1960

Beaten 3-0 by Portora in Cup.
Did Balliol, Oxford group Maths Schol. exams — awarded the
Williams Open Exhibition
Acted main part in "The Public Prosecutor" by Fritz Hochwälty
Easter: [after 2 weeks rehearsal]
Went to London for 2 weeks (stayed YMCA) ⟶
*⟶3rd in 440 to Derry Spts, 2nd 880 School Spts
Started Latin with 3 months to go. Tuts with J. Smith and
Rev. Johnston.
Did Senior O.L. Latin (260)
D: Did Senior O.L. Latin

notes
↗ And having tuts with J. McAteer. First summer with "Henry".
D. worked ⟶ Spent Summer at "Silverley". Met D. on the 20th July.
in Blacks Mother parents — later went to Fairmount Pk beginning
to.   of Sept. Met Uncle Joe (Photos).
Very Ill ⟵
Went up to Balliol. Began 1st Year.
Did Prelims. (Maths, Physics passed both.)
Acted in Dumb Waiter with P. Bleasby, P. Snow. (Balliol)
Played for Balliol 1st XV, Athletics team, 1st VI Cross-county
Room 13, 15 Staircase.
Tuts with Abernethy, Allcock (Electrostatics) Brink (Maths)

19th Birthday
Christmas

BRITISH RED CROSS SOCIETY

Northern Ireland Central Council Branch

Phone: Belfast 656252/3   108. Holywood Road,
                                                 Belfast. 4.

HOSPITAL CAR SERVICE

Dear *Mr Brennen*

     I enclose herewith cheque £....3..4..9.... in payment of
journey(s) made for the above during the month of ....

Very many thanks   Yours sincerely,

P. Gilbert.

(Mrs. H. P. Gilbert, O.B.E.)
Director of Welfare Services, N.I.

Grammar School Certificate Examinations, 1960

Your Examination
Number is

3667

ADMISSION CARD—SENIOR

On presenting this card to the Superintendent

Christopher Brennen.......will be admitted to examination at

Centre No. *138*   **Magherafelt**

Rainey End. Sch. *(Assembly Hall)*

in the subjects in which entered for examination

DO NOT WRITE ON THIS CARD

A. C. WILLIAMS, Secretary.

N.B.—(1) Any candidate or extern student may obtain a statement of the marks obtained by him on sending
written application to the Ministry, accompanied by the prescribed fee of one shilling and sixpence.
(2) Applications for State Exhibitions must reach the Ministry not later than 31st August, 1960.

Wt. 2047/95. 7,000. 1/60. D.S. Gp. 143.

MATHEMATICAL SCHOLARSHIPS

*Balliol, Oriel, Queen's, Magdalen, Corpus Christi,
St. John's and Jesus Colleges*

March 1960

I GEOMETRY

1. If A, B, C, D are four points in the plane, show that
$$AB.CD + AD.BC \geqslant AC.BD.$$

Show that equality holds if and only if the four points lie, in the order $ABCD$, on a circle or a straight line.

If A, B, C are three points find a point such that
$$PA + PB + PC$$
is a minimum.

2. Describe briefly the theory of inversion with respect to a given circle.

Let S and S' be orthogonal circles, and let I and I' denote the corresponding operations of inversion. Prove that I followed by I' gives the same result as I' followed by I.

3. A, B, C, D are four points in the plane which are not concyclic. The centres of the circles BCD, ACD, ABD, ABC are denoted by A', B', C', D', respectively. If three of these circles have equal radii show that the fourth has the same radius.

If all four circles have equal radii prove that the mid-points of AA', BB', CC', DD' coincide.

4. Let P be a point and let ABC be a triangle whose sides do not pass through P. Let AP, BP, CP meet BC, CA, AB in D, E, F, respectively, and let EF, FD, DE meet BC, CA, AB in X, Y, Z respectively. Prove that X, Y, Z lie on a straight line.

If P is the orthocentre of the triangle show that this straight line is the radical axis of the nine-point circle and the circumcircle.

5. Prove Pascal's theorem concerning six points on a conic.

If two conics are related so that one triangle can be inscribed in one conic and circumscribed about the other, show that this can be done for an infinite number of triangles.

6. Show that the two conics:
$$ax^2 + 2hxy + by^2 + 2fx + 2gy + c = 0,$$
$$a'x^2 + 2h'xy + b'y^2 + 2f'x + 2g'y + c' = 0,$$
are similar if and only if
$$(a+b)^2(a'b' - h'^2) = (a'+b')^2(ab - h^2).$$
(N.B. the ratio of similarity may be either real or imaginary.)

