POETR Y.

THE LIFE OF SONG.

Is there anything on earth,
Where the strongest are not strong,
Half so feeble in its birth.
Or so suite of death, as Song? Or so suite or death, as song friiter blossom never grew,
Peltea by the sammer rain;
Lighter laseet never flew—
Scaveely come ere gone again!
Children, who chase but te, flies,

May pursue it. to and fro.
Luttle maids who sigh, "Heigh-ho!"
May deolore it, when it dies;
Loftier deeds to men belong—
Laiger Life than Song!

There is nothing on the earth,
When so many things are strong,
Half so mighty in its birth,
And so sure of life, as Song,
Never pine on monnain hight
So the thunderbolt defies;
Never cagle in his flight
Soars with such undanned eyes, Soars with such undaunted eyes,
Conquerors pull empires down,
Think they will of the forgot;
But if song pursue them not,
Time destroys their weak ren swn,
Nothing is remembered long
But the life of Song.
—R. D. Stoddard.

A FATHER'S ADVICE TO HIS

WORTHY EVERY YOUNG MAN'S ATTEN To the Editor of the Brooklyn Eagle: Your issue of yesterday conveys the sad intelligence of the death by Roman fever of Mr. Edward Pierrepont,* recently secretary of the American legation at Rome. Mr. Pierrepont was a

young man of rare gifts and accomplishments and of great promise. He was a brilliant scholar, a close student, a thoroughly upright Christian gentle man, and a manly fellow. His inherited tendencies were favorable to the reception of good impressions, and he had absorbed a mother's graces and wisdom and a father's culture and and invaluable, but they utterly neg-

Educated at Oxford University, England, and thereafterr law student at man as the grosser substance. That Columbia College, he dies at the early the soul survives the body, and that age of twenty-five, shattering the brilliant hopes and rainbow promises of parents who counted not their life dear unto them in serving their only son. Alas, what blighted hopes! what brilliant, broken plans! To-day Mr. and Mrs. Pierrepont are hastening to the bedside of their boy, whose death is as yet unknown to them. For a score of years I have enjoyed the warm personal and much-valued friendship of the father, Mr. Edwards Pierrepont, Mr. Lowell's predecessor as United States minister to England, and known of his solicitude, hopes and plans for his son.

On the 8th of March, 1879, Mr. Pierrepont wrote a private letter to his son for his future guidance and help, intrusting me with a copy at that time. This letter so impressed me by its wis dom and discretion that I now offer it, upon my own responsibility, for publication. I do this in the conviction that many a young man who reads it will be inspired and strengthened by its teachings and guided by its counsels.

S. L. WOODHOUSE. 203 Clinton St., Brooklyn, April 17, '85. THE LETTER.

No. 103 FIFTH AVENUE. NEW YORK,

My DEAR SON-I would gladly save you from muc's annoyance and from many sorrows by giving you the benefit of my own experience. I have been through the preparatory schools and the university, and I know all their trials and their temptations. I also know how prone boys are to think that the times have changed since their fathers were young, and that the true rules for the conduct of life have ceased to be the same. My son, as you grow older you will find that from the time of Solomon to this hour human nature has not changed at all, and that the guide to a happy and prosperous life is precisely the same as it was when that wise man wrote. The boy who is fortunate enough to have a father whose experience is large and varied, and who communicates it with no possible motive but the best good of his child, has great advantage if he will heed what is told him, but will suffer all the more deeply in the end if he comes to see that the care, and the earnest warning has been disregarded.

Banish forever from your mind that folly which young men so very stupidly cherish, that "the world and the ways of the world are essentially different now from what they were forty years ago," and settle forever in your mind certain principles Which you are never to doubt, and never to swerve from in your course of life.

