## R E P O R T

## MEDICAL SUPERINTENDENT

OF THE


TORONTO,
FOR THE YEAR 1860.

TORONT0:
Leader and Patriot Steam-press Print, 63 King Street.
1861.

## INSPECTORS OF THE ASYLUM.

WOLFRED NELSON, Esq., M. D., Chairman, JEAN C. TACHE, Ese., M. D.
E. A. MERIDETH, Esq. JOHN LANGTON, Esq. D. $\mathbb{\text { E. MoDONNELL, Esq. }}$

## OFFICERS:

JOSEPH WORKMAN, M. D., Medical Superintendent. BENJAMIN WORKMAN, M. D., Assistant Physician. SAMUEL E. SHANTZ, Clinical Assistant.

JAMES McKIRDY, Bursar.

COLIN S. EASTWOOD, Steward.
MARY PARKES, Matron.

ROBERT BLAIR, Steward University Branch. ELIZA BLAIR, Matron
do.

ANDREW FISHER, M. D., Medical Superintendent Malden Branch.

## REP0RT

of the

##  AT TORONTO,

 FOR THE YEAR 1860.PROVINCIAL LUNATIC ASYLUM, TORONTO.
To the Inspectors of Asylums, Prisons, \&ec., dec., of Canada.
Gentlemen,-In accordance with the provisions of the Statute relating to the government of the Provincial Lunatic Asylum, at Toronto, I have the honor of presenting to your Board, the following Report on the operations and condition of the Institution,
The Asylmin was first opened, as a temporary establishment for the relief of the insane, on 21st January, 1841, in the old gaol, in the centre of the city,-a building in every respect unsuitable to the purpose to which it was, from mere necessity at that time, appropriated. In the course of a few years it was found requisite to occupy two other buildings, within the City, as Branch Asylums, until the completion of a portion of the building destined for the future lodgment of the insane of Western Canada, which was commenced in 1845, and was entered on 26th January, 1850 ; at which date 112 patients were transferred to it from the three temporary establishments, above nuticed. The same fact has been realized here as in all other places where asylums have been entered when only half built; and it is
to be deplored that ours has not yet been redeemed from this most injurions imperfection.

The total admissions, into the temporary institutions, appear to have been 889 ; the discharges 554 , and the deaths 211. In the period since elapsed, the admissions bave been 1540 ; discharges 770 , and deaths 354 .
A comparison of the above figures would appear to show that the operations of the temporary asylums, notwithstanding all the disadvantages connected with them, were better than those of the new institution have been,-the discharges in the former period having been equal to $62 \frac{2}{3}$ per cent. on the admissions, whilst. in the latter, they have been only equal to 50 per cent. The deaths in the former were $22 \frac{2}{5}$ per cent. on the admissions, and in the latter nearly 23 per cent.

Figures may be used to prove any thing; and in skillful hands they have sometimes established, as facts, statements palpably antagonistic to common sense. In my report of last year, I had occasion to draw attention to the unreliable character of the early statistics of the Asylum; I then shewed that the proportion of early-relapsing, or uncured patients re-admitted in that period, was more than threefold that of late years. Three cases were instanced which had enriched the statistics with no less than eighteen discharges, though the patients were certainly, throughout incurable. Two of them died in the Asylum, after long ultimate residences ; the third had vanished from the records.

The discharges of actually recovered patients, in the first nine years of the institution, did not probably exceed twothirds the number shewn in the books, and instead of being rated at 62 per cent. on the admissions, they should stand but little above 40 per cent. With regard to the compara-
tive mort stand nea
Premat discharge second pe deaths wh incurables of the 354 It must th new Asylu of legitima the proport as, say, ne with the re is by no me to admissiol the cases ad be regrette subordinate letter from large Amer lunatics we this is not a unfortunatel mother coun
From all believe, that perhaps the purtion of th in Western by the estab ables,-a me pletion of $t$
tive mortality of the old Asylums and the new, the rates stand nearly equal.

Premature burial is not so common a mistake as premature discharge ; yet, in comparing the mortality of the first and second periods, we must make a large allowance for those deaths which have taken place in the latter, among the incurables remaining from the former. Probably one-third of the 354 deaths of the last ten years were of this division. It must thus be evident that in comparative mortality, the new Asylum stands superior to the old. The comparison of legitimate discharges would be no less favorable. Taking the proportion of recovered patients, in the last ten years, as, say, nearly equal to one-half the admissions, comparison with the results of other Asylums, in Europe and America, is by no means unfavorable. The proportion of recoveries to admissions, however, depends more on the character of the cases admitted than on the treatment; and it is not to be regretted that, in Canada, Asylum statistics are held subordinate to humanity. A few months ago, I received a letter from a relative of one of our patients, residing in a large American town, in which I was informed that 108 lunatics were lodged in a neighboring poor-house. I fear this is not a solitary fact in the neighboring country ; and unfortunately it has its parallels, far too numerous, in onr mother country.
From all that I have read and observed, I am led to believe, that there is no country in Christendom, excepting perhaps the State of Massachusetts, in which so large a propurtion of the insane is provided with Asylum lodgment, as in Western Canada. This has been accomplished chiefly by the establishment of Branch Asylums, for quiet incur-ables,-a measure, which, in consequence of the non completion of this building, and the increased numbers of
claimants for admission, had become a public exigency not to be disregarded. It is an interesting coincidence, that in Canada this plan should have been initiated simultaneously with the very same in several places in England; and it is gratifying to know, that there, as here, it has proved, so far, satisfactory. It will continue satisfactory so long as these appendages are regulated and managed as the parent institutions are, and no longer. The success of our University Branch, and of the more recently established Malden Branch, has not been a matter of accident. The former has been conducted as a neighboring appendage of the chief Asylum, and has been under the immediate charge of a humane and experienced Steward, who learned his duties in the chief Asylum, and who was placed in his present position, solely because of his fitness for the office. The latter has been organized by Dr. Fisher, a gentleman eminently qualified for the duties of Superintendent, from his intimate acquaintance with nearly all the patients, acquired during his residence in the chief Asylum, as assistant physician, and from his amiable and benevolent disposition, conjoined with administrative tact, rarely perhaps exceeded. He has by his skill in the direction of the labour of his patients, and by his ingenuity and untiring industry, saved the public much expense in the preparation of the buildings and premises, and $I$ am certain that his highest pleasure is the happiness of all under his care. In recommending him, I felt that I was faithfully meeting the wishes of the Government, by whom I was consulted; fitness for the office, was the sole consideration stipulated.
The close affiliation of our Branch Asylums, with the parent institution, will be a matter of vital importance to the well-being of their inmates, and to the public interests. If they continue to be conducted on enlightened and humane
principles they lose no reliabl managem years, the acterized manageme
Strong ment of A on the gro as a mala eventually mental res ence, that that which the treatm modern A doctrine of be the best and easy $m$ ness, in the growth of i the world, clearer head the best int efforts, and peculiar sofi priately fill. sometimes d much that is Small faults ones will sp. ill-natured a
gency not ce, that in taneously ; and it is ed, so far, g as these arent instiUniversity en Branch, : has been ef Asylum, umane and n the chief tion, solely $r$ has been y qualified e acquaintng his resin , and from oined with He has by ents, and by public much d premises, e happiness I felt that I rnment, by was the sole
s , with the portance to lic interests. and humane
principles, they will prove eminently useful. If, however, they lose identification with the parent institution, $I$ can see no reliable guarantee for their future humane and correct management, and I should apprehend, that in the course of years, they might retrograde into the condition which characterized establishments for the insane, before Asylum management had become a science.
Strong objections have been urged against the establishment of Asylums distinctively for incurable lunatics, chiefly on the ground that the recognition of insanity, in any form, as a malady beyond the reach of curative means, must eventually paralyze all persistent effort in the direction of mental restoration. It certainly accords with human experience, that men work reluctantly, or apathetically towards that which they believe to be unattainable. Kindness in the treatment of the insane, has become a universal law of modern Asylums, not because it has ever been the leading doctrine of Christianity, but because it has been proved to be the best curative appliance, and by far the most potent and easy mode of government. But sound practical kindness, in the management of the insane, is not the spontaneous growth of instinctive benevolence; there are multitudes in the world, whose hearts would do much good, if guided by clearer heads; and Ihave seen a few who have started with the best intentions and kindest dispositions, flag in their efforts, and become finally unfit for the position which their peculiar softness seemed to promise they would most appro priately fill. Kindness to the insane inmates of an Asylum, sometimes demands of those in command, the execution of much that is considered very unkind to the sane attendants. Small faults must be promptly dealt with, otherwise great ones will spring from the overlooking of them. Even an ill-natured attendant may be kind to a good and obliging
patient; it requires a vigilani oversight to secure from the best tempered attendant, the like treatment of the malevolent and perverse.