7. $ABCD$ is a complete quadrangle and AD, BD, CD meet BC, CA, AB in X, Y, Z respectively. If P is any other point, prove that the six conics.

$$PYZAD, \; PYZBC, \; PZXBD, \; PZXCA, \; PXYCD, \; PXYAB,$$

have a second common point.

8. A straight line k meets the cubic
$$xy(lx + my + n) = ax + by + c$$
in three points, whose centroid is denoted by P. Show that the locus of P is a straight line when k varies in position but not in direction.

If k now varies in direction, show that the envelope of this locus is the ellipse
$$(2lx + 2my + n)^2 = 4lmxy.$$

MATHEMATICAL SCHOLARSHIPS

Balliol, Oriel, Queen's, Magdalen, Corpus Christi,
St. John's, and Jesus Colleges

March 1960

II. MECHANICS

1. State a necessary and sufficient set of conditions for the equilibrium of a number of coplanar forces.

Forces act at the mid-points of every side of an irregular non re-entrant plane polygon, in the plane of the figure and at right angles to the sides. If they are proportional to the lengths of the sides, and act either all inwards or all outwards, prove that the system is in equilibrium.

2. A solid of uniform density consists of a cone of height a fixed to a hemisphere; the two circular bases are each of radius a and are everywhere in contact. The solid stands with its axis vertical and vertex upwards on the top of a fixed perfectly rough sphere of radius b. Prove that the equilibrium is stable if $b > 5a$.

Prove also that if the solid rests in equilibrium on the sphere with its axis horizontal, then the line joining the centres of the hemisphere and the fixed sphere makes an angle $\sin^{-1}(1/6)$ with the vertical. Show that this equilibrium is unstable. (You may assume that the centre of gravity of the hemisphere is $3a/8$ from its base.)

3. Two particles P and Q, each of mass m, can move on a smooth horizontal table. P is joined to a peg at a point A of the table by an elastic string, and Q is joined to another peg at B by a similar string. P and Q are also joined to each other by a third elastic string. All three strings have an unstretched length a and modulus λ, and $AB = 3b$ $(b > a)$. The particles execute *small* vibrations at right angles to AB, with displacements (at time t) $y_1 = C_1\sin(pt)$ and $y_2 = C_2\sin(pt)$ from their respective equilibrium positions. Prove that

$$p^2 = \text{either } \frac{\lambda}{m}\left(\frac{1}{a}-\frac{1}{b}\right) \quad \text{or} \quad 3\frac{\lambda}{m}\left(\frac{1}{a}-\frac{1}{b}\right),$$

and find the corresponding ratios $C_1:C_2$.

Turn over.

4. Show that the moment of inertia of a uniform triangular lamina of mass m about any axis in its plane through a vertex is the same as that of three point masses $m/3$ placed one at each of the mid-points of the sides.

A uniform regular polygonal lamina of mass M has n sides of length a $(n \geqslant 3)$. Find its moment of inertia about an arbitrary axis in its plane passing through its centre. Check your result by considering the limiting case as n tends to infinity.

5. A smooth horizontal circular table has a raised rim. A particle is projected on the table from a point P of the rim in such a manner that it returns to P after $(n-1)$ collisions with the rim. If the coefficient of restitution between the particle and the rim is e, find the (non-zero) angle between the direction of projection and the radius at P in the two cases $n = 3$ and $n = 4$. If the particle loses a fraction $f = f(n)$ of its energy at its first collision, prove that
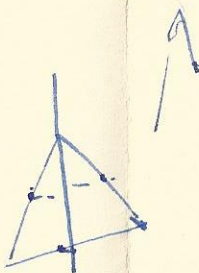
$$\frac{f(3)}{f(4)} = \frac{1-e^6}{1-e^4}.$$

6. A machine drives a circular wheel on a horizontal axle with constant angular velocity ω. The wheel has a number of smooth spokes of length a radiating out from its centre O. A small ring of mass m is free to move on one of the spokes. If the ring starts from rest at O when this spoke is horizontal and moving downwards, and then reaches the outer end of the spoke when it is next vertical, prove that

$$\omega^2 = \{\sinh(\tfrac{1}{2}\pi)-1\}g/2a,$$

and show that the work done by the machine on the particle during this time is positive.

7. A uniform rod of mass m and length $2a$ has its ends A and B free to run one on each of two smooth perpendicular wires, OX and OY, which are fixed in a horizontal plane. Initially the rod is at rest, making an angle θ with OX. The rod is given an impulse P in the plane (OX, OY), applied at a point distance r from A. If the direction of P can be varied, but r is kept fixed, find the maximum kinetic energy which can be imparted to the rod.

