

DISCE QUASI-SEMPER VICTURUS

· YIVE · QUASI · CRAS · MORITURUS

Vol. XXVI.

NOTRE DAME, INDIANA, DECEMBER 10, 1892.

No. 14.

"Notre Dame."

BY S. M. A.

ADY most beautiful,
Gentle and dutiful,
Mother most fair,
Dove-like, and very sweet,
Prostrate before thy feet,
List to my prayer.

Oh! make me meek and mild, Like to thy Holy Child— Simple and pure; Teach me to bear the thorn, Although my heart be torn, Still to endure.

Help me to bear my load
Up, up the stony road,
Until that day
Where, near the Heavenly King,
Notre Dame's praises ring,
Queen of Heaven's May.

Soaring Flight.

BY ALBERT F. ZAHM.

"And like an albatross asleep Balanced on her wings of light."

Shelley, in the above line, observes very prettily what has puzzled many a philosopher. "Balanced on her wings of light"; the vision is too charming, of course, to escape any artist. Knowles has given us a like picture of the eagle hovering over an Alpine chasm:

"O'er the abyss his broad expanded wings Lay calm and motionless upon the air, As if he floated there without their aid, By the sole act of his unlorded will, That buoyed him proudly up."

Milton makes all his devils sail on motionless wings; and all his angels too, save, perhaps, Uriel who glides on a sunbeam. Fortunately, he has not given his theory of soaring, else we should be hopelessly involved in cycles and epicycles.

It is the purpose of this article to attempt a. partial explanation of a phenomenon which is too well attested to bear any doubt, and which yet has all the appearance of a paradox. The best observers testify that certain birds can, under favorable circumstances, ride the atmosphere without beat of wing, without apparent exertion, directing their course at pleasure over vast tracts of country and at all altitudes, from the sea-level to the loftiest cloud regions; but in their explanations of the performance they singularly differ. We may be sure, however, that it is not effected by aid of the buoyancy of the atmosphere, for birds are not buoyant, and only the larger, heavier ones can soar well; nor from any vibratory, propulsive movement of the quill feathers, for anatomy and observation prove that the feathers cannot and do not have such movement; nor from superimposed contrary currents of the atmosphere; for, although such currents exist, soaring is commonly performed in a single stratum. It is evident also that such flight cannot be accomplished in a calm, and hence that the only motive power must be that of the wind, from which the bird derives both its support and the energy required for its propulsion.

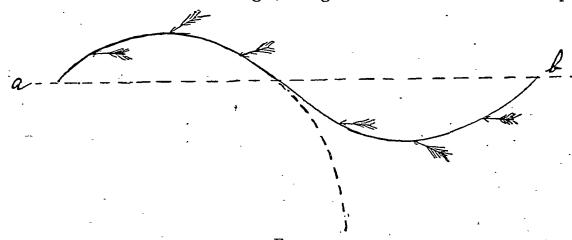
All writers likewise declare that to soar well a bird must be comparatively large and massive; that the angle of its flight must be very small; that there must be a breeze or movement of the atmosphere. It may be added also that the movement of the atmosphere must be varying, for it can be demonstrated that a current of

uniform velocity and direction is, for purposes of soaring, equivalent to a calm, unless, perchance, it have an upward motion.

Fortunately for the birds, uniform currents are not the rule. Perhaps it would be nearer the truth to say that most currents are variable both in velocity and direction. This is abundantly evidenced for the lower strata by the incessant tossing and heaving of smoke-streams and snow-flakes; by the erratic flight of the smaller birds, and by the unsteady action of kites and balloons.

The phenomena of soaring may be more clearly discussed by considering them under the following heads:

- (1) Direct soaring, which requires a rising current; (2) Naval soaring, which is effected by tacking, while gravitation and the resistance of inertia answer for keel resistance; (3) Spiral soaring, which has no analogue in art or nature.
- (1) Direct Soaring.—Direct soaring on a current that rises at a considerable angle, though not



so frequently practised, may be observed in mountainous districts, and, to some extent, near large buildings which deflect the course of the wind. Thus pigeons and swallows are sometimes seen to rise mysteriously upward against the general course of the wind, without effort and apparently in violation of natural laws. While waiting at a station in Mexico I once observed a buzzard rise from the earth on motionless wings and sail directly forward against the apparent direction of the wind to a distance of some hundreds of feet. At the same time I remarked that clouds of dust in the locality arose obliquely upward, and that the buzzard's wings presented a negative angle of advance. Among the mountains I have frequently seen large birds leap downward from a lofty perch and presently sail steadily up to a height muchabove their original level.

This performance is similar to coasting, or gliding down an incline, the forces acting on the mass of the bird being gravitation, the normal

wing pressure and the hurtful resistance, whose equilibrium is the sole and sufficient condition of flight. Considerations of inertia are of no importance in this connection; for as the bird sails in a direct course on a current but slightly variable, its mass undergoes no sudden alterations of velocity or direction, and consequently-exerts no force and no controlling influence on the direction or rate of motion. Hence both light and heavy birds can accomplish direct soaring; the only condition of continuous forward progression being that the resultant of wing pressure and gravity equal or exceed the hurtful resistances.

(2) Naval Soaring.—In comparing the second kind of soaring with the sailing of a ship, we must substitute the force of gravity and of inertia for the normal keel pressure which the water offers a sailing vessel. It must be remembered, however, that a ship may sail continuously in one direction under a uniform breeze without loss of keel pressure, while a bird can

sail but a few seconds till its inertia is overcome and it drifts with the wind; whereupon it must sink as rapidly as if in a calm. A change in the direction of the wind will then be necessary before the inertia can offer a new resistance. From this it will be seen that the inertia of a bird assists in soaring at each change in the

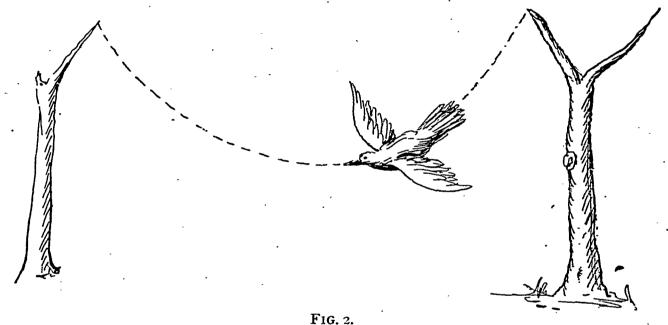
direction of the wind, and hence that frequent changes are advantageous. The greater and the more frequent such alteration, the better; but how much or how frequent it should be is questionable. It must evidently vary with the mass, the conformation and the wing spread of the bird.

Fig. 1 represents the horizontal projection of the course of a bird soaring against a wind of varying horizontal direction. The vertical projection would indicate that the bird rises near the extreme sides of its course and falls at the midway points, thus acquiring additional velocity. On crossing the line a b the bird changes the inclination of its wings so as to gradually return and glide towards the line. Also after crossing the line it is urged forward by the force of inertia, or the momentum acquired from the wind and gravitation while approaching the line. If on crossing the line the bird did not change the inclination of its wings, the course would present no point of

flexure, but follow the dotted line, beginning one of the familiar spires of the third kind of flight.

It remains to be shown that soaring may be performed in a current varying only in a vertical direction. Before attempting this it will be well to call attention to the remarkable fact that with well-formed bodies gliding on the air, and within moderate limits, kinetic and potential energy are, to a large extent, convertible. As a sleigh in gliding down a smooth slope acquires sufficient speed to carry it up another slope nearly to its original level, so can a well-formed bird sail down and up the atmosphere. Both observation and experiment confirm this statement. Everyone has noticed that when a bird wishes to fly from one perch to another fifty or sixty feet distant it plunges downward very obliquely to gain a fair velocity; then, without velocity. Anyone can repeat this experiment by properly weighting a common Japanese bird kite and projecting it as described. Hence it appears that a downward velocity can be transformed into an upward velocity, and therefore that any downward impulse of the air during flight, provided it be not too great, is to be considered as but slightly prejudicial. It has already been shown that an up current is advantageous; it might also be shown how both upward and downward currents could be turned to disadvantage.

Let us now assume that a bird sailing horizontally, as illustrated at point a, Fig. 4 encounters a fall in the atmosphere, thereby acquiring a downward velocity. After each fall there must be a lull, then a rise. The bird, during the lull, may transform its downward course into a horizontal one, and continue to sail hori-



. г

beat of wing, describes a graceful curve, rising upward approximately to the initial level before its velocity is spent. This is illustrated in Fig. 2.

The best sailors can, of course, describe much larger curves and with a greater coefficient of recovery than those birds which have very concave wings. The swallow, for example, may often be seen to dip from its course and recover again almost as perfectly as if it had continued in a direct line. The efficiency of the ascent depends largely upon the velocity of flight and radius of curvature of the path described, as well as upon the mass and conformation of the bird. It may be added here that the most efficient wings for soaring are very long, narrow and but slightly concave.