* Eong, April 18.—The funeral of Mr. Edward Pietretont, lata American Charg's definitions, occurred to-day from the American Episcopal Church. Two thousand persons, including the members of the diplomatic corporate many political and commercial notabilities, were present at the services. The monicipal authorities sent wreaths to be placed upon the coffin. The remains were wrapped in the Stars and Stripes. The Rev. Mr. Nevin officiated. An sid de camp of the King Signor Mancini, Micheler of Foreign affairs; Herr Von K-meell, German Ambassador, and Mr. S. H. M. Byers, the American Consul Seasoral, acted as pall-bearers,

cause which rules the world; a something which we can but dimly comprehend, because it is too yast for our tinite minds. It is the infinite. It is God. It is fruitless to try "to flud out

God." He is "our Father in heaven;" that is all that the simple child can know; it is all that the most learned man can ever know. That this Great Creator is just and merciful, and rules by equal laws, we have every reason to believe; and that it is one of the Creator's laws that our lives may be influenced by earnest prayer for guidance in the right way, there is no doubt.

I do not mean that to pray for specific things, such as richers and honors, will bring riches and honors as a matter of course, but that honest and earnest prayer to our Father in heaven for guidance in the way that is for our best good is sure to bring strength and enlightment to the mind, and thus to aid us in the affairs of life.

Every day ask your Heavenly Father to guide you in all things in the way which is right, and you will not go Most of the scientific men of our time

devote thems lives to the study of the laws of matter, and they seem to forget that man, even while on earth. has a spiritual as well as a material nature. They find nothing but matter in the brain which they dissect, and they jump at the conclusion that there is nothing but matter. Their discoveries in the laws of matter are wonderful lect the study of spiritual laws, which are as real and as certainly a part of it is happy or miserable, "according to the deeds done in the body," never allow yourself to doubt. If skeptics wish to talk to you about it, don't argue; arguments on these subjects never do any good; you might as well argue that you love your mother. Practice what I suggest, and you will be made much happier and serener day world. When in the family of the Rev. Heary Seymour, at Holme Pierrepont, you saw how cheerful and serenely happy they all were under the influence of a religious life.

ty, cowardice and of a deprayed nature, and they always fail of their object and strict integrity, justice and honor, no one can have continued success in anything or lasting respect from anybody. Every one is found out sooner or later, and much sooner than he supposes. Indeed, your true character is sure to be known, and sure to be justly apprecia-

I pray you, my son, never trouble yourself about popularity. Do right, the best you can, deserve respect and you will be certain to have it.

If you see a fellow-student, who is always manly, honorable, brave and just, and who devotes himself to the duties before him every day, who re sists temptations to pleasures which interfere with his health, and hence with his success, you cannot help admiring and respecting him; and so is it with the most jaded idler at Christ Church. Oxford has never graduated a man who was an indolent failure at the college who ever became an eminent success afterwards, and she never

Attend to the duties and obey the laws of the university. It sometimes enters the shallow heads of young men that it is clever and spirited to transgress the rules. It is supremely silly. It requires neither brains nor courage to break the laws, and comes of a desire to get cheap notoriety through cowardice or vice, and the aspiring idiots always fail in the end. Thieves and burglars break laws; true men keep them; they are made for good.

The great secret of making the labors of university life or of other life easy is o do saca duty every day. If you let ta burden of arrears accumulate it will discourage you. If you have five things to do each day, they are easily done; but if you put them off with the idea that you can do fifty on the tenth day,

you will surely fuil. Mind not what others do; they may can afford; more likely, however, that they will fail. Many in Christ Church

First-That there is a great first despise the diligent.

If you have not a determined pur pose to take a stand as a scholar, and to lead an earnest, manly life after you leave Oxford, then leave it now, and save me the mortification and expense, and yourself the reproach and scorn which your countrymen bestow upon wasted opportunities. Do well, and there is nothing in my power which I would not do to advance you. Be a failure, through your own indolence. weakness and indulgance, and though you are my only son, I should feel that I had one too many.

Success comes not of spasmodic effort, but of continued every day work.