3 M 4

8. A particle of mass m moves in a plane under the gravitational attraction of two similar particles which are fixed in the plane at two points A and B, distance $2ae$ apart $(0 < e < 1)$. If the moving particle describes an ellipse of eccentricity e with A and B as foci, prove that its total energy E must be greater than $-2\gamma m^2/a(1-e^2)$, and find the greatest and least speeds of the moving particle.

(The gravitational force of attraction between two particles distance r apart is $\gamma m^2/r^2$, and their mutual potential energy is assumed to be zero when they are infinitely far apart.)

3 M 4

MATHEMATICAL SCHOLARSHIPS

Balliol, Oriel, Queen's, Magdalen, Corpus Christi,
St. John's, and Jesus Colleges

March 1960

III. CALCULUS

1. Find the largest value of the function
$$f(x, y) = x^2 + xy + y^2,$$
when x and y are such that $-1 \leqslant x \leqslant 1$ and $-1 \leqslant y \leqslant 1$.

Find also the smallest value of $f(x, y)$ when x and y are restricted in this way.

2. If the polynomial $P(x)$ satisfies
$$(1-x^2)\frac{d^2P}{dx^2} - 2x\frac{dP}{dx} + n(n+1)P = 0$$
for some positive integer n, show that the function $Q(\theta)$ defined by
$$Q(\theta) = \int_0^{2\pi} P(\sin\theta \cos\phi)\, d\phi$$
must satisfy
$$\operatorname{cosec}\theta \frac{d}{d\theta}\left\{\sin\theta \frac{dQ}{d\theta}\right\} + n(n+1)Q = 0$$
when $0 < \theta < \pi$.

3. If $u = e^{-x^2}$, prove that $D^{n+1}u + 2xD^n u + 2nD^{n-1}u = 0$ for all integers $n \geqslant 1$.

If
$$\phi_n(x) = (-1)^n e^{\frac{1}{2}x^2}\left(\frac{d}{dx}\right)^n e^{-x^2},$$
where now n is a positive integer or zero, show that
$$\frac{d^2\phi_n}{dx^2} = (x^2 - 2n - 1)\phi_n(x),$$
and hence (or otherwise) prove that
$$(n-m)\int_{-\infty}^{\infty} \phi_m(x)\phi_n(x)\, dx = 0 \quad \text{for all } m \text{ and } n.$$

3 M 1

Turn over.

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4. Find the values of u and v (where $-\infty < u < v < \infty$) which give to the integral
$$\int_u^v \frac{\sin t}{t}\, dt$$
(i) its largest value, L, and (ii) its smallest value, S.

Prove that $L + 2S$ is positive, and show that L does not exceed $2\pi \log 2$.

5. Show that of the eight integrals
$$\int_0^{\infty} e^{\pm x \pm e^{\pm x}}\, dx$$
(where the three choices of sign may be taken independently) four only are finite.

Identify them, evaluate three of them, and show that the fourth is equal to
$$\int_1^{\infty} \frac{e^{-u}\, du}{u^2}.$$

6. The points P and Q lie on the parabola with equation $y^2 = 4ax$, and are such that PQ passes through the focus S. Show that the arc bounded by P and Q will have its minimum length when the line joining P and Q is perpendicular to the axis of the parabola.

Calculate the least value of the arc PQ.

7. If
$$\frac{df(x)}{dx} = \tfrac{1}{2}f\left(\frac{1}{x}\right) \quad (x > 0),$$
and if $F(t) = f(e^t)$, show that
$$\frac{d^2F}{dt^2} - \frac{dF}{dt} + \tfrac{1}{4}F = 0,$$
so that $F(t) = (A+Bt)e^{t/2}$. Hence or otherwise find the most general form of the function $f(x)$.

8. The polynomial $P(x)$ satisfies the equation
$$P(x) = \tfrac{1}{2}\int_{-\infty}^{\infty} e^{-|x-y|}P(y)\, dy$$
for all real values of x. (Here $|t|$ denotes t when $t \geqslant 0$, and $-t$ when $t < 0$.) Show, by differentiation, or otherwise, that $P(x)$ must be of the form $a+bx$, where a and b are constants.

Is there any restriction on the values of the constants a and b?

3 M 1

MATHEMATICAL SCHOLARSHIPS

Balliol, Oriel, Queen's, Magdalen, Corpus Christi,
St. John's and Jesus Colleges

March 1960

IV. ALGEBRA AND TRIGONOMETRY

1. Express the coefficients of the polynomial
$$(x-a)(x-b)(x-c)$$
in terms of s_1, s_2, s_3, where $s_r = a^r + b^r + c^r$, and hence, or otherwise, express s_4 in terms of s_1, s_2, s_3.