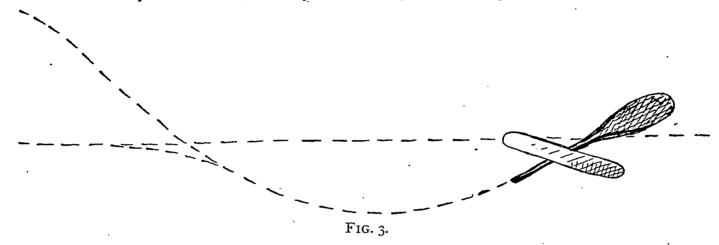
To illustrate experimentally the transformation of kinetic into potential energy the birdshaped kite shown in Fig. 3 may be projected downward obliquely and made to curve gracefully upward almost to the height due to its zontally with its increased velocity until it encounters a rise in the atmosphere. It will then, without altering the position of its wings, and still retaining the increased horizontal speed, rise on the current as indicated, and attain its former level with an increased velocity which would enable it to ascend above its original level. This is soaring; this is deriving energy from the atmosphere without active muscular exertion.

The above graphical description is purposely exaggerated to illustrate the conversion of downward into horizontal velocity. If the transformation were perfect, the height above its original level to which the bird could ascend during a second lull would be equal to that due to its increased velocity, or equal to the fall, after which it might sail on with the velocity it had at point a. In actual flight the transformation is not perfect, and with most birds it is so incomplete as to render soaring impossible.

It will be seen from the position of the wings indicated in Fig. 4 that the net effect of the forces acting upon them is to advance and sustain the bird, since the average resultant must evidently lean forward and upward. It may also be noted that in this evolution the velocity due to the fall has only to be changed into a horizontal, not a vertical one, the ascent being effected by the upward flow alone.

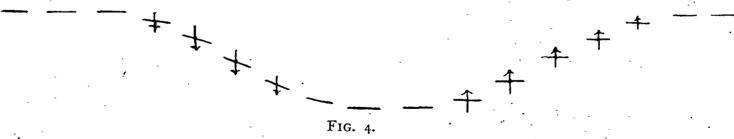
The arrows in the illustration indicate only the vertical velocity of the wind; it may have direction of the wind, provided it be not too violent, may be rendered promotive of flight.

(3) Spiral Soaring.—We come now to the third kind of flight which is, in some respects, the most marvellous performance in all nature. The chief apparent difference between this and the second kind is that the bird moves round and round so as to head, at different times, in all directions, thus describing a kind of spiral path. By so doing it can turn to profit not only each change in the direction of the aerial



also a moderate horizontal motion and still admit of soaring. My observation has been that birds soar most easily and effectually when the wind is not strong. Indeed, they are often seen to glide about with perfect ease at a height of 100 to 500 feet, when the air at the surface of the earth is barely moving, and the leaves on the highest trees are but slightly waving. Anyone who has observed the motion of smoke, dust or thistle-down on a quiet day must have noticed that the atmosphere rises and falls slowly, something like the swell of the sea. The atmosphere just over a swelling sea is peculiarly favorable to this kind of soaring; for a rising

disturbances, but also each change in the velocity. For, suppose a bird sailing westward to encounter a gust of wind. So long as its inertia is not overcome, the bird breasts the wind and rises on it. Presently it begins to veer to one side, to partake of the velocity of the wind, and finally to glide eastward with a great velocity which is the resultant of that due to wind pressure, initial speed and velocity due to descent—in case it descend at all. If the bird have the instinct to continue veering to one side while the gust is at its height, it may, after the gust has somewhat subsided, sail eastward on the slower part of the current, turn



current of very little velocity affords great sustaining force to a bird sailing rapidly over it. Indeed it may be shown by a simple demonstration in aerodynamics that a rise of the air barely sufficient to sustain a leaf will support a large bird gliding rapidly on horizontal wings. It may be remarked here also that the air is sometimes quiet in one locality and disturbed in another near by; so that in passing from one to the other the bird may profit by the difference of condition. It appears then that any disturbance, any variation in the velocity or

gradually about and head west again, having attained an altitude above its original level, and thus successfully completed one spire. In describing a path of this kind, then, a bird may take advantage of every conceivable variation of the smaller atmospheric currents, and hence this kind of soaring is most frequently preferred by vultures and eagles when they wish to attain a great altitude. In sweeping through a single one of those remarkable curves the eagle, the buzzard, or the condor will profit by each change in its horizontal course, each rise and fall, each

quietude or difference of motion of neighboring localities, and of course, by the general rising of the atmosphere of that region, if it should happen to be rising at the time. What other reasons there may be for preferring the spiral path I cannot conjecture, though I doubt not there may be many.

So it appears that a large, well-formed bird can raise itself up from a perch to the sky by sheer dexterity, having once learned to avail itself of the resources of the air. And what a god-like performance it is! So extraordinary, indeed, that many observers mistrust the evidence of their eyes and deny its possibility. Yet the feat has been observed by men who have made it their favorite study, who have followed the birds again and again with large telescopes, and who assure us that the wings remain outstretched and motionless, that the birds ride by sheer instinctive skill upon the fickle wind, aye! sleep upon the wing, rocked in the soft cradle of heaven.

I myself have observed such performances under every conceivable circumstance, in the mountains and on the plains, with every degree of wind, and so close that I could observe every movement; and I am convinced that a bird can rise from near the earth to the sky without once beating its wings, without the slightest rowing, without any muscular movement more than that of steering.

The grandest and most impressive natural scenes I have ever witnessed were topped and magnified by some of these royal birds. In the ascent of a lofty mountain, when, after a long forenoon's ride, we halted in the fields of eternal snow, with horses breathless and exhausted, and for a moment gazed upon the vast earth outstretched below and the blue peaks arrayed on every side, behold! the birds were there, soaring high over all; and they arose far above the mountains and the clouds in their solitary course to that region where no sound is heard save the tread of their strong pinions and the warring of contending winds.

Again in the valley of the Arkansas, when passing that tremendous gorge whose walls rise up to the clouds on either side, overhanging huge and dark, clothed in such grandeur, such solemnity of age and strength that every soul was hushed and every eye strained in ecstasy, lo! the clouds withdrew from the top of this high chasm, and above them wheeled the imperial eagle, fierce, haughty and alone, like genius above the world.

Once more I rode on that slope of the Sierra Madre where the powers of science and of nature vie with each other in works of wonder; where

the road winds through tunnels and over precpices impassable even to the gazelle; where the airs of two climates combine their perfume and vegetation and colors amid the rugged depths of innumerable mountains; and as we emerged from the darkness of the last tunnel that borders the world-famed pass of Maltrata, behold a concave, deep and vast as another world yawned beneath us, and far down as the eye could fathom were the groves and gardens and habitations of another race. And as we edged above this tremendous abyss, amid the clouds of vegetation and the tumult of waters, threading our way beneath the over-frowning earth and along those high columnar bridges whose mighty-armed pillars stand like the forest kings of Oregon, "Surely," said I, "man is a master in all things." But as I surveyed again this immensity of verdure, following upward mount on mount of pendent foliage to where this high range salutes the sky, and above it Orizaba bears his frosted cone into the central blue, there were the sacred birds of Mexico soaring in majesty above the freighted clouds, and the proudest ranges that kiss the sky, and frosted Orizaba and Popocatepetl,—soaring alone, silent, beneficent, unapproachable by man, and inimitable.

Thus too in mid-Atlantic, when the mighty ocean in anger tosses the proud ships to the clouds and in thunder buries the faint cries of men, the great white-winged birds hover over the ruins, fearless and in defiance of the storm, conscious of the all-sustaining power they possess. The huge condor of the Andes, Humbolt assures us, can raise himself up from the Pacific and, in a few moments, soar above the extreme peaks of Cotopaxi and Aconcagua, at an elevation which no plant can endure and all the animals of the earth perish.

O man, the master! where is thy power? Look above thee, O man! for a little pace and win a lesson from the lowliest scavenger.

Hermenigild; or, The Two Crowns.

A TRAGEDY IN FIVE ACTS.

ACT V. SCENE.

(Castle of Itaka. Hermenigild discovered sleeping on a couch, chained heavily. Vision of angels, music, Bengal light; when it disappears he awakens.)

HEMENIGILD. O stay, stay! ye spirits of a better world that hovered over me with faces kind and gentle, unfolding visions of celestial joy and beauty. Thou, kindly light, O linger on and cheer the weary hours of the night! It's

gone, and all is dark again. The gloomy shades of cheerless solitude hang on the walls; the clanking of my chains re-echoes still the sentence of life-long imprisonment; and yet these bright, heavenly dreams which come to me in this lonely cell give strength and courage to my soul to bear my lot with patience. Who comes? (Enter. JAILER.)

JAILER. My Prince, a friend has come to visit you; and though it is against my orders, I will admit him to cheer your Highness in your loneliness.

HERMENIGILD. I thank thee, generous friend, for thy good will. I know not how I have deserved it, nor how to thank thee.