Read the fable of the hare and the tortoise, and profit by its teachings, and one of the highest pleasures of life. I have many fears lest in companionship with so many young men of easy fortune, and no ambition beyond that of the easy life of an English gentleman. you lose the sturdy purpose which should animate you daily. Remember that America is not England. No one is born to titled greatness or to any other greatness here; he who gets it must achieve it, and he who cannot achieve it in some form is of small conidle life is a worthless and unhappy times fatal; never acquire it.

Never go to balls or parties in term scarce a pleasure.

From his birth Sampson drank neither wine nor strong drink, and those who are trained for the ring imitate his example. During our late war it was conclusively proved that those who drank water only, escaped disease and endured fatigue far beyond the others.

I cannot to strongly urge upon you the importance of early retiring to rest. Investigations into the cause of longevity have shown that early sleep and early rising are among the chiefest reasons of long life, and science has revealed the fact that the magnetic rays by day, and far more prosperous in the of the sun are widely different in the morning from those of the declining day. As the sun goes down, most of the beasts and birds seek their place of rest, many of the flowers and plants and trees fold their leaves; and the Second-That truth, unfaltering in- large sun-flower, which looks toward be departed from under any circum- to greet him in the morning toward tortions, and when these the east. As he approaches to usher

Lies come from meanness, low vani- in the day, all nature, from bird to flower, seem animated with invigorated life. Then the mind of him who bring the liar into contempt. Without has had refreshing sleep awakes with its best thoughts, its wisest plans, its largest capabilities. But this can come only to him who has spent the midnight hours in sleep. Sleep restores the pervous forces of the exhausted brain, and the best constitution will soon be shattered and the best mind will become unstrung if sleep is neg-

> "Sore labor's Lath, Balm of hurt minds, great nature's seco Chief nou latter at lile's feast."

lected. It was justly called

Third-That economy is a virtue and that extravagance is a vice, never

You never see a man of forty wh regretted his economy; you will see plenty that mourn their early extravagance. Lavish expenditure never wins respect. It may win temporary flatterers, who despise the fool they flatter. Pay every debi you owe,but-

"Neisher a borrower nor a lender be, For loss oft loses both itself and friend,"

Let not your vanity ever tempt you to spend money. English young men are life awake; they laugh at the foolish Americans who are so lavish. Remember future is unimagined and whose greatpire in the world. You are to be a your future success. part of it; and, if you do not one day go as ambassador from the greatest republic that has ever been to the most powerful and advanced kingdom in ties and of my hopes.

Do not listen to the twaddle about decay, but in the full vigor of robust manhood. Great nations do not com mence their fall until their morals are ty-five you will desire what others valcorrupted. As yet England has a stage of life. I mean what the higher sturdy moral sense, courage, and ca- order of men value. pacity for self-denial and for brave derds; she believes is God and truth thus you will lead a happy life; a life be able to waste more time than you and justice. She has many faults and which will secure to you the happier wenknesses. She is not moving forward with the colossal power of this forget not that yours are advantages do not expect to make any figure in younger, bolder, more rash and fear- suited to America, not suited to E gthe world, and have no ambition but less America; her civilization is in to pass through; and many affect to advance of ours, but she has inher-

ited many prejudices coming down system of primogeniture and title gives from old centuries which retard her progress and from which we are free.

I would deprive you of no innocent leasures; that is not pleasure which injures the health, jades the mind, and makes you feel meanly and weak and inequal to the labor which is to fit you for manly life.

Study well whatever the college couse requires, and never say that this or that will be of no use. All is of use which disciplines and strengthens the mind. When training for a boxer, you strike the sand-bag; you would not tell the trainer that you do not expect to fight sand-bags, in life, and hence you will not strike them now. You li't weights to strengthen the hands; you rememoer that success, with honor, is do dry work to strengthen the head; and remember that you must do it; no one else can do it for you; as well might you get some one else to strike

> was to strengthen your muscle, Duties well done every day, and difficulties surmounted as they arise, grow easier continually, and finally become lasting enjoyments.