If $s_3 = 0$, $s_1 \neq 0$, and $s_2^2 = 2s_4$, prove that $s_1^2 = 6s_2$.

2. Prove that any polynomial in x of degree n can be expressed, in exactly one way, in the form
$$a_0 + a_1 x + a_2 x(x-1) + \dots + a_n x(x-1)(x-2)\dots(x-n+1).$$

Evaluate
$$\sum_{n=0}^{\infty} \frac{n^4}{n!}.$$

3. Two sequences $f_0(x)$, $f_1(x)$, $f_2(x),\dots$, $g_0(x)$, $g_1(x)$, $g_2(x),\dots$ of polynomials in x are defined by the equations
$$f_0(x) = x, \qquad g_0(x) = x-2,$$
$$f_{n+1}(x) = f_n(x)g_n(x), \qquad g_{n+1}(x) = \{f_n(x)\}^2 g_n(x) \quad (n \geqslant 0).$$

Prove that $f_n(x) = x^{a_n}(x-2)^{b_n}$, $g_n(x) = x^{A_n}(x-2)^{B_n}$, where each of the sequences (a_n), (b_n), (A_n), (B_n) satisfies the same recurrence relation:
$$a_{n+1} = 2a_n + a_{n-1}.$$

Hence, or otherwise, prove that the degree of the polynomial $f_n(x)$ is
$$\frac{\alpha^{n+1} - \beta^{n+1}}{2\sqrt{2}},$$
where $\alpha = 1+\sqrt{2}$, $\beta = -\alpha^{-1}$.

3 M 2   **Turn over.**

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4. Prove that, if
$$a+b+c = 0, \quad l+m+n = 0, \quad ax+by+cz = 0$$
and
$$lx+my+nz = \tfrac{1}{3}\begin{vmatrix} a & b & c \\ l & m & n \\ 1 & 1 & 1 \end{vmatrix},$$
where a, b, c are not all zero, then **either**, for some k, $l = ka$, $m = kb$, $n = kc$, **or** $y = z+a$, $z = x+b$, $x = y+c$.

5. Prove that the real and imaginary parts of each of the roots of the equation $x^5 = 1$ can be evaluated by a finite number of extractions of a square root, together with rational operations.

In particular, prove that
$$\cos 18° = \tfrac{1}{4}\sqrt{(10+2\sqrt{5})}.$$

Find a similar expression for $\sin 15°$, and prove that $\sin 3°$ also can be evaluated by a finite number of rational and square root operations.

6. Evaluate the finite series
$$\sum_{r=0}^{n-1} \sin^r \theta \cos r\theta, \qquad \sum_{r=0}^{n-1} \sin^r \theta \sin r\theta.$$

For what real values of θ are the corresponding infinite series convergent?

7. The sequence t_0, t_1, $t_2,\dots$ of non-zero real numbers is such that
$$t_{n+1} - t_n = k\{1 + t_n t_{n+1}\} \quad (n \geqslant 0).$$
Prove that, for m, $n \geqslant 0$,
$$t_0 - t_m - t_n + t_{m+n} = \{t_0^{-1} - t_m^{-1} - t_n^{-1} + t_{m+n}^{-1}\} t_0 t_m t_n t_{m+n}.$$

8. Solve the simultaneous equations
$$\sin x + \sin y + \sin z = 0,$$
$$\cos 2x + \cos 2y + \cos 2z = -\tfrac{1}{9},$$
$$\sin 3x + \sin 3y + \sin 3z = -\tfrac{8}{3}.$$

3 M 2

$$\cos(A+B) = \cos A \cos B - \sin A \sin B$$
$$\cos(A-B) = \cos A \cos B + \sin A \sin B$$

$$A = A+B + A-B$$

MATHEMATICAL SCHOLARSHIPS

Balliol, Oriel, Queen's, Magdalen, Corpus Christi, St. John's, and Jesus Colleges, March 1950·

V. PROBLEMS

1. Two similar uniform rods AB and BC, freely jointed at B, are suspended from smooth joints A and C in the same horizontal line so that the inclination of each rod to the horizontal is α. The end C is then set free. Show that the initial angular accelerations of the rods will be in opposite senses if $\cos 2\alpha > 8/9$.

What happens if $\cos 2\alpha = 8/9$?