JAILER. O noble, patient Prince! My heart would be of stone were it not touched by such heroic patience as you have shown. I shall admit your friend. (*Exit.*)

HERMENIGILD. A generous, feeling heart, although it beats beneath the rugged outside of a jailer. Deceitful world! how oft art thou deceived in judging men from what they seem to be! (Enter Utolf.) Who's this? My sight is dim!

Utolf (Kneels). My own dear Prince! 'Tis Utolf.

HERMENIGILD. Utolf, friend of my soul, faithful companion in all my misfortunes, and faithful to the last, fain would I take thee to my heart but for my chains. Prithee arise.

Utolf (Rising). I hope the time is near when prison chains shall be but dreams of sorrows past.

HERMENIGILD (Shaking his head). I think not so. dear friend.

UTOLF. I bring good news from Recared, your brother. An embassy from the Emperor Justinian has arrived to plead for you with Leovig, your father; Boso is with them.

HERMENIGILD. So, Emperor Justinian has not forgotten his former schoolmate at Athens. God bless him for his friendship! How differently has Providence cast our lots: he on the throne, wielding the sceptre of the East, and I—in prison!

UTOLF. Dear Prince, the day will surely come when you shall leave this prison to mount the throne.

HERMENIGILD. No, friend, such dreams tempt me no more. When I entered here, I bade the world farewell. This gloomy cell will be the tomb of Hermenigild.

UTOLF. My Prince,—

HERMENIGILD. No, Utolf, no! There is no earthly hope, unless I do renounce my faith. For that they sent me to this fearful dungeon.

But, Utolf, listen, for these words of mine may be the last. Prince Hermenigild in dungeon and in chains, bereft of all the world holds dear, remains unshaken in his faith, true unto death to Him who has redeemed the world. That is my testament.

Utolf. O glorious confessor of the faith, greater in chains than when the splendors of the world were thine! (Noise of approaching troops. JAILER rushes in.)

JAILER. My Prince, dismiss your visitor. There is a troop of horsemen at the gate; 'twould be my death if they discover that I have disobeyed my orders. Make haste.

Utolf. Farewell, my Prince, till better days arrive.

HERMENIGILD. Yes, better days! (Looking upward.) There are forebodings flitting through my soul that whisper of such days. Farewell, my own, my dearest friend! May Heaven bless the earth where Utolf walks! Tell Recared, my loving brother, that I have phophesied the crown of Spain would fall to him, and that I bless him from all my heart. Greet Boso, greet Seville. Farewell!

UTOLF. Farewell! (Exit with JAILER.)

HERMENIGILD. Twice blessed is he who in the wreck of fortune has kept his conscience clean and the esteem and love of friends unchanged. So blessed am I. (Noise.) What noise is this that breaks so suddenly upon the stillness of the night? Who comes?

(Enter Jailor, Lieutenant and Soldiers.)
Jailer (kneels and kisses Hermenigild's hand).

O Prince, dear, most unfortunate Prince!

HERMENIGILD. What does this mean? LIEUTENANT. Your Highness, sad is the duty which I must perform by order of the king.

HERMENIGILD. The king?

LIEUTENANT. My tongue almost refuses to read to you the warrant of the king.

HERMENIGLD. The warrant? (Looks to heaven.) I think I know its meaning. Fear not, my lord, I am prepared to hear the worst, as I have ever been since I set foot into this dungeon. Read!

LIEUTENANT. Then, by your leave, I read: "We, Leovig, King of the Visigoths, having discovered the dangerous and treasonable machinations of the party supporting Prince Hermenigild, in which he is involved in a prominent manner, do hereby decree his execution.

"Given at our royal palace April 12,
"Leovig."

HERMENIGILD (Stands calm, his eyes raised to heaven). The will of God be done!

LIEUTENANT. My Prince, if you have any wish—

HERMENIGILD. Lieutenant, tell my royal father that I, his son, in the face of death, do solemnly protest that I have never joined in any machinations against my king and country, nor have my friends. The accusation is but a fabrication of my enemies. May God forgive them! May He deal in mercy with my deceived father, whose heart will break when he discovers, alas! too late, how he has wronged his:son. Send me a priest.

LIEUTENANT. Alas! my Prince, your priests

have all been banished from the land.

HERMENIGILD (Looking up). Not even that

last consolation granted?

LIEUTENANT. My Prince, forgive me for the harshness of my office; I am but servant to the ruling powers. My tongue almost refuses to

announce that you must die to-night.

HERMENIGILD (Pale, but firm). What? So soon? O cruel passions of the human heart, so headlong in your course, and merciless in dealing with your defenceless victims! Be it so, in Heaven's name, I am resigned. I am a soldier who has braved death on many battlefields. I cannot meet it in a higher cause. Lieutenant, leave me alone for the few moments which I have to live.

LIEUTENANT. Farewell, Onoble Prince! (Exit.) JAILER (Kncels). O gentle, holy Prince!

HERMENIGILD. O do not weep for me, my generous friend, the pain is short, eternal is the crown. May Heaven bless thee! (Exit JAILER.)

HERMENIGILD. My toilsome pilgrimage is drawing to its close. O earthly greatness, pleasure, beauty, you are deceitful dreams, yea shadows of a dream! Most willingly I turn away from you forever. But Thou (kneels), O God of God, O Light of Light! O my divine Redeemer, I look to Thee alone; Thou uncreated Truth, Thou everlasting Beauty, receive my soul in mercy! In Thee I trusted since I saw Thy light fall on my path—in Thee alone! And I shall not be confounded in eternity. (Enter Fredegisel, dagger in hand; when near, Her-MENIGILD raises his face, FREDEGISEL draws back.)
HERMENIGILD. Who art thou?—My execu-

. tioner? Approach and do thy work! Fear not;

I forgive thee!

Fredegisel (Throws away the dagger). Prince, no, no! My soul is black enough. I cannotwill not-kill the prince. (Running out, meets

SISBERT with sword in hand.)
SISBERT. Ha, coward! Weak-kneed fool!
Running away? (Shakes him; chain and locket of AGILAN drop from FREDEGISEL'S bosom.) Ha! What is this? The chain and locket of my murdered brother!

Fredegisel (Falls on his knees). O mercy!

mercy!

Ha! Thou blood-stained villain! Sisbert. Speak! Where didst thou get this locket?

FREDEGISEL. O mercy! Count Sisbert! Kill me not! I will confess! When I did stab him-SISBERT (Raging). Ha! What? Thou treach-

erous, white-livered villain! Murderer of my

unhappy brother! Criest thou to me for mercy? Take thy reward. (Stabs him.)

Fredecisel. Help! help! I die—(Exit falling.) SISBERT (Turns to HERMENIGILD). Ha! this is the hour of revenge for which I thirsted since my brother's death!

HERMENIGILD. Sisbert, Sisbert! The judg-

ment! Heaven's judgment!
SISBERT. Ha! The judgment? What do I care when I can have my vengeance. Think of Seville; think of the night when, over my. brother's corpse, I swore revenge upon you! The time has come at last! For such a chance as this I risk my soul, eternity and all! Revenge! (Stabs him. HERMENIGILD raises his arms and falls slowly.

SISBERT (Steps behind the corpse, facing the audience). Ha! revenge has found its victim! (Exit.)

UTOLF (Behind the scene). No, jailer, let me go! I must! An' it cost my life. (Enters, draws back.) O! Prince, my dear, beloved Prince! O must I find thee so? (Kneels over him.)

JAILER. O sorrowful, heart-rending sight!

(Covers his face.)

Utolf. Ha! bloody Sisbert has done his work too well. Look here, his heart is pierced. O' that I could have died with thee, thou noble Christian knight! Now all is dark and cheerless. (Hides his face. Noise outside.)

RECARED (Behind the scene). Stop! in the name of Leovig the king! Stop! Show me the way! (Enters with Boso and LIEUTENANT.) Merciful Heavens! Too late! too late! Hermenigild, O my brother! (Throws himself on HERMENIGILD.)

Boso. O heart-rending sight! (Covers his face.) UTOLF. There broke the noblest heart that

beat within this land.

RECARED. Dead! dead! O that I could have died for thee!

Boso. Is this the promised end?

UTLOF. He died as he lived, true to himself, true to his faith, true unto death to all that's good and holy.

RECARED. Of are thee well! thou brother of my heart! Thy gentle spirit has flown to the eternal heights where holy martyrs dwell. Such faith as thine is founded on the truth. Henceforth it shall be mine and that of our land. Upon

thy martyred body I pledge myself.

Boso. O shed not tears when noble heroes fall upon the battlefield of truth and right. Though brutal force may break the bonds of life the soul remains unconquered in the strife, like the truth to which it testified. Triumphant over force, outlasting men's renown, eternal is the martyred hero's crown.

(Curtain.)

(TABLEAU:—HERMENIGILD dead on a throne; angels behind holding a crown; in front the bodies of Goswin and Ægismund; Sisbert with averted face; Leovig and Recared kneeling. All the personages friendly to HERMENIGILD on the right side turned in joy towards him; his enemies on the left turned away in confusion.)

THE END.

NOTRE DAME SCHOLASTIC.

Notre Dame, December 10, 1892.