Never play cards for money. It is no pleasure to win a fellow-student's money, and it is pain to lose your own. sideration. We have no idle class, Au The habit is always bad, and often-

Dress like a gentleman; never be peculiar or flashy, but dress as becomes time, and avoid late wines and suppers you, not as becomes some one else. at all times; they always injure the Never talk about your expenses or health, and without health life has your money, and never be ashamed to live with economy; on the contrary, be proud of it. Your business now is to acquire knowledge, and you need not be anxious to display yours, especially to ofder men; but always try to learn of them.

Never say to another what it would be unpleasant to have them say to

Remember that good manners are of great importance. Manners should be frank and easy, with dignity.

Avoid fawning, toadying ways as you would the foul fiend. Never fawn to a prince or swagger to a peasant. Be courteous and manly everywhere and

Let your manner be quiet; nothing is more underbred than a flurried address, with face wrinkled all over with a grinning delight.

The countenance can express pleastegrity, justice and honor are never to the sinking sun in the west, is turned ure and welcome without idiotic conwhether in the son of a duke or a drayman, they are intensely vulgar.

You can not have good manners in the Jrawing-room if your habitual manner is bad; the habit will betray you, let the habit be always good.

Far better that you look frigid even, han that you degrade your countenance with silly hilarity.

Be a gentleman, feel like a gentlenan, and you will look and act like

Sometimes you will be neglected, and your vanity may feel wounded. Never let this annoy you; be absolutely sure that in due time all will come right, and that you will have all the consideration which you merit. No one can do you any permanent injury but yourself. The world is so constituted that it is not in man's power to withhold respect from lofty character, real ability and good conduct.

You may be invited to a ball or dinner because you dance or tell a good story; but no one since the time of Queen Elizabeth-has been made a cabinet minister or a lord chancellor for such reasons.

The years of youth are short, and the pleasures of youth perish in manly life. Reputation, power and the con-sideration which comes of ability, attainments and good character, and are what the man from thirty to seventy that your hope, your pri-le, your life covets. Nothing but the well spent

I would keep you from no enjoyments suited to your age which are no ness and power will surpass any em- injurious to your real happiness and

You have health and a good constitution, and you have no inherited tendencies to any vice. It is easy for you to do right, and it will be unpardonable if you go astray.

I rejoice to find that profanity is con-

Europe, you will fail of your possibili- sidered vulgar in England. It is vulgar everywhere. During the two years that I resided in England I never heard a profane word from a gentleman. the decadence of England, she is not in to be abundant. I hope that it does not prevail at the university. Remember that when you are twen

> Live each year in the war which will best fit you for the next year, and

life to come.

precedence and outward respect, in large degree, irrespective of merit. It is not so with us, and I am very glad. Quarrel not at ail with their system; they seem to like it. But never cover it, and never commit the silly snobbery of pretending to prefer it to the system

of your own country.
The social life of England is very charming, and their plan of leaving all land to the eldest son has built up vast estates, adorned and dignified with castles, and halls filled with art and luxury and refined taste; but all this is at the sacrifice of many haman rights which we value.

Nothing like this is possible a America; and it will not always last in Eag-

The substratum of the English character is solid, honest, truthful, and inthe main, just. Our best traits are a heritage from that race; but I feel quite sure that, with all our faults, we are rapidly improving upon our faults we are rapidly improving upon our English sires, and that we shall become quite the superior people as a

Feel always a manly pride that you are an American, and that your future the sand-bag or lift the weight which is here.