2. An inextensible string of mass m per unit length is placed in a smooth tube in the form of the curve $y = x^2$, $x \geqslant 0$. One end of the string is fixed at the origin and the other end is free. The tube is then made to rotate in a horizontal plane with uniform angular velocity ω about the origin. Show that the tension in the string at the origin is

$$\tfrac{1}{2}m\omega^2 a^2(1+a^2),$$

where a is the x-coordinate of the free end of the string.

3. The polynomial $P(t)$ is known to have no multiple zeros in the interval $a < t < b$, and it is also known that neither of $P(a)$ and $P(b)$ is zero. A function $C(x; a, b)$ is defined by

$$C(x; a, b) = \int_a^b \cos[xP(t)] \left| \frac{dP(t)}{dt} \right| dt$$

where as usual $|u| = \max(u, -u)$. Show that the number of zeros of $P(t)$ in the interval $a < t < b$ is equal to

$$N(a, b) = \frac{1}{2\pi} \int_{-\infty}^{+\infty} C(x; a, b)\, dx.$$

How must this result be adjusted if (i) $P(t)$ has some multiple zeros in the interval, (ii) if $P(a)$ or $P(b)$ or both is zero?

[*You may assume without proof that the value of the integral*

$$\frac{1}{\pi} \int_{-\infty}^{+\infty} \frac{\sin xy}{x}\, dx \text{ is } +1 \text{ when } y \text{ is positive and } -1 \text{ when } y \text{ is negative.}]$$

3 M 7   **Turn over.**

4. A and B are two fixed points and the distance $AB = 2$. A variable point P moves in a fixed plane containing A and B in such a way that

$$\sqrt{r} + \sqrt{s} = 2,$$

where $r = AP$ and $s = BP$, and the square roots are positive. Show, as convincingly as you are able, that the locus of P is a figure-of-eight. Comment on the weak points in your argument, if you think there are any.

5. (i) Two integers m and n are expressed in the scale of 9 as

$$m = 11...1, \quad n = 11...1211...13$$

where ... indicates a sequence of ones, the same number in each case. Prove that each of m and n is a triangular number (i.e. the sum, for some r, of the first r positive integers).

(ii) An integer N expressed in the decimal scale consists of the triad 296 repeated p times, followed by 740 repeated p times, followed by 962 repeated p times. Prove that $N+1$ is a perfect cube, and find its cube root.

6. Non-negative integers p, q, x, y are related by the formula $px - qy = 1$. Prove that the largest integer which can *not* be expressed in the form $pm + qn$, where m and n are non-negative integers, is

$$pq - p - q.$$

7. Let S and S' be confocal ellipses with S inside S'. Tangents are drawn from a point P on S' to touch S at Q and R. Show that the shortest distance from Q to R along S differs from $QP + PR$ by a number which is independent of the position of P.

8. A ray of light is emitted from a point inside a square whose perimeter is a reflecting mirror. Prove that the path of the light is closed if and only if the angle between a side of the square and the initial direction of the ray has a rational tangent.

[*Assume that, if the ray of light goes into a corner of the square, it returns along its previous path.*]

3 M 7

VI. PHYSICS

(*Candidates should attempt five questions.*)

1. Give a method for determining the surface tension of a liquid as a function of temperature.

A soap film formed in a circular wire ring can perform small oscillations. Find, by the method of dimensions, how the frequency of the oscillations depends on the radius of the ring, the surface tension in the film and the density per unit area of the film.

2. Explain why the apparent pitch of a train whistle changes as the train passes a stationary observer. How is the effect different when the observer moves relative to a stationary source of sound? When should this difference be important?

Give an account of observations of the Doppler effect in other fields of physics.

3. Prove the pressure exerted by an ideal gas on the walls of its container is $P = \frac{2}{3}E$, where E is the total kinetic energy per unit volume of the gas molecules. (Assume that the container is a box with rectangular sides.)

Assuming that photons or light quanta can be treated as particles whose momentum M is related to their energy ϵ by the relation $\epsilon = cM$ where c is the velocity of light, find a relation between the pressure exerted by light on the walls of a perfectly reflecting container and the energy per unit volume of the radiation in the container.

3 M 8   **Turn over.**

4. How would you measure the thermal conductivity of glass?

A room has windows 4 mm. thick with a total area 8 sq. metres. Estimate the power required to maintain the inside room temperature at 25° C, when the outside temperature is 0° C, assuming that all heat is lost by conduction through the windows.

By what factor is this reduced when double glazing is used? The windows consist of two panes of glass each 4 mm. thick and separated by a 2 cm. layer of air. Assume that heat is lost by conduction only. What is the weakness of this last assumption?