Perfect discipline in an army, is not best preserved in its outlaying small detachments, and if these were cut off from all connection with head-quarters, they would soon cease to be efficient for the purposes of war. The organization of our Branch Asylums, was devolved upon me, as Superintendent of the chief Asylum, and I executed the duty entrusted to me as faithfully as I was able. I have my own views as to the appropriate mode of managing these establishments, but I restrict myself, on this occasion, to the expression of the wish, that the relation between the chief Asylum and its Branches, should be defined.

The withdrawal from the chief Asylum of all its quiet old residents, and the introduction in their stead of all the worst cases presented by the country, has, as was foreseen, rendered still more necessary the completion of this building, in order to present those means of classification which are, beyond all other requirements, essential in the treatment of insanity. It is very strange that a fact so manifest, should have received so little public consideration, notwithstanding the frequency with which it has been urged. Probably there is not a newspaper in Canada, which would withhold its approbation from the establishment of a Branch Asylum in its own village. We have enough of this sort of sympathy with the insane, but far too little of the more disinterested and truly christian form.

Within the past five years a large number of insane persons, from the more respectable classes of society, have had to be sent to institutions out of the country, because this Asylum could not, in its present unfinished state, afford
them that demanded; strangers, a have cost tl and which ford them. the sufferer: ance; bat account. public reve who also co was built, a Whilst we b we be regar pay liberally of their frien

The admis being the lar above 185, 9 men, 47 were 54 were ma since the first

Of marr
" single
Of marri
" single
The total m
This excess not, I believe, sanity in the s unless paupers
e from the malevolent
rved in its ut off from on cease to unization of as Superinae duty enown views e establishthe expresief Asylum
ts quiet old 11 the worst reseen, renis building, which are, eatment of fest, should ithstanding
Probably d withhold ach Asylum ort of symmore disin-
of insane ciety, have try, because state, afford
them that appropriate accommodation which their position demanded ; and thus they have been forced to seek, among strangers, at double or treble the expence which it might have cost them at home, that relief which they required, and which it is disgraceful to us to have been unable to afford them. This is an evil which touches but the few, and the sufferers are not at all disposed to proclaim their grievance; but surely they are not to be neglected on that account. The very class who contribute most largely to the public revenue out of which the Asylum is supported, and who also contributed most largely to the tax out of which it was built, are denied a proper return for their contributions. Whilst we bestow a due attention on the insane poor, should we be regardless of those who support them, and who would pay liberally for support in an Asylum fit for the reception of their friends?

## ADMITSSIONS in 1860.

The admissions during the year have amounted to 185 ; being the largest number yet received in one year. Of the above 185,96 were men, and 89 were women; of the 96 men, 47 were married, and 49 single ; and of the 89 women, 54 were married, and 35 single. The total admissions, since the first opening of the Asylum, have been 2,429, viz.:


The total males admitted exceed the total females by 213. This excess in the male admissions arose many years ago, not, I believe, from any difference in the incidence of insanity in the sexes, but from the fact, that female lunatics, unless paupers, were then more generally detained at home
than they have been of late years. Of 1,047 patients admitted by me, in $7 \frac{1}{2}$ years, 517 have been men and 530 women, thus showing a very close approximation of the rate of insanity in the two sexes.

The numbers of single men and married women admitted in 1860, have fallen below the average. This variation may be purely accidental, and no proof of improved morals in the former, or in the husbands of the latter.

No question is so frequently put to the physician of a Lunatic Asylum as that which calls upon him to state the most productive cause of insanity. Those who are most familiar with insanity, find themselves the least able to reply to this question. The reader of one book, or the doctor of one patient, is sure to understand disease and its cure much better than the student of half a century. So, also, he who has never seen half a dozen of lunatics, and has never thoroughly sifted the history of a single case, may be found very dogmatical on the question under notice, and may propound articles of belief which the patient investigator might hesitate to subscribe to.