Bublished ebern Saturday During Term Time at N. B. Aniversity.

Entered as second-class matter at the Post Office, Notre Dame, Ind.

Our Eleven.

As the football season draws to a close we feel that the successful efforts of our "eleven" deserve to be mentioned in the columns of of our College paper. The team disbands with individual glory for its members. The results of the games in which they have contested for supremacy reflect credit on the skill of the boys, and testify to the ability of P. Coady as Captain. The manner in which the games have been conducted has done much to banish the prejudice from the minds of those who formerly saw nothing but mere strength in the contests, and thoroughly convinced them that science and head-work are important factors for success, either in the class-room or on the athletic field. The game of Hillsdale vs. Notre Dame was the finest exhibition of football playing ever seen on the campus of Notre Dame. The elevens were evenly matched; Hillsdale's strength in the rush line being equalized by Notre Dame's fleetness of foot and quick actions in general. In this game Dinkle and Linehan did honor to the eleven in tackling, while Roby, Flannigan, Schaack, Schillo and DuBrul, in the rush line, formed an impregnable bulwark against the unsuccessful attacks of Hillsdale's mighty phalanx. Brown and Keough were unable to perform their usual effective work on account of the slippery condition of the grounds. Quinlan, at full back, is all the most careful captain could desire. He plays his position with more than ordinary skill, while Coady's success is not hemmed in by the bounds of quarter back. Besides playing his position exceptionally well, he directs his men in a way that materially contributes to the success of the eleven. Flannigan, Roby and Schaack are the strength of the rush line. Joe Combe, the efficient quarter back, met with an accident in the early part of the season, and has been unable to display his adroitness in handling the ball. Captain Coady lost a valuable man in him. Crawley, Murphy ever an opportunity is given for them to play and Kearns are valuable substitutes. Therefore, it is with pleasure that, in the frontispiece to the present issue, we introduce our readers to the "'Varsity Football Team" of Notre Dame.

"Sound and Music."*

This work makes a large, handsome octavo volume of nearly six hundred pages, and, in many respects, is altogether different from anything in the language. It discusses in detail the principles of acoustics, and gives a full exposition of the physical basis of musical harmony. Besides this, it presents the science of music in a new light, and embraces an accurate account of all the recent discoveries in the fertile domain of acoustics. Particular attention is given to the researches of Koenig and Mayer, whose labors are practically unknown to English readers.

The work is designed primarily for musicians and general readers who are desirous of extending their knowledge so as to embrace the science as well as the art of music. Such a work in English has long been a desideratum. The number of new apparatus and experiments described will make the book of special value to all students and lovers of science. The work is thoroughly up to date, and complete in its resume of all the latest investigations bearing on the nature and laws of musical harmony.

The book, in manuscript, was submitted to some of the most eminent acousticians of Europe and America, and has received their cordial indorsement. Some of the members of the Société Française de Physique, of which, by the way, Father Zahm is the first American member, having been elected in 1878, are enthusiastic in their expressions of approval of the manner in which the subject-matter of the work is treated.

For several years past Father Zahm has given special attention to the science of music, and we may, therefore, feel confident that his work will be an authority on the subject treated. During his many visits to Europe, he spent much of his time in the superbly appointed laboratories of Dr. Koenig—the greatest living authority on acoustics —and went over experimentally with the distinguished savant all the more important researches which have made him so famous the world over. Over and above this, Father Zahm is fortunate enough to have in his cabinet in Science Hall what Dr. Koenig has pronounced to be "one of the best collections of acoustical apparatus in ex-With this he has been able to verify experimentally all the leading statements made in his book, and thus give it a value it could not otherwise possess.

^{* &}quot;Sound and Music." By REV. J. A. ZAHM, C. S. C., Professor of Physics in the University of Notre Dame. Chicago: A. C. McClurg & Co.

A Chat About Books.*

Those of you who know the life-story of the sweet St. Francis of Assisi cannot but remember the simplest, holiest and clumsiest of his confrères, Brother Juniper. He was constantly doing the unexpected, the impossible, and—save that obedience sanctified it—the absurd. Well, one day this dear old Brother was left at home to prepare dinner, while Francis and his monks went a long journey to preach. You know that in Catholic countries the Franciscans, being mendicant friars, forbidden to receive or keep money, go about the cities gathering alms upon which they subsist. So, with a leathern bag slung over his shoulders, Juniper went forth gladly praising God and soliciting charity. It appears that the good folk of the city were especially generous on this occasion, for Juniper soon returned with such a burden of good things as only his broad shoulders and his great good will could have enabled him to carry. There were bread and chickens and eggs and corn and turnips—a rich store of edibles in his time and country. And as he came home singing hymns in the gladness of his heart, it occurred to him that the brethren wasted a halfhour daily in preparing dinner that might else be spent in the worship of God. So he resolved to cook this great quantity of food together, that no more time might be wasted that week.

He built a great fire and borrowed a large caldron which he filled with water. Now Juniper was a very good friar, but a very bad cook. Into this large caldron he dumped the bread uncut, the chickens with their feathers on, the eggs with their shells, the corn with its husks and the turnips with their green tops. And the fire crackled, and the vegetables boiled, and good old Juniper's heart boiled too; for in the simplicity of his soul he felt he was doing a good work for God and the friars. It was long after noon when Francis returned, weary and footsore and hungry. Juniper was exultant at the success of his scheme, and hastened to call the brethren to dinner. But when the unsavory feast was spread before them, and Juniper with tender solicitude implored them to eat and be refreshed, though their weakened stomachs revolted at the sight, they yet praised God that such simplicity and unworldliness should still be found among the children of men. Without the virtue of this dear old Franciscan.

* Summary of an address delivered before the Philodemics, Nov. 27.

without that simple, artless soul which, after highest sanctity and sublimest genius, I should most like to possess, I have been constituted your Juniper to-night. You have delivered yourselves over to a very bad cook—one utterly unskilled in devising palatable dishes, but who lacks nothing, I trust, on the score of good will.

I heartily appreciate the mercy shown by your programme committee, in permitting me to choose my subject to-night. Left to my own discretion, there was only one theme I could elect. Like yourselves, I am interested in literature, and it is the peculiar virtue of literature that it binds its devotees together as no other art does. You do not often hear of the political sage or the scientist making a visit of courtesy to the members of his craft; but your littérateur will go endless miles of devout pilgrimage to pay his tribute of reverent homage to the laurelled poet, to feed his soul upon inspired converse—"the thoughts that breathe and the words that burn." It was this spirit that created the literary guilds of the Middle Ages; it was this spirit that made the French salon possible, where the wit and the wisdom of the land were met for common pleasure and for common profit; and it is this spirit that suggests the foundation of societies like our own.

Littera scripta manet was said in mediæval times, and I say to you that the one truly immortal work of man is the written word. Literature is all that will live of human thought or human effort. What is there left of the ancient dyrasties to-day but their literatures? The genius of the orator, the counsels of the sage, the glory of the soldier and the state-craft of the king. are as the idle wind unless they be seized upon and stereotyped in literature. All that men have thought and accomplished, all that they have loved and yearned for, their hopes and their fears, their joys and their sorrows,—all this is literature. The world was young when . literature began, and only with the end of time will it vanish from the earth. It embraces all peoples, all tongues and all times. This imperishable heritage is ours; it is as truly yours and mine as if it had been created for our sakes alone, and with no thought of another.

How then may we worthily enjoy and best profit by this inheritance? The answer is simple enough: by cultivating an appetite for the pleasures of taste. And here I wish to disclaim any intention of apotheosis, of sublimating literature at the expense of the other branches of knowledge. On the contrary, a knowledge of literature presupposes at least some knowledge of all the liberal arts. It is true that Cardinal

Newman demands of the author only great power of expression; but Quintillian and the older rhetoricians held quite another view of it. But the point I wish to make here is that God has appointed a special function for these pleasures of taste. The intellectual man whose days and nights sometimes are given over to hard, serious study, has need of a lighter occupation to relieve the strain upon his mind and to save him from reaction into the excesses of mere animality. The man who plods in the paths of matter, and who is, by lack of education, incapable of the highest thought, he, too, needs diversion of an elevating nature, such as will save him from utter grossness. Now, I submit that the pleasures of taste are eminently adapted to meet these wants. Taste is neither wholly intellectual nor wholly sensible. Intellect and sensibility meet to form this faculty whereby we receive pleasure from nature and art. That intellect plays an important part in it is a truth which needs no argument. That much depends upon sensibility is shown by the fact that many scholars have this faculty only in very scant measure, and the more perfect the organs of any man are the keener and more delicate is his appreciation of beauty.

Again there is no life which has not its idle hours, and the idle hour is the weary hour. There is no life but languishes at times when the mind can relish neither work nor listlessness. And for these hours, and for these times, literature is the very mercy of God. It exercises and stimulates the mind without fatiguing it; it fills up these vacant intervals, and offers the entertainment that can best banish dullness and care. But above all its good effects is this one: it develops the heart. Your physiologists will tell you that the heart is but a lump of muscle; but the common-sense of the race has taken that old word to stand for sentiment, and sentiment is the fragrance of the soul. Notice that my plea here is for sentiment, not sentimentality; the two are as far apart as the east is from the west. Now how can a man be other than noble who communes daily with the noblest minds? How can his soul be corrupted who thinks and feels and acts with the knightliest of his race? But I find this "short talk" looking alarmingly ambitious. I shall therefore conclude with a few suggestions which, I trust, may not be wholly worthless.