Thermal conductivity of glass: $2 \cdot 5 \times 10^{-3}$ cal sec^{-1} cm^{-1} °C^{-1}
,,   ,,   ,, air: $5 \cdot 6 \times 10^{-5}$,, ,, ,, ,,
Mechanical equivalent of heat: $4 \cdot 2$ J/cal.

5. An electric circuit consists of a battery, an open switch, a condenser and a resistance connected in series. At time $t = 0$ the switch is closed. Calculate the current as a function of the time. What is the total energy supplied by the battery? What fraction is dissipated in the resistance?

6. State the law of electro-magnetic induction.

A uniform metal wire is stretched between fixed supports and vibrates in a horizontal plane. A vertical homogeneous magnetic field is applied and the ends of the wire are connected through a resistance. Describe the subsequent motion of the system and indicate the steps in a calculation of the observed effects.

7. A plano-convex lens of thickness t is silvered over the plane surface. Find an expression for the distance from the curved surface at which parallel light close to the axis is brought to focus if the refractive index of the material of the lens is μ and the radius of the curved surface is r. Show also that if t is small the system behaves like a concave mirror and find its equivalent focal length.

8. Describe one accurate method for measuring the velocity of light. What evidence is there for the statement that light is a transverse electro-magnetic wave?

9. Explain three of the following:

(a) What happens when a pendulum with a metal bob swings between the pole faces of a magnet?

(b) Why is a small object floating on the surface of tea in a teacup attracted to the edge of the cup?

(c) Why are very high frequencies used for television transmission?

(d) Why is a rod fixed horizontally to a vertical wall by a clamp liable to break near the wall when the free end is depressed.

10. Write an essay on one of the following:

(a) Electric charge.

(b) The law of conservation of energy.

(c) Friction.

(d) The measurement of astronomical distances.

RAINEY'S SCHOOL MAGHERAFELT

1713

THE DRAMATIC SOCIETY

Presents

"The Public Prosecutor"

A Drama of the French Revolution

by

FRITZ HOCHWALDER

in the

Johnston Hall

on

Monday, Tuesday and Wednesday,
4th, 5th and 6th April, 1960

at 7-45 p.m.

Programme .... Sixpence

THE PLAY.

When the curtain rises, it is 10 o'clock on the morning of August 20th, 1794, or, as the new style has it, the 28th Thermidor, Year 2 of the Republic. The French Revolution has now run its awful course for five years. Louis XVI and Marie Antoinette have already been executed. Hébert, Marat, and Danton have come and gone. On the 9th Thermidor, a rising led by Tallien has revolted against the Terror and Robespierre has followed his predecessors to the Place de la Révolution, his broken jaw tied up in a bloody bandage. Tallien is now the leader of the Government, which has not yet had much occasion to take note of an obscure lieutenant of artillery named Buonáparte.

But a much more sinister person than Tallien is the Public Prosecutor, Fouquier-Tinville, who has been responsible for bringing hundreds of unfortunate "suspects" to the guillotine. Now that the law of Terror is about to be repealed, the opinion is widespread among those who hate and fear him that he too "must go." In fact, Thérésia Tallien believes that the reign of Terror can effectually come to an end only through Fouquier's death. The Prosecutor, on his part, is confident that he can retain his immense power and outwit all his enemies. Unfortunately, he fails to realize who his most dangerous antagonist is......

SYNOPSIS OF SCENES
The action of the play passes in the office of the Public Prosecutor of the French Republic in the prison of the Conciergerie.

ACT I.
10 o'clock on the morning of August 20th, 1794.

ACT II.
Later the same afternoon.

ACT III.
The same night.

THE CAST
(in order of appearance)