Not very long ago there appeared in a Canadian newspaper a letter from a medical gentleman, who stated that he was inspector of liquors in Cincinnati, and amongst other large assertions in the epistle, was one to the effect that he had himself often been called on to certify to the lunacy of quite a number of patients daily-candidates for the county Lunatic Asylum. The figures were, very certainly, far beyond the capacity of the Asylum, or of all the four Asylums in the State of Ohio; and if all the other members of the profession sent in patients only one-tenth as multitudinously as this gentleman, twenty Asylums as large as that at Cincinnati would be insufficient for them. This letter was
published b who certain not believe have publis showing ver insanity cau

If we woul strict, but ho with more ti opinion is su virtue requir

It is much human reforr good, occasio and give utte or confound $t$ suber inquire papers, recen speak from $m$ missioner of ] of my experie sanity, to be j cause than fro in the British firm Lord S Canada is co although in th temperance is in other places their Asylums, by his lordship
Intemperanc
patients adaen and 530 on of the rate
nen admitted ariation may ed morals in
ysician of a to state the ho are most least able to book, or the sease and its entury. So, atics, and has case, may be notice, and tient investi-
nadian newsstated that mongst other ffect that he he lunacy of or the county ertainly, far he four Asy. members of s multitudinge as that at is letter was
published by one of our worthiest advocates of temperance, who certainly would not have given it to the public had he not believed it to be strictly true. He might, however, have published another, which was strictly true, though showing very different figures, illustrative of the amount of insanity caused by intemperance.
If we would reform the vices of society, we should keep strict, but honest, accounts with them. If we charge them with more than their just liabilities, the verdict of public opinion is sure, ultimately, to be corrected. Morality and virtue require not untruth for their support.

It is much to be regretted, that some of the advocates of human reformation, in their zeal for the accomplishment of good, occasionally lose sight of the limits of reliable fact, and give utterance to expressions which, though they dazzle or confound the uninformed, yet cause but sorrow to the suber inquirer. Lord Shaftsbury is reported by the newspapers, recently to have nsed the following language:-"I speak from my own knowledge. I have acted as a Commissioner of Lunacy for the last twenty years. The result of my experience is, that full six-tenths of all cases of insanity, to be found in these realms, arises from no other cause than from the habits of intemperance." There is not, in the British realms, an Asylum Physician who would confirm Lord Shaftsbury's assertion. Certainly, as far as Canada is concerned, it is a huge over-statement; and although in the large towns of England and Scotland, intemperance is more largely productive of insanity than it is in other places, yet I was quite unable, in my visitation of their Asylums, to obtain any such information as that given by his lordship.
Intemperance is unquestionably one of the worst and most
prolific of the causes of insanity; but it is only one of the legion; and let us remember, that it is often very difficult to decide as to what is truly causal in the evolution of insanity, and what is but resultant. Still, in which ever light we view intemperance, it is a monstrous evil ; and its havoc is infinitely greater outside the limits of insanity than within them.

In former reports I have alluded to the very imperfect and unreliable character of the information furnished in medical certificates of lunacy, under the head of Causes. Medical examiners of lunatics, in Canada, are seldom able to possess themselves of that full information which is required to enable them to certify distinctly to the origin of the malady; consequently in a very large proportion of cases, no cause is named, or if named, it is given perhaps merely on the affirmation of the relatives of the patient; and in such cases it is generally but one of the early manifestations of the insanity, rather than its cause,-and as to hereditary taint, the admission is very reluctantly, if at all, made.

The following abstract, from the Admission Register, exhibits the assigned exciting causes during the year 1860:

Religion, 15 ; Intemperance, 10 ; Epilepsy, 8 ; Masturbation, 6; Fright, 5; Menstrual disturbance, 5 ; Puerperal do., 3 ; Parturition, 3 ; Cold, 3 ; Fever, 3 ; Love, 4 ; Deathof Son, 2; Family troubles, 2; Anxiety, 2; Excessive study, 2 ; Lactation, 2 ; Puerperal Convulsions, 1 ; Uterine disturbances, 1 ; Death of Brother, 1 ; Sickness of Wife, 1 ; Jealousy, 1 ; Loss of money, 1 ; Loss of money or Love, (?) 1; Intemperance and Religion, 1; Excessive smoking, 1; Unkind Husband, 1; Abuse by Husband, 1; Leaving Eng. land, 1; Desertion of Husband, 1; Death of Husband and Epilepsy, 1; Drunken Father, 1; Spiritualism, 1; Fear, 1; Imbecility of Mind, (!!) 1; Politics, 1 ; Pregnancy, 1 ; Hard

Work, 1 ; Cut on H Recent Cep. Family, 1 ; Weakness, 1 1; Accident
In the abo two-fifths of thrown unde psychologica damaged.
The editor last Annual I I should writ might thereby telligent pers causes, closing will believe th light on this a
It is, nevert the assigned c value; and it
In the list of may be regade Excessive smol Hard Work, F ment, Intemper
The followin Excessive study Politics (not ree ary), Leaving $\mathrm{E}_{1}$ Sickness of Wif of Mind (a disec
$y$ one of the ry difficult to n of insanity, yer light we its havoc is than within
ry imperfect furnished in d of Causes. seldom able which is rethe origin of roportion of ven perhaps patient; and ranifestations o hereditary , made.
on Register, e year 1860: 8; Mastur; Puerperal ve, 4 ; Death ; Excessive s, 1 ; Uterine s of Wife, 1 ; y or Love, (?) smoking, 1 ; Leaving Eng. Husband and 1; Fear, 1; ncy, 1 ; Hard

Work, 1; Fatigne, 1; Sunstroke, 1; Fall from a Horse, 1; Cut on Head, 1; Matter on Brain, 1; Meningitis, 1; Recent Cephalic attack, 1 ; Ill health, 1; Anxiety about Family, 1; Family in Slavery, 1; Business perplexity, 1; Weakness, 1 ; Critical period, 1 ; Measles- 16 years before, 1; Accident-long ago, 1; Unknown, 74.-Total, 185.
In the above total of 185, no cause is assigned in 74 , or two-fifths of the whole number. Had the whole 185 been thrown under the same head, perhaps the real interests of psychological truth would not thereby have been much damaged.
The editor of a respectable Western paper, in noticing my last Annual Report, suggested, that if on a future occasion I should write at some length on the causes of insanity, I might thereby render useful service to the public. No intelligent person who will read the preceding list of assigned canses, closing as it does with a two-fifths unknown portion, will believe that I am prepared to throw much additional light on this already sufficiently beclouded subject.
It is, nevertheless, a fact that the information conveyed in the assigned causes of insanity, is often of much practical value; and it is occasionally of much negative importance. In the list of assigned causes above given, the following may be regaded as genuine, viz :-Epilepsy, Masturbation, Excessive smoking, Puerperal convulsions, Over-lactation, Hard Work, Fright, Injuries to the Head, Religious excitement, Intemperance.
The following are of equivocal value:-Love, Jealousy, Excessive study, Sunstroke (as it probably never happened), Politics (not required), Pregnancy (as it was only imaginary), Leaving England, Matter on the Brain (of the doctors?), Sickness of Wife, Measles (sixteen years before), Imbecility of Mind (a discovery !)