And my first suggestion, strange as it may seem, is that you read books. There are two words here that require explanation. Ninetenths of the people of the world to-day have never read one book. Do you know the derivation

of the old Saxon "read"? It comes from the same root as reason; to read means to reason. And it is absurd to call everything that gets between paste-board covers a "book." All the books that have ever been made might be comfortably placed on the shelves of a small library. There would be two shelves for Latin and Greek, one for the more ancient languages, and about four for the moderns. Therefore when you can lay hands on a book, read it.

Secondly, I would urge you to cultivate the art of "skimming," or of receiving impressions. There are thousands of printed volumes in the world of which you must have some idea. This was what the poet meant when he paraphrased the old Latin saying into "Art is long and time is fleeting." And art is daily becoming longer, and time is daily becoming shorter. You will therefore readily see the importance of skimming over the surface merely, to collect what cream is to be had. This is an art for which no rules can be laid down; it is one of the richest gifts of nature, and—at least in the present phase of criticism—the one indispensable faculty of the critic. Again, I conjure you to make of the silent counsellors on your book-shelf your closest friends. I need not discourse upon the joys of true friendship, but in all the world was never friend like a good book. It is never ill-humored, never frivolous, never depressed. You need not fear that it praises you through flattery or rebukes you with jealous lips. And what a glorious privilege it is to live in constant friendship with the greatest of the dead! What would you not give to sit at Homer's feet while he told you the story of Troy? To spend an hour with Dante or Milton were ecstasy, and I would give a decade of my life for a romp through the fields with Shakspere. Yet we have these good, great men continually at our elbow; and because they are so silent and so unobtrusive, we suffer them to lie neglected, though, indeed, they clamor for attention, and will talk to us as long as we choose to listen.

The literary sin of this generation is that men hunger and thirst after the silly gossip which respects an author's personality, his comings in and his goings out, his physical and mental eccentricities, while they remain indifferent to the message that falls from his lips, and the utterance of which has alone distinguished him among his fellows. Better one burning word of prophecy than a thousand volumes about the prophet. Better one syllable that falls from lips anointed than a whole catalogue of the poet's private selfish deeds.

There is one other thought which this last

sentence suggests to me, and if I can succeed in making it practical for you, I shall have done a good work this night. Every young man who begins life has need of a guiding star, not less in the high moontide of prosperity than in the frosted air of life's night. Every young man has need of moulding influences. It is not art alone, or literature alone, which has its distinct schools of workers. All through the world are scattered little knots of men who move around a common centre, that centre a directive mind. Choose then, one or two, or it may be three, mental giants with whom you have most sympathy, and study their lives as you would study a model in sculpture. Let them be noble, generous, high-minded, and in so far as holy faith allows you, commit yourselves irrevocably to their guidance. Know, if possible, every word that they have uttered, every fact and every incident that can throw a side-light upon their lives. Fear not to grow up thus in the shadow of the great, for in God's good time and your own proper season, when your minds have been quickened and strengthened, the sunshine of Heaven shall visit you and warm you into independent life and independent action.

Treason Against the State.

An exceptionally interesting and instructive article, entitled "Treason as Applied to the Homestead Riots," appears in the current number of the Chicago Law Fournal. It is from the pen of the Hon. John Gibbons, '69, the gifted and learned editor of that publication. It seems that steps were recently taken to prosecute the participants in the riotous proceedings at Homestead, in Pennsylvania; and, instead of having them indicted in the manner customary under such circumstances, recourse was had to a method of procedure very unusual and almost forgotten. It is that of charging them with treason against the Commonwealth of Pennsylvania. Mr. Gibbons objects most earnestly and forcibly to the search of the local authorities among the musty records of the past for an obsolete method of prosecution; and the method adopted, he claims, must tend to introduce confusion and uncertainty into the law in its application to the crime of treason. He proves clearly that treason against the State is, except nominally and as to scope, very much the same as treason against the United States, consisting simply in levying war against it and adhering to the public enemy. He shows that when the same act is treasonable against the United States and the individual State it is to be regarded as treasonable against the United energetic for his party's interests. Our subject States alone. It is true that, in the absence of is a Delawarean by birth, but a Pennsylvanian

constitutional and statutory provisions, treason against the individual State is an offense at common law; but, surely, the acts of the alleged rioters at Homestead, so far as known to thepublic, do not come within the definition or meaning of treason. The uncertainty that would necessarily arise in the administration of law from thus tampering with it, and abusing its process, and seeking to pervert it into an agency of wrong and oppression, would exercise a more potential influence in weakening the foundations of government than. treason or anarchy, with which at present the law can promptly and effectively deal. But when the law itself is perverted from its proper purpose and corrupted at its very source, there is nothing left to grapple with and subdue treason—nothing left to face and crush anarchy. In knowledge of constitutional law Mr. Gibbons is without a superior at the bar of the Northwest; and it is not remarkable that he takes a firm stand against such trifling with the administration of justice as appears to be involved in the method resorted to for punishing the Homestead strikers. It would seem to be hardly less than a huge joke, were not the consequences so momentous, to predicate treason of the acts ascribed to them.

William T. Harrity.

The improvement, if there has been any, in the politics of this country during the past quarter of a century, is not in keeping with the wonderful progress made in the inventive department during the same period. Probably necessity did not require it. Nevertheless a reformation is needed. Cliques and rings, trusts and factions seem to be formed in solid phalanxes ever ready to oppose whatever legislation is enacted that does not tend to foster their monopolistic tendencies.

Politics should be above such classes. Politicians should not be subservient to such organizations. They should be men, who by their actions serve as examples to put to shame all those who attempt to frame laws beneficial only for a certain few. Those despicable bigots who pretend that one's creed makes him unfit to perform the duties of a public office should be rebuked at the polls. To be a politician is a public duty. And voters irrespective of party should put down those persons who, by their actions and declarations, show themselves to be imbued with a spirit contrary to the Constitution.

An ideal politician is William T. Harritybroad-minded for the public good, shrewd and by education. La Salle College is his Alma Mater. He entered that noted institution of learning as a Classical Freshman, and in 1870 received the degree A. B., together with the highest class honors. He continued to perfect himself in the classics in the position of teacher for a year, at the end of which time he received the degree A. M.

Had he continued as a professor no doubt he would have won laurels that would be the earthly goal of anyone. But law had a peculiar fancy for him and he had a fancy for law. He entered the office of Pierce Archer and the Hon. Lewis C. Cassidy, ex-Attorney General of the Commonwealth of Pennsylvania, and in due time was admitted to the bar. He applied himself to the practice of his chosen profession with unremitting energy. Success followed his efforts, and besides being one of the ablest lawyers in Philadelphia, he was appointed to many positions of trust which he most creditably filled.

With a natural inclination towards politics, and possessing a peculiar genius for harmonizing factions, Mr. Harrity ventured amongst the stormy clouds of national differences. The foothold of Democracy in Pennsylvania at this time was very weak. Yet the Republicans were divided. A serious break was in their party line; Mr. Harrity knew it. He also knew that if a skilful organization of the Democratic ranks could be accomplished, and its entire force centered on a candidate not unpopular to the lukewarm Republicans, nothing short of a complete victory would be the result. He marshalled his forces together and proved that he was right. Robert E. Patterson was nomiated and elected, together with the State ticket, and many important municipal office holders.

This event gave him unquestioned supremacy in Pennsylvania Democracy. He became the recognized leader, not only in Philadelphia, but also in the State. From that time, on all questions of politics, his counsel was sought and his influence solicited. And ever since he has contributed to the national success of his party by his untiring efforts and natural ability.

Mr. Harrity has never been an office seeker. Never did he hold a public position till the important duties of Postmaster of Philadelphia were thrust on him by President Cleveland, at the solicitation of his friends; the former recognizing his ability, and knowing that the appointment of such a capable man would reflect credit on the administration; while the latter were conscious that he would conduct the affairs of the office to the satisfaction of all. That he

did is evidenced by these words of Postmaster General Wanamaker upon the retirement of Mr. Harrity: "It is a subject of astonishment that the work should be done so efficiently and satisfactorily, and for Mr. Harrity to do so well without sufficient clerical force proves the goodness of his system and the energy of his administration." This is truly a flattering compliment.

When we consider Mr. Harrity's many admirable qualities we do not wonder at his success in life. He is young, active and courteous and possesses an affable disposition, which alone would bind the circle of friends so easily drawn by him with links of unseverable friendship. Above all he is a thorough Christian gentleman. Imbued with a deep religious spirit, he has ever labored for the success of the Church. He is an example of true Catholic manhood. Social and benevolent societies seek his co-operation, and his zeal to surround the young men and women with a pure social atmosphere, and to relieve the needy, is similar to the energy which has characterized his work in professional and business life.