There is not, in all historic time, a grander record than that of the United States, Before the nation was a hundred years old a great civil war broke out, and the North alone had st one time more than a million of armed men in the field and the South had vast armies also. After four years of terrible wer, more than twe've hundred thousand soldiers were dispanded almost in a day. They returned to the peaceful industries of civil life without a murmur, without disorder, and without crime. Under our system of govern-ment they had learned to govern themselves. Even in the madness of the conflict, when the President was assasinated, the government moved on without even a ripple of disturbance. More than three thousand inillion of debt was created and the paper money was in such discredit that one gold dollar would buy two dollars and seventy cents of the paper. But so soon as the war ended we went bravely to work, paid off one-third of our debt, and row a paper dollar will buy a gold dollar in any part of the country, and our national credit is of the highest grade. We have finished more than seventy-five thousand miles of railway, revived our industries increased in population, and our prosperity is such that our annual income s greater than that of any nation on the earth.

I have a letter from the Denn to-day in which he says, "Your son's improve-ment has really astonished me." Continue to astonish the Dean and delight

me."
This shows that you have the ability, and that there will be no excuse and no pardon if you are not faithful in the

From time to time I shall hear from he Dean, and also from your tutor, and they will tell me all and only truth. They will reveal your shortcomings, it you have them, as well as your merits. You accept too many invitations from your fellow students. This will weaken your energies and prevent your success; besides you will become a bore, which avoid as you would "the plague." Short visits do

When we last met you did not carry yourself erect. You seemed to think that you were awkwardly tall, and you ried to look shorter; this is a mistake you are nineteen years old and scarce nore than six feet high, that is not too tall; but if you grow to any height, carry yourself erect.

When you have done the duties of the day, and done them well, take your pleasures, which will be all the more ceen, and when you have well finished the labors of the term, you will enjoy the vacation a thousand times the more by reason of your successful toil. I do not need, in this letter, to repeat

the warnings against those petty vices, temptations, and follies of which I have so often spoken.
I will print this because I wish

to read it more than once. God bless and keep and guide my Your ever devoted FATHER.

The Small Boy's Dealings With His Father.

"No, my son," he replied, as he put on his hat, "you can't go to the circus." "But why, father?" "Well, in the first place I can't fool

way my money on such things. Yes, but I have enough of my own. "And in the next place it is a rough crowd, the sentiment is unhealthy, and no respectable person can countenance such things."

"But, fath-" "That's enough, sir. You can't go. I want you to enjoy yourself, but you must seek some respectable amuse-

An hour later a curious thing happerced in the circus tent. A boy climb ed to the top flight of seats and sat down beside a man who had fluished a glass of lemonade and lighting a cigar. He had his plug hat on the back of his head and seemed to be enjoying himself hugely. It was father and son. The father had gone straight to the grounds from dinner and the boy had run away. They ooked at each other for half a minute and then the boy got in the first blov "Say, dad, if you won't lick me

won't teil ma you was here."

The father nodded his head to the agreement, and the great spectacolar parade in the ring began.

A Financial Estrangement.

"I understand you and Bilker are out," said Steadboy to Funnywag the other day.

"It is not Bilker ; it's I that am out." nawered Funny sadly. "How's that,"

"Why I'm out five dollars that Bilker owes me."-Hatchet

Save the Timber.

Daugers Which Threaten the Porests of A Time-keeper Used by Nations of Anthony the Culted States.

In the convention of the American ociety of Engineers, in session at Deer Park, Maryland, Mr. Francis Collingwood, of New Jersey, last Friday read a paper on the preservation of forests. In the light of the statistics furnished, he finds

1st. The supply of white pine in the United States is certain to be exhausted before the end of this century, and good judges predict the same result for the Canadian supply. The price in the last twenty-five years has about trebled at tide water. It can be replaced by neighborhood of New York city. They other pines from Canada and the West or by other soft woods.

2nd. Of Southern pines, at the present rate of consumption, there is stated to be 150 estimated, the geometrical increase in consumption of timber, together with the immense and inevitaole losses by fire, seem certain to reduce this limit.