In my last Report, I alluded, as delicately as possible, to the destructive results of a certain vice, more familiar perhaps to the American than to the English Asylum Physician. The opinion I then gave on the spread of this vice in the present time, was questioned by a Canadian journalist, who asserted that it was confined to the lowest and most ignorant class of society. I must, however, state that the observation of asylum physicians throughout America, goes to affirm the contrary. In my Report for 1857, I quoted from the talented and experienced President of the Association of Medical Superintendents of Asylums, an eloquent extract on this subject, a brief passage from which I here introduce:-
"It is a fact of deep importance," writes Dr. McFarland, "that this vice recruits its victims, not from the ranks of the naturally low and sensual, but from a class comparatively high in the social scale."

Dr. McFarland did not make the above statement without sufficient grounds, and it has never been controverted by any one competent to offer an opinion on the subject.

Ages of 185 patients admitted :-Under 20 years, $15 ; 20$ to 30,$50 ; 30$ to 40,$51 ; 40$ to 50,$32 ; 50$ to 60,26 ; over 60,11 . Total, 185.

These figures coincide very closely, proportionally, with those of 1859.
Religion of the above 185 :-Protestants, 134 ; R. Catholics, 42 ; Unknown, 5 ; None, 4. Total, 185.

Birth-places of the above 185 :-Ireland, 64 ; Canada, 38 ; Scotland, 34 ; England, 32 ; U. States, 9 ; Germany, 3 ; N. Scotia, 2; W. Indies, 1; P. Ed. Island, 1; Unknown, 1. Total, 185.
possible, to familiar persylum Phyof this vice a Canadian o the lowest owever, state throughout port for 1857 , esident of the Asylums, an e from which

McFarland, the ranks of class compar-
tement withcontroverted he subject.
years, 15 ; 20
60,26 ; over
tionally, with

34 ; R. Catho-

; Canada, 38 ; rmany, 3 ; N. Unknown, 1 .

The following have been the proportions as to the admissions in 1859 and 1860 :-


The educational classifications of the 185 , admitted in 1860, was as follows:-
Able to read and write $\ldots . . . .$.
"
" read, only . . . . . .

Neither - . . . . . . . . . . . . 19
Unknown
12
Total - . . . $\overline{185}$
About one-third of the patients admitted in 1860, had been committed to prison "as lunatics dangerous to be at large." This system of magisterial and municipal provision for the imbecile pauper, would now appear to be the most lofty conception of Christian duty existing in Upper Canada; and if Government will but go on in the establishment of institutions for the lodgment of the destitute, there is not the least reason to apprehend that they will not be furnished with inmates.

Among the "dangerous to be at large," lunatics sent from our gaols in 1860, was one paralytic in the lower extremities, and who, in the Asylum, is as gentle as a child. I have inquired from the relatives of this patient, how he came to be committed to gaol as a dangerous lunatic. The reply was, that they were unable to support him, and the "authorities"
pointed out that he might be got into the Asylum, if he were committed to gaol ; and so this man was committed,-as a dangerous lunatic, I suppose,-because he could not go at large. The fact of his paralysis was concealed, until he was brought to the Asylum : and though the By-laws of the Institution were violatec in admitting him, it appeared to me, that, to send him back to the "authorities" of his locality, would have been a murderous extradition.

Along with the above patient was brought another "dangerous lunatic," who is certainly one of the most gentle creatures I have ever seen in this house. I could easily lengthen the list of instances of committals such as the above. How do the parties, swearing, manage the task; and how do the magistrates permit the oaths to be taken? In some instances it has happened that when advice of vacancy for a "dangerous lunatic" has been forwarded to the County gaol, the patient was no longer in custody, having apparently been committed, merely as a sort of facilitating formality, in the process of admission into this Asylum.
In the present hard times, no doubt the "authorities" regard every person, who has nothing to eat, as dangerous to be at large ; and, as the Asylum is known to be a good boarding-house, they conclude that it cannot be turned to a better purpose than that of relieving themselves from the duty of supporting their poor. It is certainly high time that Upper Canada should think of providing for the destitute, through its otherwise efficient system of municipal government. Where can be the propriety of filling the beds of this Asylum with quiet, chronic lunatics, to the certain exclursion of acute, improvable, or truly dangerous ones? On the average, every one of the former, admitted, costs the Pro-
vince perh if sufficient curable ke pass into th
The first reason: wh mand, shoul able insane. would be be must be infli

The disch average perio months and 2 dence of 5 pa 15 days, the a $12 \frac{1}{2}$ days. from the Univ days. Two w of whom had 1 and 29 days; of recovery, su giving up hope promising.
The shortest varying from 1 were but tempo indeed was not ligious class ; th lactation, the to last; the remain
$n$, if he were itted,-as a d not go at until he was -laws of the appeared to ties" of his ion.
ght another $f$ the most s. I could tals such as ge the task; be taken? n advice of orwarded to in custody, sort of fa. on into this
authorities" s dangerous be a good e turned to es from the gh time that re destitute, pal governthe beds of ertain exchur es? On the ts the Pro.
vince perhaps eight times as much as a curable patient; and if sufficient accommodation for all does not exist, every incurable keeps out eight curables, who, in consequence, may pass into the same hopeless condition.
The first duty of this Institution is to restore the insane to reason: whatever surplus benevolence it may have at command, should be extended to the most exigent of the incurable insane. By this course the largest possible number would be benefited; by a different one, much public evil must be inflicted.