Mr. Harrity's home is in Philadelphia where, as a loving husband and dutiful father, he presides over a happy family circle of a wife and three children. He continues his law practice, and is connected with many business transactions. He is always found at the helm of the political ship, guiding it through perilous voyages to a harbor of safety. The recent success of the Democratic party is due to the political sagacity of its chairman. He is a hard worker, yet he is but in the outset of life. His powers are now developing. The future conceals the plans of the grand structure that is to be placed on the solid foundation. Time will reveal to him the result of the seeds sown by him in his fertile youth, and which are now budding into a manhood that breathes forth a perfume of goodness, permeating the hearts of many young men, ennobling their minds and elevating their ideas.

Local Items.

- —Dick has a long "reach."
- —They're on to me! There—
- —Did you hear of the pond shop?
- "Spike" is an inveterate punster.
- --Mickey says that it was not cigarettes.
- —The Minims have formed three rugby teams.
- —Tim has graduated from the "penmanship" class.

- —Did you read Richard's essay on the "Dollar?"
- —Dick has recovered from a severe attack of the "blues."
- —"Do you solemnly swear that you will tell the truth, etc."
- —Hear ye! Hear ye! Hear ye! The court is now in session.
- —The Band concert has been postponed until next session.
- —Lost.—A cravat pin, moonstone, heart shape. Finder will please leave the same at students' office.
- —The essay on "Hamlet" which appeared in the Scholastic two weeks ago should have been credited to Mr. Frost Thorne, '93.
- —Col. William Hoynes was called to Chicago for a few days this week. His place in the law room was filled by Messrs. Brick and Hubbard of South Bend.
- —There is a movement on foot to have the students procure a N. D. U. cane for use during vacation. Over one hundred have signified their intention of getting them.
- —Professor Edwards requests us to return thanks to Mrs. Edward Roby, of Roby, Ind., for a contribution of twenty-five dollars towards purchasing books for the Lemonnier Library.
- —A pigeon was found in Brownson Hall Thursday evening and caused much merriment for a few moments. If the boy who brought it in is found, he will have the pleasure of joining the penmanship class.
- —The case of Atkinson vs. Taylor for \$300 damages for whipping a student at a district school is now before Judge Hoynes, of the University Moot-Court. It is a jury case, and elicits a good deal of attention.
- —Mr. John Fendrich, '84, of Evansville, Ind., was a welcome visitor to the University last Thursday afternoon. All his old friends here among the Faculty and Community were rejoiced to see him looking so well.
- —Bro. Paul received a letter this week from A. A. Stagg, captain of the Chicago University eleven, stating that his team had disbanded, and therefore could not come this year. He also says he would be glad to come next season, and will undoubtedly get the chance.
- —There will be no more outside football games this season. It is hoped that next year Notre Dame will equal her record of this year. Captain Coady deserves great credit for the gentlemanly way he conducted all games, and many are the converts he has made to the now national game, who were before this season utterly opposed to football in any form. Gentlemanly behavior will win friends in a Rugby team as well as in the outside world. Three cheers for the 'Varsity eleven of '92!
- —Some inquisitive friends would like to know: Why "Shorty" and certain members of the Iroquois part their hair in the middle?

If anyone could possibly recognize "Chauncey" in a dress suit?

If F. K. wasn't awful English, you know?
If that sprained ankle wasn't all a fake?
If Captain F. didn't "eat up" the Indian?
If Judy (gens Iroquois) was lost in the pasture with the sheep?

Where are the "implements of deluge"? Why one huntsman gave himself away? Who put that purp in C's room?

How many captains there be? Where is that nightingale?

If some one found out who was that kodak fiend?

Why Washington Hall is not heated before the commencement of a concert, and why, as Remenyi said, the "cannonading" is kept up during the entertainment?

-Just half a century ago the venerable and sainted Very Reverend Father Sorin, founder of the University of Notre Dame, Indiana, arrived on the site where stands that monument of learning to-day. A little log hut on the shore of St. Mary's Lake was the first establishment of the Congregation of the Holy Cross in America. Last Sunday was the golden anniversary of this glad event, and the Most Rev. Archbishop Riordan, of San Francisco, an alumnus of Notre Dame, officiated at the Solemn Pontifical High Mass in the college church. The public and more solemn celebration of this Golden Jubilee has been deferred until the college commencement in June next. As it is, the hearts of the Catholics of America go forth in joyous congratulations to that grand old patriarch of the Church, who has made the University of Notre Dame world-wide with the fame of its reputation.—Catholic Review.

-Football Games. Notre Dame, 24; De la SALLE, 6.—The game of football on the Brownson campus on Thursday, Dec. I, between the De la Salle Institute of Chicago, and eleven members of a picked team of light players of the University, was a one-sided affair, and it is a wonder that the De la Salle boys made a score. The teams were evenly matched as to weight, but the visiting team could not cope with the superior skill and activity of the home team. In the first place the De la Salle boys did not understand the rules of the game; neither did the men they brought to referee, which caused much delay and a good deal of annoyance; but, on the whole, the game passed off without the bitter feeling which seems to be a characteristic of it. At 2 30 p. m. game was called. The De la Salles won the toss and ball, and started with a rush. They made gains on each rush and kept it until a touch-down was made by M. Donahoe, who also kicked goal. Capt. Coady then discovered where the inroads were made in his team, and cautioned his players. From this on the De la Salles were at the mercy of their opponents; but the efforts of M. and E. Donahoe as halfbacks were well worthy of notice. The Notre Dame team played well for boys that have

not practised together. They started to run up the score after La Salle's touch-down, and could have made it larger. Their first touchdown was credited to Flannigan, whose skilful manipulation of the ball could not be solved by them. DuBrul was accorded the next touchdown for Notre Dame, while the third was made by Capt. Coady, who made a spurt that would have done credit to our own "Hal," running seventy yards to gain the goal. He was assisted in this by the timely blocking of Linehan; Dinkle kicked goal. The fourth was carried across the line by Flannigan, after being brought to within ten yards of De la Salle's line on sprints by Messrs. Coady, DuBrul and Keough. The fifth was gained by Keough, who started with the ball from the fifty yard line, and was helped in his effort by the blocking of Messrs. Dinkle, Brown and Linehan. O'Neill kicked goal. Score: 24 to 6 in favor of Notre Dame.

Touch-downs: Flannigan, 2; Dinkle, 1; Coady, 1; DuBrul, 1; Keough, 1; M. Donahoe, 1. Goal kicks: Dinkle, 1; O'Neill, 1; M. Donahoe, 1. Umpire: M. Hannin, '93, Notre Dame. Referces: Burns, Cudahy, De la Salle; Roby, Notre Dame. The teams were as

NOTRE DAME.		De la Salle.
Linehan	Left End	Clinnin
Luther	Left Tackle	Hicks
Cavanaugh	Left Guard	English
Flannigan	Centre Rush	Healy
DuBruĬ	Right Guard	Boyle
Brown	Right Tackle	Heneghan
Dinkle	Right End ·	Thurston
Coady, Capt.	Quarter Back	Williams
Gibson	Right Half Back	E. Donahoe
Keough	Left Half Back	M.Donahoe, Capt.
O'Neill	Full Back	Hoyle
Kelly /	Substitutes	(Cudahy
Hesse (Sanstrates	(Moran
•	34:	-

MANUAL LABORS, 10; THIRD ELEVEN, O.

On the afternoon of the 4th inst. the second of a series of games between the Manual Labor School eleven and the Third eleven was played on the Brownson campus. The M. L. S. boys were defeated in the game played previously by a score of 16 to 0, and came out this time prepared to retrieve what they had lost before, and in this they were not disappointed. They played a faultless game, and showed a vast improvement in their modus operandi. In fact, they impressed the spectators so vividly with their work that some say they would be a match for the 'Varsity Eleven. Their opponents could not withstand their clever rushes, and this accounts for the game being won by the Manual Labor School by a score of 10 to 0. The third game will be played soon, and is awaited with much interest by the admirers of both teams.

The first eleven of the Minims played an eleven made up of Juniors on the Junior campus on the afternoon of the 4th inst., and it proved very interesting. Score: 16 to 0 in favor of the Junior eleven.

Roll of Honor.

SORIN HALL.

Messrs. Ahlrichs, Brown, Carney, Correll, Cummings, Combe, Coady, Crawley, Chute, Dacy, Dechant. DuBrul, Ferneding, Flannery, Elannigan, J. Fitzgerald, C. Fitzgerald, Hannin, Jewett, Kearney, Keough, Maurus, Monarch, J. McKee, F. McKee, Mitchell, McCarrick, McAuliffe, Neef, O'Donnell, Powers, Quinlan, Ragan, E. Scherrer, Schillo, Schaack, Sinnott, Schopp, Thorn.

BROWNSON HALL.