3d. The supply of sprice in the United States, east of the Mississippi, is not fully given, but there would seem to be not over 25 years' supply. There are, however, large supplies of this and other soft woods to be drawn from in

Canada and the West
4th. Of hemlock the supply in the East is about the same as that of spruce. It will soon be exhausted in Pennsylvania, New York and the Eastern States. The price has about doubled in 25 years, and an advance in price sufficient to warrant transportation will bring large supplies from distant

5th, Of hard woods, black walnut began to be used extensively less than 25 years ago, and the price has advanced to \$110 per M. at wholesale. The supply is being rapidly exhausted. Ash

oak also, in the same time. The supply of large timber in all these is destined to rapid extinction in the older settled districts. The supplies to be drawn upon are so great that we cannot predict a famine, except in some of the species. We can say that prices will continue to advance, as timber is brought from greater distances and the cost of transportation is increased.

So far us we are concerned, as engineers, the matter becomes one simply of cost; and in this view alone it is evidently worth our while to economize in the use of timber. As a matter of ethics, however, something more is due from us It is our bounden duty to try in every way to prevent the terri-ble losses of timber by fire. Our locomotives are responsible for an immense amount of this mischief, and the fact is discreditable to the profession, Ifa cutting and burning the way for new lines through wooden countries, also, forest fires are frequently started. In pursuit of our duty we come in contact with the backwoodsman, and we can spread sound knowledge as to the sure profit eventually to result from the preservathe large timber, and inculcate greater care in brush burning and the use of fire in other ways in the woods.

We can also point out the profit that may be expected in many parts of the ed in the forum a dial which had been country from the cultivation of certain taken at Catania. The Arabians ackinds of wood, particularly on ground quired the sun dial from the Greeks, which would otherwise be waste. As, and were enthusiastic students of asengineers, we are called upon to study the subjects of water supply, and the effects of floods upon structures, and n causing changes in streams, etc. Now, however much opinions may vary as to the effect forests may cause by inducing local climatic changes, there can be no question as to their efficiency as conservators of the water supply of the region where they are, and of their tendency to equalize the flow of streams and prevent floods, The public at large certainly need education upon this very important subject. The great unknown factor is waste, and we in common with all good citizens are interested in the introduction of some thorough system by which this great wrong shall be donaway with. If this be done, and reasonable care be taken to replant forests and circumstances warrant the expec tation that it can be done with ease, we may safely rely on an abundance timber for generations to come,

The American Ffreside.

An American woman is lecturing in England on marriage, domestic habits and kindred subjects. Heridea of fireside bliss is illustrated by an ideal picture of a cozy room with a pretty mother seated in it, equally pretty children and a cat and dog playing about. Enter to these the husband, tired but happy. He throws binaself into an easy chair, is attitude of careless repose, waich he completes by placing his feet in his wife's lap. With her usual gentleness and faith in what they are told concerning American affairs, the English who unfortunately hear this lecture will henceforth stubbornly believe that all American husbands are in the babit of resting themselves with their feet in their wives' laps .- Indianapolis Journal.

Time to Think it Over

"It is my unaltered decision, Clara," he said firmly; "I cannot walk on the avenue with you if that poodle is to accompany us. You must choose between me and him. It rests with you, Clara, if our engagement shall be broken off."

"Oh, George!" the girl replied, and her face assumed an oshen hue; "this is all so sudden. You must give me time to think it over. One week, George, and you shall have your answer."-Ingleside.

Ramon's Relief cures sick-headache, neuralgia, toothache, cramp, &c., in five minutes. For sale at Machell's The Antique Sup Dial.

On the side walk in front of the store of an optician and a dealer in astro-nomical instruments in upper Broad-way stands a sun dial. "Clocks and watches have, of course, supplanted sun dials entirely as time keepers," the optician said, "but many are bought by gentlemen owning country seats to adorn their grounds, and others by colleges and seminaries for purposes of instruction. Many of them can be found on places along the Hudson, and, are made of marble with brass gnomon—the shaft which casts the shadow—or entirely of brass, which becomes bronzed by age. The divisions on the dial must be adapted to the latitude of the place where the instrument is set up. In order to construct a dial the maker should have an acquaintance with some of the simple doctrines of astronomy, with the elements of geometry, and plane and spherical trigonometry. The use of the instrument is readily learned. It can be set up in various positions, vertical, horizontal, declining, or inclining. It may also be said that there are human sun dials, as the intelligent farmer, by notising his shadow cast by the sun, can readily tell the hour of the day.