## DISCHARGES.

The discharges in the year have been 75 ; and the average period of residence of those discharged, has been 10 months and 22 days. Deducting, however, the long residence of 5 patients, amounting to 25 years, 7 months, and 15 days, the average for the remaining 70 , is 7 months, and 121 days. One of the five long residents was discharged from the University Branch: she had been in 6 years and 20 days. Two were discharged from the Malden Branch; one of whom had been an Asylum resident for 7 years, 9 months and 29 days; and the other, 5 years and 9 months. Cases of recovery, such as these, should teach us to be slow in giving up hope. At one time, all the three were very unpromising.
The shortest periods of residence occurred in twelve cases, varying from 11 days to 3 months. Three of these cases were but temporary results of intemperance, one of which indeed was not truly insanity; two were of the physico-religions class; two, puerperal ; one, recurrent insanity from lactation, the fourth or fifth attack, and not probably the last; the remaining four presented nothing of special in-
terest. Nine of the twelve were taken home by their friends, sooner than I believed advisable; but only one of the number has relapsed.

Of the 75 discharged, 42 were men, and 33 were women; 13 of the men were married, and 29 single; 20 of the women were married, and 13 single.
No reliable comparisons can be found on the figures covering so brief a space; yet the proportion between the married and single men discharged, is unusual.

## DEATHS.

The deaths in the three Asylums amounted to 40 ; of which 22 occurred in men, and 18 in women. Disparity between the mortality of male and female lunatics, is a well known fact in Asylum Statistics. In a large aggregate the mortality of male lunatics is to that of the other sex, probably, as 4 to 3 .
-An obvious consequence of the lower mortality of women, is the accumulation of female incurables in all asylums where they are retained ; and this disparity is increased by the disproportion between male and female recoveries. Female insanity is, in a large proportion of cases, merely a reflex disturbance of the brain. Insanity in men, much more extensively involves cerebral lesion; and their mortality is proportionably increased.

Intemperance is very rarely the cause of insanity in females, but when it has been the cause in men, the malady is very largely incurable, or fatal.
Some of the autopsies held during the year, I have regarded as very interesting; and as information on this head
is always 1 details of a
Case 1 ( of two chil a brother e 4th March frantic exci or four men but her frie to religious admitted, ar bath and $a \varepsilon$ to the bath, inexpedient bed, and cor festing many though her c
Wine and bowels were citement was five evacuatic the night of $t$ aspect becam were manifest
On the fifth piration was l heart's action applied over freely; but m tory muscles
On the 6th in the evening.

## 19

e by their nly one of re women; 20 of the
the figures etween the
to 40 ; of Disparity cs, is a well gregate the r sex, prob-
y of women, all asylums ncreased by recoveries. es, merely a men, much their mor-
insanity in the malady

I have reon this head
is always much valued by the medical profession, I submit details of a few cases, as briefly as possible.
Case 1 (Regist. 2275).-R. H., married ; aged 28 ; mother of two children; a large and powerful-looking woman; had a brother epileptic. She was admitted on Sunday morning, 4th March; had been four days and nights in a state of frantic excitement, and was restrained constantly by three or four men. Her mania was of the physico-religious form, but her friends denied that she had been recently subjected to religious disturbance. She was much exhausted when admitted, and had a little wine administered, and a warm bath and a sedative ordered for the evening. When taken to the bath, she became instantly excited, and it was found inexpedient to attempt undressing her. She was taken to bed, and continued screaming, raving, praying, and manifesting many of the usual phenomena of puerperal mania, though her case had not that origin.
Wine and beef tea were prudently administered. Her bowels were freely moved on the second night, and her excitement was considerably moderated. On the third day, five evacnations were again effected, of fetid character. On the night of the fourth day, the pulse ell off in force, her aspect became anxious, and indications of vital exhaustion were manifested.

On the fifth day, a tendency to coma was observable; respiration was laboured; trequent sighing occurred, and the heart's action was troubled and feeble. A large blister was applied over the chest, and cordial stimulation was used freely; but motive impairment extended from the respiratory muscles to those of deglatition.
On the 6th day she became entirely comatose, and died

## 20

Post Mortem.-The head only was examined, about twenty hours after death.

The scalp was in a normal state.
The cranium was thicker than common. The dura mater presented a limited adhesion to the skull, near one parietal protuberance. The pia mater showed a few opaque spots. The vessels on the surface of the brain, and all their branches dipping between the convolutions, were turgid with dark blood. The left ventricle contained about half an ounce of serum. The right ventricle had only the usual moisture. The substance of the brain was normally consistent.

The above case exhibits the usual condition of the brain, in acute mania speedily terminating fatally.

Case 2, (Register 2206).-J. McA., aged 34, a married man, of good appearance, but reported to have been "irregular" in his habits, and to have been insane for two and a-half years. When admitted he was apparently in good health, had a great appetite, said he was quite well; and his friends had been told by the doctors, it would not require long to restore him to reason.

The case was most distinctly one of general paralysis, and the disease took the usual course. During his residence I learned that, about eight years before, he had been struck on the head with a heavy poker, ard had lain in a state of insensibility for some days. He had, however, recovered, and resumed his usual occupation, at which he continued till about a year prior to his admission into the Asylum.

Post Mortem - The head only was examined.
The scalp and cranium were normal, showing no marks of injury.

The dura matter was normal in appearance, but extensively adherent to the skull, all over the base.

On open intermixed rior and la deposit was resembling this memb size of the $d$ dissection, it surface, and carried deep let a gentle appearance, posed layers inner or cere

Neither th important ma The left cer an extent equ was unusually tained no unus

This case m insanity and th of General Par any structural doubtedly proc tions morbid de probably dated jury before not
That most e gluttonous appe in this case, in $f$ symptom? Wh ne parietal aque spots. ir branches with dark in ounce of 1 moisture. ent.
f the brain,
a married have been ane for two tly in good well; and not require
paralysis, is residence been struck n a state of recovered, ntinued till um. no marks of but extens.

On opening the dura mater a large mass of blood coagula, intermixed with serum, was found covering the whole superior and lateral aspect of the left cerebral hemisphere. The deposit was contained in a smooth, firm, membraneous sac, resembling the arachnoid thickened, but quite distinct from this membrane, and required no separation. The entire size of the deposit was about that of an ordinary hand. On dissection, it was found to be of loose texture near the outer surface, and its contents fluid, but more firm as the knife was carried deeper. On squeezing water from a sponge, so as to let a gentle stream fall on it, it assumed a shreddy fibrillated appearance, and seemed to consist of a number of superimposed layers of flat sacs, the deepest of which lay upon the inner or cerebral fold of the membrane,
Neither the arachnoid, nor the pia mater, presented any important marks of disease.

