the belt to the "dead" engine was thrown off, and, to the amazement of those present, the idle engine instantly started off and ran at full speed for several minutes before it slowed down and stopped.

The dead engine at work was an example of what is called the "conversion or transmission of energy." The engine was connected with an air-tight boiler, and when set in motion by means of the belt it acted as a compressor and filled the boiler with air under pressure. When released, it became itself a prime mover or motor under the pressure of the air stored in the boiler. The throttle being

wide open, it ran at full speed until the compressed air was reduced to its normal pressure. The energy or power developed by the live engine was transmitted through the belt to the dead engine, and a part of this energy was for the time stored in the air within the boiler. When the supply of energy was cut off, the stored energy in the boiler reappeared as me-



chanical power on the previously dead engine.

It is a curious fact that at the International Exhibition at Vienna, in 1873, a parallel phenomenon was observed.

There was at the Vienna Exhibition a display of dynamos of the Gramme type, or, as they were then called, "Gramme machines," and in this exhibit one