Messrs. Barton, Burns, Brady, Brinen, C. Corry, A. Corry, Cutler, Coady, Cooke, Cullen, Cumiskey, Crilly, R. Corcoran, Casey, J. Corcoran, Chidester, Delaney, Devanney, Dinkel, Dempsey, Eyanson, Foley, Fardy, A. M. Funke, J. Flynn, E. Flynn, Flannigan, O. Griffin, F. Hoffmann, Hermann, Hennessy, Henley, Hesse, Healy, E. Harris, Hagan, Henley, Hudson, Isbell, Kelly, Kirker, M. Kenny, Kearns, Krembs, W. Kirby, Kintzele, F. Kenny, Karasynski, Kunert, Libert, Marmon, Murray, D. Murphy, Meibers, T. Monarch, D. Monarch, F. Murphy, E. Marckhoff, Magnus, McCuddy, McFadden, McCullough, McCarthy, O'Connor, O'Shea, Pulskamp, Priest, Prichard, Peake, Quinlan, E. Roby, G. Ryan, M. Ryan, Reis, Schmidt, Stanton, Schueler, Shermann, Smith, Spalding, Stace, Tinin, Tratt, Vignos, Whitehead, Walker, Wilkin, Weaver, Welsh.

CARROLL HALL.

Messrs. Allen, Bergland, Barrett, R. E. Brown, O. Brown, R. Brown, J. Brown, Bennett, Berles, Blumenthal, Bachrach, Bixby, Baldauf, Burns, Breen, Brennan, Cornell, Covert, Creedon, Cox, Carter, Chauvet, Clendenin, Connell, E. Coolidge, A. Coolidge, Cavanagh, Cullen, Cochrane, Dorsey, Druecker, Ducey, Dannemiller, De-Lormier, Freeman, Franke, C. Furthmann, Fossick, Funke, Finnerty, E. Gilbert, L. Gibson, N. Gibson, Griggs, Gerding, Gonzales, Gerdes, Girardin, Hill, Hack, Hurley, Hathaway, Hoban, D. Hilger, A. Hilger, Heiz-Hurley, Hathaway, Hoban, D. Hilger, A. Hilger, Heizman, Howell, Jones, Janssen, Krollman, A. Kegler, W. Kegler, Kutina, Kuehl, Kindler, Kinney, Klees, Lanagan, Lee, J. LaMoure, W. LaMoure, Lambka, Lantry, Lohner, Lee, J. LaMoure, W. LaMoure, Lambka, Lantry, Lohner, Langevin, T. Lowrey, Louie, Ludwig, Lynch, Lippman, Lane, Levy, Maurer, Mitchell, Mattox, Maternes, E. Murphy, Maguire, L. Murphy, Medalie, J. Miller, L. Miller, Marre, Mills, Marr, Moss, Monaghan, R. Miers, McDonald, McPhee, McCarrick, McCarthy, J. McPhillips, J. A. McPhillips, C. McPhillips, Nolan, Nichols, O'Mara, F. O'Brien, W. O'Brien, Oliver, Priestly, Pim, Reis, Rend, Ruppe, Repscher, Romero, Renesch, Reilly, Reber, Sievers, Stern, W. Spalding, S. Spalding, Slevin, Spiegel, Sullivan, Schaack, Sparks, Segenfelter, Strauss, Sharp, Schroth, Tong, Taylor, Trankle, Thome, Tempel, Treber, Tobin, Wolf, Wagner, Walde, Wensinger, Welty, Walker, H. Wilson, R. Wilson, Whitehead, Washburne, N. Wietzel; B. Wietzel, O. Wright, D. Wright, Yeager, York, C. Zoehrlaut, G. Zoehrlaut, C. Meyers.

ST. EDWARD'S HALL.

Masters Ahern, G. Abrahams, L. Abrahams, Ball, Bopp, Bump. R. Berthelet, V. Berthelet, Barrett, Bourgeois, Crandall, Curry, Corry, Cross, Corcoran, Croke, D. Campau, F. Campau, A. Coquillard, J. Coquillard, Christ, Cressey, Durand, Dugas, F. Emerson, W. Emerson, Eagle, Elliott, Egan, Engelhardt, Freeman, Flynn, Finnerty, Feltenstein, Getchel, Gavin, Girsch, Green, Graff, Howard, Higginson, Holbrook, Roy Higgins, W. Higgins, Ralph Higgins, J. Higgins, J. Healv, W. Healy, Jones, Jonquet, Kinney, Keeler, LaMoure, Lawton, Loomis, Lohner, Lowrey, G. McCarthy, R. McCarthy, Emit McCarthy, E. McCarthy, McGinley, Morris, McGushin, C. Monaghan, McPhee, McDonald, McAlister, McCorry, Minnigerode, Ninneman, Oatman, Otero, O'Neill, W. Pollitz, H. Pollitz, Pyle, Peck, L. Rasche, H. Rasche, B. Roesing, F. Roesing, Roache, V. Romero, A. Romero, Robb, Shipp, W. Scherrer, G. Scherrer, Swan, Stuckart, Segenfelter, Shillington, Thompson, Trankle, Wilson, Wilcox, Wagner, Wells, Langley. Bopp, Bump, R. Berthelet, V. Berthelet, Barrett, Bour-

St. Mary's Academy.

One Mile West of Notre Dame University.

[Essays, society reports, and items of general interest regarding the Academy, appear in *St. Mary's Chimes*, issued monthly by the pupils of St. Mary's Academy. Price of subscription, \$1.00 per annum.]

Weekly Bulletin.

Graduating Class.—Misses Moynahan, K. Ryan, Bassett, Haitz, Hudson, Lynch, Thirds.

First Senior Class.—Misses Davis, Roberts, Gallagher, Wilkinson, Smyth, R. Butler, Charles, Patier, Kimmell, M. Burns, Dempsey, B. Winstandley, G. Winstandley, E. Burns, Riffel.

Second Senior Class.—Misses Gibbons, Healy, Morehead, Ruppe, Pumpelly, Carico, Dillon, Higgins, Holmes, McGarry, McLoughlin, M. Nichols, Clifford, Duffy, Kennedy, Stuart, Brady, M. Byrnes, Griggs, Hutchinson, Hellmann, N. Keating, N. Moore, Sanford, E. Seeley, M. Wagner, Guggenheim, Hamilton.

Third Senior Class.—Misses Coady, O'Sullivan, Coffin, Bogart, Cooney, Hunt, Meskill, B. Nichols, E. Wagner, Murphy, E. Barry, Hammond, Jacobs, Kelly, Kieffer, Miner, K. Nicholson, Welker, Franke, M. McCarthy, Allen, Boyle, Garrity, S. Smyth.

First Preparatory Class.—Misses A. Butler, Chauvet, Agney, Crilly, Culkin, Dingee, Doble, Hopkins, Hittson, E. McCarthy, E. McCormack, Sachs, Terry, Schoolcraft, Wright, Richardson, B. Dale, Baxter, Kasper.

Second Preparatory Class.—Misses Schultz, Bartholomew, Ellett, Hazlitt, C. Hermann, Lodewyck, Marshall, McDonald, B. Reed, Riese, Robbins, Russert, Morgan, L. McHugh, Dent, Coddington, B. Kelly, Graffe.

Third Preparatory Class.—Misses Cahill, Caldwell, T. Hermann, Kline, LaMoure, Mitchell, G. Reed, Thompson, E. Wolverton, Bové, Burnet, A. Girsch, Sargent, Reily.

Junior Preparatory Class.—Misses Casanave, E. Dowling, Whittaker, Trask, Riordan, Tilden, M.Welter, Ryder, M.McHugh, Flynn, I.Dowling, Seeger, Beck, Crandall, Ford, J. Richardson.

First Junior Class.—Misses Pendleton, N. Hammond, Campau, McDonald, Titsworth, Mc-Kenna, McPhilips.

Second Junior Class.—Misses Binz, M. Wolverton, A. McCarthy, Fisher, H. Girsch, Bourgeois, Crocker, Feltenstein.

Third Junior Class.—Misses V. Smith, Dugas, Degnan, Buckley.

LANGUAGE COURSE.

LATIN.

First Class.—Misses Healy, Hudson, Roberts, Smyth, Thirds.

Second Class.—Misses E. Barry, Higgins, Kimmell, Lancaster.

Third Class.—Misses M. Agney, C. Culkin, Cunningham, Gallagher, Griggs, Meskill, K. Nicholson, Pumpelly, Welker.

FRENCH.

Second Class.—Misses Davis, Bassett, Gibbons, Sanford, Morehead, Lynch, Chauvet.

Third Class.—Misses Thirds, A. Tormey, S. Smyth, Charles, M. Nichols, Doble, A. Seeley, G. Cowan, M. Burns, M. Byrnes, Baxter, Daley, Dempsey, K. Ryan.

Second Division.—Misses E. Reed, Garrity, E. Wagner, E. McCormack, Hutchinson, E. McCarthy, Hammond.

Fourth Class.—Misses Butler, Riffel, A. Cooper, Kennedy, Coffin, Nicholson, Crilly, Dingee, Goldsoll, Ellett, Foulks, Lodewyck, Thompson, Burnett, Cooney, Morgan, Trask.