The left cerebral hemisphere was less than the right, to an extent equal to the size of the deposit. The whole brain was unusually firm, but free of lesion. The ventricles contained no unusual moisture.

This case must be regarded as unusually interesting. The insanity and the muscular impairment, were markedly those of General Paralysis, yet the malady was unassociated with any structural degeneracy of the brain itself, though undonibtedly proceeding from the presence of a large adventitions morbid deposit on its surface, the origin of which most probably dated from the period at which he received the injury before noticed.

That most constant symptom of General Paralysis, a gluttonous appetite, with good digestive power, was present in this case, in full perfection. What is the cause of this symptom? What relation had it, in this case, to the grad
uated pressure of the deposit, or the vascular disturbance connected with its formation? Why was the insanity so late in its developement, or why did it come at all? The fact is now pretty well established, that all the physical symptoms of General Paralysis have frequently been met with, without mental impairment; and in such cases, I believe, post mortem examination has shown lesions, quite as formidable as those found after insanity. Only a few days ago I was consulted by a patient from the country, in a very advanced stage of the disease, but whose mind was as clear as it ever had been.
Instead of the term general paralysis, some use that of "paralysis of the insane;" and others, reversing the idea, speak of "insainity of the paralytic." But the insane are subject to ordinary phralysis, as other people ; and then their insanity differs not from that of ordinary cases. Those who assert that the insanity of the general paralytic is not sui generis, have, I apprehend, seen very little of the disease.

A second class of traumatic general paralysis, differing considerably in its autopsical details, from the preceding, was presented in the past year, and I submit it, in conjunction.

Case 3 (Register 2326).-T. L., a married man, aged 30, of temperate habits and good character ; admitted 16 th June. He had, about a year before, received a blow on the head from a pr soner in the Penitentary, where he was a keeper. Some time afterwards paralysis appeared on one side, and he " had three or four fits."

He was certified to be violent at times, and disposed to wander. In the Asy lum he was very quiet, and as to his wandering tendency I believe it was merely the result of defective memory, which rendered him unable to distinguish
localities, said he ha the left ey power. H without its
A mont epileptifor or at the cl by six othe from the ac

Post Mo death.
The cran The dura
The brair little anterio broken roug nodulous or portion was when dissect and to consis garden pea, through, sho three fourths lar, striated conjoined by
The medull had become e this change to pons varolii, a to bear manip In front of $t$

## 23

disturbance anity so late The fact is 1 symptoms ith, without elieve, post s formidable s ago I was ry advanced ar as it ever
use that of ng the idea, e insane are nd then their
Those who $c$ is not sui he disease.
$18 i s$, differing e preceding, t, in conjunc-
ran, aged 30 , ed 16th June. on the head vas a keeper. e side, and he
d disposed to and as to his e result of de. to distinguish
localities, or to find his way. His appetite was keen; he said he had occasional pain in the head; there was ptosis of the left eyelid, and the left arm and leg were defective in power. He had the self-complacency of general paralysis, without its ambition.

A month after admission he was seized with a severe epileptiform fit, such as is usually observed in the progress, or at the close, of general paralysis, and this was succeeded by six others, in close succession. He died in nine hours from the accession of the first fit.
Post Mortem. -The head was examined on the day after death.
The cranium was of ordinary thickness.
The dura mater was free of adhesions to the skull.
The brain and its envelopes were much congested. A little anterior to the right parietal eminence it presented a broken rough surface, which, under the finger, felt firm and nodulous over an extent of one inch in diameter. This portion was highly vascular and of a dark red colour, and when dissected out it was found to be about $\frac{大}{8}$ inch in depth, and to consist of four parts or quarters, each as large as a garden pea, flattened and elongated. These bodies, cut through, showed firm white nuclei, each in volume about three fourths of the whole, around which a beautiful vascular, striated zone was spread; and the four bodies were conjoined by a looser vascular texture, of fainter colour.
The medullary substance of the brain, beneath these bodies, had become exceedingly soft ; and further dissection showed this change to be extensive. The walls of the ventricles, the pons varolii, and the four crura, were all so softened as not to bear manipulation.

In front of the left anterior lobe was found a soft vascular
tumour, about the size of a flattened chesnut; and on dissection this body was traced downwards and found to extend backwards as far as the sella turcica. The left portion was much larger than the right, and had pressed on the olfactory nerve along its tract to the cribriform plate. The two anterior lobes were united by this body in the inferior part of the fissure. About six drachms of serum was found on the base of the skull.
In the foregoing case we have an extent of lesion rarely met with in insanity; and I am disposed to believe, that in all cases of traumatic insanity a similar fact may be realized, where life terminates within a limited period from the infliction of the injury to the brain. Obscurity of prognosis, in such cases, outside of Asylums, would appear to be not uncommon. In both this instance and the preceding one, the wives of the patients had been led to indulge strong hopes of recovery. Insanity succeeding to severe injury to the head, is a far more significant fact than seems commonly to be supposed. It is but the unavoidable mental indication of fatal lesion, perhaps in a brain not at all predisposed to the malady, and consequently resistant against it to the utmost possible extent ; therefore we should regard the intellectual aberration as the courier of early dissolntion, when it is accompanied, or has been preceded, by muscular or other physical impairment.

In ordinary idiopathic cases of general paralysis, errors both in diagnosis and prognosis are frequent. Within a few days past, a patient, called a lunatic, has been sent into the Asylum, in the very last stage of the disease-indeed in extremis. It is hardly credible that his respectable relatives would, on the very verge of dissolution, when the power of swallowing had ceased, and almost total muscular motion had disappeared, have placed him in a Lunatic

Asylum, $b$ imity of their feelin informed!

In my la have been paralysis be of another this countr? clusively in
The first have met w about two m terest. The are both qui this exceptio

Case 4.-A man, aged 4 dyspepsia. business. indications despondency capacity. Tl him, as he o had always b his malady as in this state h
He refused culty sufficien About two we paralysis of th became indis

## 25

and on disd to extend portion was he olfactory he two anrior part of und on the
esion rarely eve, that in be realized, in the inflicrognosis, in r to be not ling one, the trong hopes jury to the ommonly to l indication edisposed to it to the utrd the intelntion, when muscular or
lysis, errors Within a en sent into ase-indeed ctable relawhen the tal muscular a Lunatic

Asylum, but to die, had they been made aware of the proximity of death. How much might have been spared to their feelings, had the physicians been more candid, or better informed!