Grébeauval, clerk to the Revolutionary Tribunal...John Burns

Fouquier-Tinville, Public Prosecutor ... Christopher Brennen

Tallien, leader of the revolutionary government...James Forsyth

Sanson, Chief Executioner of Paris..............Leslie Gregg

Montané, a retired judge .... Stanley Stewart

Thérésia Tallien ....Barbara McIver

Fabricius, formerly clerk to the Revolutionary Tribunal...
Fergus Hartley

Héron, an elderly householder .... Derrick Crothers

1st Guard .... Peter Burton

2nd Guard .... Edmund McClure

Prompters...... Hazel Stewart
Lorna Watson

Directed by
Mr. H. W. Young   Mr. G. E. Johnston

Costumes   Scenery
Miss D. Madden   Nevin Houston

Stage-Managers:
Mr. A. Burton   Mr. A. Cowan

Lighting
Mr. J. N. McAteer   Mr. J. M. Smyth

Business Manager .... Mr. G. A. Wareham

House Manager .... Dr. A. E. Gwilliam

The incidental music for the play is taken from the 4th Movement (The March to the Scaffold) of Berlioz' "Symphonie Fantastique."
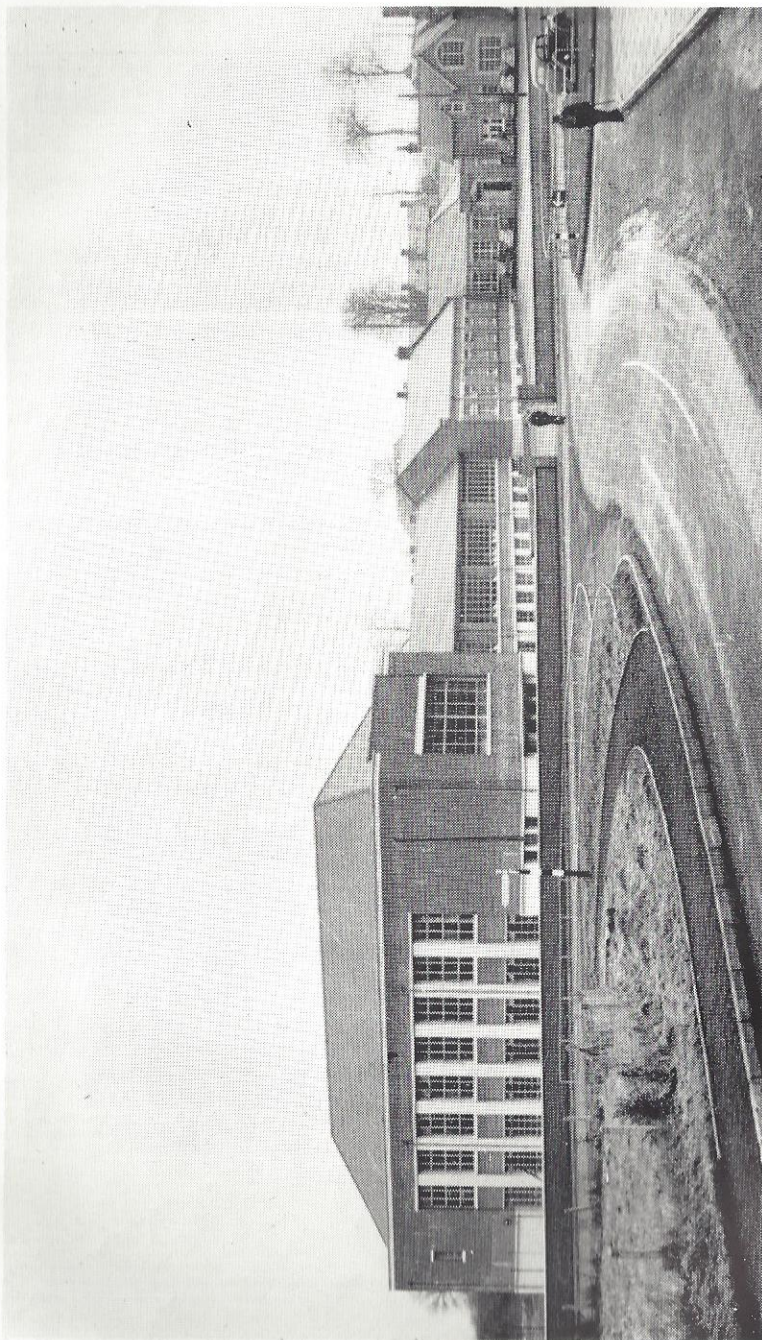
The

Rainey Magazine

1960

Vol. VII   Part 4

RAINEY ENDOWED SCHOOL
MAGHERAFELT

1960

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S. J. Hazlett, Esq.
Rev. S. N. Duff, B.A.
Rev. W. H. Vere Cooper, B.A.
J. A. Keatley, Esq.

STAFF

Headmaster : W. R. Todd, B. A., H.Dip.Ed.
Vice-Principal : W. McFadden, M.A., Ph.D.
Senior Mistress : Miss R. A. Carson, B.A.

Masters

W. S. Anderson
A. K. Arnold, M.A.
W. H. P. Browne, M.A.
M. S. Bridge, B.A.
A. Burton, M.Sc.
A. Cowan, B.A.
J. Cowan (Diploma in Phys. Ed.)
A. Davison, B.Sc.
A. E. Gwilliam, B.Sc., Ph.D.
P. Hinkley, L.T.C.L. (T.T.D.)