Fifth Class.—Misses Egan, Bourgeois, Finnerty, Murray, McCormack.

GERMAN.

Second Class.—Misses Russert, Carico, Franke, Kieffer, Marrinan, Kasper.

Third Class.—Misses Ruppe, Guggenheim.

Fourth Class.—Misses McLoughlin, Bartholomew, G. Winstandley, B. Winstandley, Holmes, Psaelzer, Schaefer, Klemm, Girsch, Cowan.

Fifth Class.—Misses Coady, McDermott, Wilkinson, Sachs, Seeger, Flynn, McHugh, Kelly, Schultz, Bogart, Moore, Gardner, Hermann, Morgan, Allen.

Second Div.—Misses Casanave, Ryder, Titsworth, Binz, Feltenstein, Fisher, M. Wolverton, I. Dowling.

CONSERVATORY OF MUSIC.

HONORABLY MENTIONED.

Graduating Class, 1st Course.—Miss Marrinan. First Class. 2d Division.—Misses E. Coffin, A. Dillon, L. Gibbons, A. Tormey, N. Wurzburg.

Second Class.—Misses D. Davis, E. Dempsey, R. Doble, M. Gallagher, M. Miner, M. Roberts, A. Thirds, E. Welter.

Second Div.—Misses Chauvet, A. Haitz, M. Ruppe.

Third Class.—Misses B. Dale, L. McHugh.
Second Div.—Misses R. Bassett, E. Baxter, H.
Boyle, Brady, Coady, Guggenheim, T. Kimmell,
Marshall.

Fourth Class.—Misses A. Augustine, M. Burns,

A. Cahill, E. Call, M. Carico, E. Dowling, P. Foulks, Hellmann, A. Hunt, M. McCune, G.

Winstandley, Richardson.

Second Div.—Misses M. Barrett, Burnett, C. Cahn, K. Charles, I. Dowling, C. Dreyer, L. Griffith, K. Jacobs, F. Kaufmann, M. Kelly, M. Kenny, E. Moore, M. Patier, H. Sanford, E. Seeley, H. Seeger.

Fifth Class.-Misses Byrnes, Daley, Hutchin-

son, N. Keating, Lynch, B. Nichols, M. Nichols, O'Mara, Riordan, K. Ryan, M. Wagner, E. Wagner, B. Winstandley, M. Welter.

Second Div. — Misses Agney, K. Barry, P. Carter, A. Cooper, C. Duffy, C. Graffe, Healy, Hoban, A. Hopkins, D. Kline, P. Pfaelzer, G. O'Sullivan, A. Terry, B. Wright, Riese.

Sixth Class.—Misses A. Butler, M. Clifford, M. Cooper, Edsoll, J. Hammond, C. Kasper, E. Keating, B. Kelly, L. Kennedy, G. Kieffer, B. Kingsbaker, B. Lancaster, E. McCarthy, M. McDonald, N. McGarry, M. McLoughlin, Margaret McHugh, M. Murray, M. Trask, C. Wehr, E. Welker, G. Whittaker, M. Wilkinson.

Second Div.-Misses M. Bartholomew, M. Barry, G. Bogart, L. Binz, G. Campau G. Casanave, G. Cowan, M. Culp, M. Good, L. Goldsoll, L. Hazlitt, T. Hermann, M. Higgins, H. Klemm, Lodewyck, M. McCormack, McPhillips, Murphy, A.Ryan, Sachs, Schaefer, J. Smyth, L. Thompson, L. Tong, M. Wellington, E. Wolverton, Zeiger. Seventh Class.—Misses E. Barry, Bové, Culkin,

A. Cowan, G. Crandall, A. Dingee, L. Ellett, M. Feltenstein, E. Finnerty, Franke, Garst, M. Garrity, C. Hermann, F. Hittson, L. LaMoure, K. Nicholson, H. Pumpelly, G. Reed, B. Reed, Schoolcraft, Schultz, McKenna, C. Wheeler, M. Wolverton.

Second Div.-Misses Bourgeois, Egan, Flynn, Otero, Ryder.

Eighth Class.—Misses Allen, Crocker, Ford,

J. Richardson. Ninth Class.—Misses Martha McDonald, M.

Murray, E. Tilden.

Tenth Class.—Misses D. Dugas, A. Fisher, N. Hammond, L. Smith.

HARP.

Misses L. Stuart, D. Kline, E. Baxter, Griggs.

VIOLIN.

Misses G. Bogart, A. Dillon, A. McDermott, Beck, M. McCormack.

MANDOLIN.

Miss S. Smyth, E. Werst.

BANJO.

Miss M. Agney.

GUITAR.

Misses Duffy, Marrinan, Ruppe, Riffel, Zeiger.

VOCAL DEPARTMENT.

Misses R. Bassett, F. Kaufmann, M. Brady, B. Winstandley, M. Burns, M. Wagner, Stuart, Sanford, B. Nichols, Kelly, N. Moore, Kline, M. Nichols, Agney, Good, Boyle, Morehead, Gallagher, Thompson, Casanave, C. Hermann,

T. Hermann, Ruppe, Flynn, Gibbons, Augustine, Hunt, Byrnes, E. Keating, K. Ryan, A. Ryan, Kennedy, Jacobs, Kieffer, M. Patier, A. McCarthy, M. Smyth.

DRAWING. .

ELEMENTARY COURSE.

Misses Boyle, Cowan, Cahn, Doble, Dent, G. Dale, Foulks, Franke, A. Girsch, Gallagher, Garrity, Good, Griffith, Hazlitt, C. Hermann, Hoban, Kelly, Miner, Marshall, McKenna, Mitchell, Otero, Pfaelzer, Robbins, Russert, Ruppe, Schoolcraft, Schultz, Schaefer, Wehr, E. Wagner.

CRAYON AND ADVANCED PENCIL COURSE.

Misses M. Burns, Charles, Clifford, Dempsey, Kimmell, Kenny, K. Ryan.

WATER-COLOR COURSE.

Misses M. Burns, Clifford, Dempsey, Doble, A. Girsch, Good, Kenny, Kimmell, Robbins, K. Ryan.

OIL PAINTING.

Misses Marrinan, Wilkinson.

CHINA PAINTING.

Misses Marrinan, Miner.

PHONOGRAPHY.

First Class.—Misses G.O'Sullivan, P. Hellmann. Second Class.—Misses M. Miner, M. McGarry.

Roll of Honor.

[For politeness, neatness, order, amiability, correct deportment and observance of rules.]

SENIOR DEPARTMENT.

Misses Agney, Allen, Bassett, E. Barry, Bogart, A. Butler, Bartholomew, Brady, E. Burns, R. Butler, Byrnes, C. Barry, Barrett, Bové, Charles, Cowan, Coffin, Crilly, Culkin, Coady, Cunningham, Caldwell, Cahill, Carter, Clifford, A. Cooper, Cooney, Chauvet, Davis, Dillon, Dingee, Dempsey, Duffy, B. Dale, Ellett, Foulks, Franke, Griggs, Gibbons, Guggenheim, Haitz, Hudson, Healy, Hellmann, Holmes, Hittson, Hazlitt, C. Hermann, T. Hermann, Higgins, Hutchinson, Hunt, Hopkins, Hamilton, Jacobs, Kimmell, N. Keating, Klemm, E. Keating, Kennedy, Kelly, Kieffer, Kenny, Kingsbaker, Lynch, Lancaster, Lodewyck, LaMoure, Lillyblade, Marrinan, Moynahan, McLoughlin, Morehead, Miner, E. McCarthy, McDonald, McDermott, Mitchell, N. Moore, E. McCormack, McGarry, Murphy, A. McCarthy, M. Nichols, B. Nichols, Nicholson, O'Sullivan, Patier, Pumpelly, K. Ryan, Ruppe, Russert, Roberts, A. Ryan, Richardson, Riffel, Schultz, Schaefer, Sanford, Smyth, Thirds, G. Winstandley, B. Winstandley, M. Wagner, E. Wagner, Welker, Werst, Wurzburg, Wright, Wolverton, Wehr, Wilkinson, Zeiger. Misses Agney, Allen, Bassett, E. Barry, Bogart, A. Wilkinson, Zeiger.

JUNIOR DEPARTMENT.

Misses Allen, Boyle, Binz, Beck, Campau. Casanave, Coddington, Dent, E. Dowling, I. Dowling, L. Dowling, Edsoll, Ford, Feltenstein, Flynn, Graffe, Garst, Grub, Hammond, Kelly, L. McHugh, McKenna, Maguire, Morgan, Murray, Pendleton, Reily, Riordan, Richardson, Ryder, J. Smyth, Seeger, Tilden, Trask, Whittaker.

MINIM DEPARTMENT.

Misses E. Brown, I. Brown, Buckley, Bourgeois, Crocker, Dugas, Degnan, Egan, Finnerty, Fisher, Girsch, Murray, McCarthy, McDonald, McCormack, Myers, L. Smyth, V. Smyth, Titsworth, Wolverton.