In my last report I alluded to the erroneous views which have been entertained, as to the majority of cases of general paralysis being produced by intemperance. The experience of another year has tended to conform my belief that, in this country at least, the disease presents itself almost exclusively in temperate men.

The first well-marked case of general paralysis which I have met with, in this Asylum, in a woman, was admitted about two months ago, and I am watching it with much interest. The mental disorder, and the physical impaiıment, are both quite analogous to those observed in male cases; this exception proves, to me, the rule.
Case 4.—Acute mania.-(Register 2274.)—J.F., a married man, aged 47, of temperate habits, but long afflicted with dyspepsia. He had been all his life actively engaged in business. About six weeks before his admission, the first indications of mental disorder were observed in the form of despondency and loss of confidence in his own business capacity. This conviction became daily more terrible to him, as he occupied a position of great responsibility, and had always been a zealous and faithful officer. Ultimately his malady assumed the form of suicidal acute mania, and in this state he was brought to the Asylum.
He refused all nourishment, and it was with much difficulty sufficient aliment to sustain life was administered. About two weeks after admission, he became affected with paralysis of the bladder; and the regular use of the catheter became indispensable. This symptom subsided about a
week before death, which took place one month and twelve days after his entrance.

Post Mortem.-Cranium of ordinary thickness. Dura mater congested, but free from adhesions. Slight serous effusion on the surface of the arachnoid; but no diseased condition otherwise. The blood-vessels of the brain a good deal congested. The ventricles were filled to distension with serum ; and a considerable quantity flowed from the theca vertebralis. The consistence of the brain was quite normal. The lungs were healthy, but presented a few pleuritic adhesions. The tranverse colon was deflected as low as the umbilicus. The other viscera were healthy.

Case 5. (Register 2266),-E. M., a married woman, said to be 51 years old, but apparently much older ; most determinedly suicidal. Died in about four months atter admis-sion.-(Insanity said to be recent.)

Post Mortem.--Skull very hard and thick ; no adhesions of membranes worth notice. The entire brain was much softened, but more especially its inferior parts. The ventricles had each about half an ounce of reddish serum; all the blood vessels of the brain much congested. Lungs sound (though she had a severe cough for a long time). Heart soft and pale. Liver enlarged, soft, and of a pale tawny color. The cardiac portion of the stomach much congested, and its mucous membrane softened. The pylorus thickened and rigid.

Ileum showed several softened dark patches. Spleen enlarged and hardened. Right kidney absent, and the left nearly double the usual size.

The brain of this patient presented diseased marks, which are seldom exceeded in general paralysis, yet the patient was never paralytic.

Case 6, aged 70 . duration, p

She was versed on 1 her death her of mor able to resu June, her n University the nurse to the nurse r fall forward

Post Mon dura mater arachnoid, About two over the cer
The entir cyst, as larg of the right ous to the su superficial $g$ ceptible.
I shall nov brain was no second it sha

Case 7, ( married wom The form of prevented fro

## 27

and twelve
ness. Dura light serous no diseased orain a good tension with m the theca uite normal. pleuritic ads low as the
woman, said most deteratter admis-
no adhesions a was much

The venserum ; all ted. Lungs long time). d of a pale mach much The pylorus

Spleen enand the left
narks, which the patient

Case 6, (Register 1733).-.L A. L., a married woman, aged 70. Resident $4 \frac{1}{2}$ years. Insanity of some years duration, preceded by intemperance.
She was very fond of reading the scriptures, and she conversed on religious subjects sensibly. About a year before her death she had an apoplectic seizure, which deprived her of moving power for some time; but she finally was able to resume her former habits.-On the morning of 30th June, her nurse took her out for a little walk, in rear of the University Branch. She sat down on a bench, and asked the nurse to go in for something she had forgot. Before the nurse reached the building, the patient was observed to fall forward from her seat, and was found to be dead.
Post Mortem.-The skull was remarkably thin, and the dura mater was extensively adherent to it. Neither the arachnoid, nor the pia mater showed any marks of disease. About two and a half ounces of serum was found effused over the cerebellum.
The entire cerebrum was softened to a mere pulp. A cyst, as large as a hen's egg, was found in the inferior part of the right central lobe, containing a pulpy mass, analogous to the substance around it, bat more disintegrated. The superficial grey matter was so wasted, as to be barely perceptible.
Ishall now submit the notes of two cases in which the brain was not the organ fatally implicated, though in the second it shared in the general disease.
Case 7, (Register 2165).-J. H., aged thirty-eight; a married woman, much emaciated, and desperately suicidal. The form of her insanity was religious dispair; she was prevented from self-destruction only by the most incessant
vigilance. She became, finally, less disturbed, and listened to religious consolation with deep interest and apparent relief.
She complained of pain in the abdomen, and referred to a "lump" in the umbilical region, but would hardly suffer the part to be touched. She had daily hectic, but no cough or expectoration at any period of her illness. She died in ten months after admission.
Post Mortem.-External aspect, that of extreme emaciation. The ribs seemed drawn inward, as if from tightlacing.
The lungs were universally adherent to the ribs by old dense deposits, and their entire substance appeared to be but a mass of tubercles, which, in a few places, had broken into cavities. The tight-lacing had all been inside.
The liver was atrophied, and its anterior and superior surfaces were adherent to the contiguous parts.
The entire colon was displaced, and its transverse portion lay along the brim of the pelvis.
The stomach presented hour glass contraction, but did not shew a diseased condition.

Case 8, (Register 2143).-W. B., aged 53, a powerful man, in whose family insanity was deeply hereditary, was admitted in March 1859, and died in Angust 1860.

His insanity was characterized by a strange admixture of religion and profanity, turbulence and harmlessness. He had been very roughly handled at home, and consequently his friends manifested much suspicion as to our course. This is a fact familiar to all Asylum superintendents.
The patient was once visited by one of his quondam keepers.

After lea to the visit "Oh, yes, thing we ha down."
I think th he was very and very res
During his epileptic cha to such.
Three mon peared, and $\mathbf{r}$ enjoy his foo allowed all he took his break voice, for som his room and adjacent to wh

Post Morter the body.
Skull unusu in a few places
The arachno superior aspect Each lateral The substance

The lungs she tubercles, but n siderable quanti
ind listened d apparent
referred to ardly suffer it no cough the died in
ome emacifrom tight-
ibs by old ared to be pad broken de.
d superior
rse portion
but did not
verful man, as admitted

Imixture of sness. He nsequently ourse. This
quondam

After leaving the ward, the assistant physician observed to the visitor that the case was one of unusual character, "Oh, yes, replied the man, " when he was at home the first thing we had to do, on entering the room, was to knock him down."