"The date of the invention of the sun dial is unknown, but the earliest men-tion of it is in Bible, in Second Chronicles. thirty-second chapter, twenty-fourth verse, where it is recorded that Hezekiah was sick and prayed onto the Hezekiah was sick and pray.

Lord, and received in answer a sign,

Lord, and received in described in which is particularly described in Isaiah, thirty-eighth chapter, eighth verse, as follows: 'Behold, I will bring again the shadow of the degrees which is gone down in the sun dial of Ahaz degrees backward. So the sun returned ten degrees, by which degrees it was gone down.' Seyen hundred years before the Christian era the Chaldeans, among the earliest astronomers, divided the day into sixty parts in some manner but the first sun dial used by them was the hemicycle or hemisphere made by Berosus, who lived about 540 This primitive instrument consisted of a concave hemisphere placed horizontally in an open space, with the concavity toward the zenith. A small globe was suspended, or fixed in any way at its centre, and the shadow marked the sun's daily flight by means of regular lines upon the dial. highly probable that all the nations of antiquity used sun dials, but none have been found in Egypt, although they may be buried in the ruins of the cities. However, it seems to be unquestionable that the obelisks were in-tedded as gnomons, and that their snadow told the hour of the day with sufficient correctness to the inhabitants of ancient Egypt. The circle of Osy-mandias, at Egyptian astronomer might have determined the azimuth of the heavenly bodies and thereby have told the hour of the day or night. In Rome the sun dial was seen for the first time about 290 B. C., one having been captured from the Samites, and in 261 B. C. Valeri-ush Messala plactronomy and mathematics. There is in the British Museum a combination of four dials called the dials of Phiedrus. They are traced on a single block of pentelique marble, and they date from the second or third century of the Christian era. They were part of the spoils of Lord Elgen.

"But it would take too long to detail the entire history of the sun dial, As I said before, it was most, probably used by all nations of antiquity, and is in some countries utilized to this day; and considering the use the average individual or even nation makes of the time, I am not prepared to say that the sun dial is not a good enough timepiece yet "-New York Sun.

How a Bronze is Cast.

To make the matter clear I will suppose that one of the first artists of the day has modeled a statue which is to be cast in brouze. The statue is a scated female half draped. She has bare feet and raised arms. The drapcry is tall of narrow deep folds designed to show and emphasize the movement of the figure. The statue is cast in plaster as soon as the model in clay is finished and is handed over to a bronze founder-"art founder" he will probably style himself.

The first thing he will do will be to

cut off the arms, because it is so much

easier to mo d them separately. Then Le will probably cut off the the line of the drapery, then he will likely enough cut off the plinth. All these pieces he will mold and cast sep-arately. They have to be then cleaned up with chisels, punches and files to remove the lines left on them by the seams of the mold, the latter having been made by many pieces fitted to each other in the same way as piece molds are made in plaster. The seams left on plaster cast by these latter are amiliar to every one. If there been deep or intricate under cutting in any part, as in the hair, the ears, or the drapery, probably this has been quietly filled in by the founder—to the estruction of the artists work-in order that it may be easier to mold. know of one instance in particular where a very important national monument was so treated, to the diagartists. The nation was none the wis-er. All these pieces having been cast and shaped up must now be put togeth-er. This is done partly by means of screws and rivets, partly by raising the parts together according to circum-stances. These joints have then to be stances. These joints have then to be worked over with punches and files, in order that the exact line of jointure may be concealed; indeed, it is often requisite to work over seve al inches on either side to effect this purpose.
Sometimes what between the lines of
the mold that have to be worked over, there is but little left of the touch of the original artist, -English Blustrated

Magazine. Subscribe for THE GLEANIE