I think this mode of reasoning was hardly necessary, for he was very susceptible of kindness, and although vociferous and very restless, he was devoid of malice.
During his residence, he had one or two fits of a quasi-

Three months' prior to death, anasarca of the limbs appeared, and resisted treatment. He continued, however, to enjoy his food, and would have eaten very ravenously, if allowed all he wished. On the morning of his death, he took his breakfast as usual, and shortly after called, in a loud voice, for some mutton. The attendant presently entered his room and found him dead, leaning over against the wall, adjacent to which he had been sitting in his bed.
Post Mortem.-Anasarca general over the lower parts of the body.

Skull unusually thin, and the dura mater adherent to it, in a few places near the summit.

The arachnoid was thickened and opaque, over all its superior aspect.

Each lateral ventricle contained about an ounce of serum. The substance of the brain was softer than normal.

The lungs shewed old plearitic adhesions, and contained tubercles, but none yet advanced to maturation. A considerable quantity of water was effused in both cavities, as
well as in the pericardium. The heart was much hypertrophied. Granular deposits were largely found on the valves.
The transverse colon was deflected to the umbilicus.
The kidneys were enlarged and indurated. There was but little water in the abdomen.

I learned after this patient's death, that one or two of his near relatives had also died suddenly.

It would be imcompatible with the limits of this report, to extend these notes by additional details of cases, though I am well aware the intelligent reader always attaches much importance to such information; and only in Asylums for the insane can it be procured.

As I consider it more necessary that the Superintendent of an Asylum should exhibit the wants and imperfections of the institution under his care, than that he should proclaim its merits, I avoid details of the improvements of the past few years, both inside the building and in the surrounding grounds. Those who have seen the institution as it was, may see it as it is, and judge for themselves.
The sabbath-day religious services still continue to be rendered gratuitously, by clergymen of the city, and prove generally acceptable and profitable, though it is hardly to be expected that occasional mistakes, in addressing an in. sane assembly, may not be made by those who who are not familiar with their malady. A regular chaplain, attached to an Asylum, possesses the advantage of individual intimacy with his auditory, and thereby learns what is best to be said, and what is better unsaid.
The Reverend S. Givens still gives his kind attention to the University Branch.

The Roma make freque of their Chur
The press gratuitous su

The distrib follows:-

In the Chi

## 31

The Roman Catholic Clergy, and the Sisters of Charity, make frequent, and always welcome, visits to the members of their Church.

The press has the thanks of our people for the continued gratuitous supply of newspapere sent to the institution.
The distribution of patients at the end of the year, is as follows:-

$$
\begin{array}{ccrcr}
\text { In the Chief Asylum } & \text { Men. } & \text { Women. } & \text { Total. } \\
\text { " } & 170 & 175 & - & 345 \\
\text { " University Branch } & 6 & 62 & - & 68 \\
\text { " Malden Branch } & 94 & 85 & 85 & 179 \\
& & \boxed{270} & \boxed{322} & \\
\hline
\end{array}
$$

I have the honor to be, gentlemen, Faithfully yours,
(Signed) J. WORKMAN, M. D., Medical Sup't, P. L. A.

To the Chairm
Gentlemen quirements o the accompan ture of the Pr that of the B period of one the thirty-first
As also, Sta of the Orillia first day of $D$

All of whicl
I hav

Provincial Lu
Toronto, 9 th

## REPORT OF THE BURSAR.

To the Chairman and Board of Inspectors of Asylums, Prisons, foc. Gentlemen,-I have the honor, in obedience to the re. quirements of the Act 22nd Victoria, Cap 110, to submit the accompanying Statement of the Income and expenditure of the Provincial Lunatic Asylum at Toronto, including that of the Branch Asylum, University Grounds, for the period of one year, being trom the first day of January to the thirty-first day of December eighteen hundred and sixty. As also, Statement of Income and Expenditure on account of the Orillia Asylum Building, for the year ended thirtyfirst day of December, eighteen hundred and sixty. All of which is most respectfully submitted.

I have the honor to be, Gentlemen, Your most obedient humble servant, (Signed) JAMES MoKIRDY, Bursar.
Provincial Lunatio Asylum, Toronto, 9th Feb., 1860.

STATEMENT of the Income and Expenditure of the Provincial Lunatic Asylum Toronto, for one year, from 1st January to 31st December, 1860.
Dr. Expenditure.
Balance Liabilities, 31st Dec, 1859 ..... \$1987 12
Medical Department ..... 1887341Household Expenses, (Food)362603Bedding and Clothing.856696
Fuel, Light, Washing ..... 3361720
Miscellaneous
Expenditure of Provincial Lunatıc Asylum.- 6767072$\$ 919767$?

$\qquad$0Branch Asylum, University Grounds, for one year, from 1st Jan: to 31 st Dec.'60:
$\$ 22785$
Medical Department ..... 310959 ..... 41811
Household Expenses, (Food)
Household Expenses, (Food)
Clothing80167Fuel, Light, Washing and Cleaning................. 229392Miscellaneous229392Expenditure of Branch Asylum$\$ 685114$\$83i19 53
Income.
き649 58 ..... 279936
Paying Patients ........ ..... 301037
60055
Branch AsylumCr.$\$ 705986$For Branch Asylum :-
Malden Lunatic Asylum. ..... $\$ 5190$
Articles Sold ..... 3053Cash on deceased patients... 700
Warrants
\$78685 21 ..... 503432
Balance ..... $\$ 8371953$

## Dr.

Excavator, Ma Carpenter, Join Painting and Out-Buildings Architect Clerk of Work Balance

Cr. Warrants

Balance
unatic Asylum, , 1860.
$\$ 919767$

959
811
167
392
\$6851 14
$\$ 83$ i19 53

86


84
sTATEMENT of the Income and E-penditure for Orillia Asylum Buildings, for the year ended 31st December, 1860.

## Dr. <br> Expenditcre.

Lxcavator, Mason, Plasterer and Material. ..... $\$ 648000$
Carpenter, Joiner and Tinsmith .................. 422500
Panting and Glazing. ............................ 75000
Out-Buildings and Fences ............................ . 223000
Architect
57275
Clerk of Works
26200
Balance
27000
\$1478975
Cr.
Warrants
Income.


JAMES MoKIRDY,
Bursar, P. L. A