G. E. Johnston, B.A.
G. B. Leadley, B.A.
J. N. McAteer, B.Sc.
J. K. McIlrath, B.A.
E. Ross, B.Sc.
J. M. Scofield, M.A.
J. M. Smyth, B.A.
G. A. Wareham, M.A.
H. W. Young, B.A.

Mistresses

Mrs. D. Burton
Miss K. E. Gray, B.Sc.
Miss A. Holland, N.F.F.
Miss B. Keenan, L.S.G.M.
Miss M. E. McCully, Dip. in Dom.Sc.
Miss D. Madden, D.A., A.T.D.
Miss M. Macbeth, B.Sc.
Miss A. Moffett, B.A.
Miss P. O'Brien, Dip.Inst.Ed.

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THE RAINEY MAGAZINE

Vol. VII.   Part 4

Contents

MAY WE ASK OUR READERS TO SUPPORT THOSE FIRMS WHICH HELP US BY ADVERTISING IN THE MAGAZINE?

SCHOOL NOTES

The following were appointed prefects by the Headmaster for the year 1960 :

Senior Prefect (boy) : Christopher Brennen.

Senior Prefect (girl) : Jennifer Egan.

Prefects (boys) : D. Crothers, F. Johnston, P. Burton, T. Fulton, W. F. Hartley, J. Forsyth, E. McClure, R. W. Gordon, P. J. Gribben, G. N. Houston, J. G. McAlary, T. N. McCord, R. J. Bole.

Prefects (girls) : B. Ellis, E. Logan, S. D. Paul, M. Broderick, A. McCormack, D. Sheppard, E. Hartley, D. E. Watters, H. Hamilton.

* * *

We regret to announce the departure at Christmas of Mr. G. B. Leadley, B.A. from the Department of Modern Languages. Mr. Leadley was extremely popular for his cheerful manner and witty tongue with both staff and pupils. He takes with him to Omagh, where he has been appointed to the administrative staff of the County Tyrone Education Committee, our best wishes for his future. In his place, we welcome Miss Alison Moffett, B.A., with the hope that her stay with us will be a long and happy one.

* * *

We should like to take this opportunity of congratulating Christopher Brennen, Derrick Crothers and Peter Burton on winning university scholarships during the present academic year. Crothers, having sat a scholarship examination at Cambridge was offered an Exhibition at Selwyn College, but, in the meantime, he and Brennen had paid a visit to Oxford where they were both successful, Crothers obtaining a War Memorial Open Scholarship to Balliol College and Brennen a Williams Exhibition to the same college. Slightly earlier in the Easter term, Peter Burton was successful in obtaining the Gaskill Scholarship to Manchester University, while Frank Johnston gained entrance to the same university as a result of the scholarship examination. To all these pupils we extend our heartiest congratulations for the honour they have brought upon both themselves and the school.

* * *

The Old Pupils' Association held a reunion in Belfast during February. The function was eminently successful and it is hoped that it will become an annual affair and a "must" in the social calendar of old pupils in N. Ireland. The officers of the Association are still anxious to collect news and records of former pupils and any information of this nature will be gladly received by Miss M. E. McCully at the school.

* * *

The usual school parties and dances have been held in the course of the year. The Young Farmers' Club Dance which had to

be postponed from February on account of the weather was finally held on March 18th and attracted a large attendance. Old Pupils may rest assured that the social side of the school flourishes as well as ever it did. In this connection, may we remind former pupils and those about to leave the school, that the Film Society has resumed operations and that it will definitely present a programme during the winter and spring terms of 1960—61?

* * *

A notable change in the appearance of the school grounds will be seen when the "desert" of waste land between the tennis courts and the Tobermore Road begin to blossom like the rose ! Flowering and decorative shrubs have been planted with professional advice— the whole scheme being in the capable hands of groundsman Robert Paul. We now await the swimming-pool. Junior members of the school may start cleaning their spades !

* * *

Readers of the magazine may wonder why we have nothing to report on the "drama" side of school life at Christmas. It was decided, however, for various reasons, to postpone the usual school play until Easter, when the play: " The Public Prosecutor " was produced by Mr. H. W. Young and Mr. G. Johnston. Preparations are already under way for the production of " The Pirates of Penzance "—next year's Gilbert and Sullivan Opera.

* * *

The many school clubs and societies have pursued their usual courses. The hockey and rugby teams had moderately successful seasons. A real thriller was provided by the rugby club in losing narrowly to Portora R.S. by 3 pts. to nil in the Schools' Cup. An addition to the school societies has been made by the formation of the Camera Club under the leadership of Mr. Ross.

* * *

The end of the Easter term was marked by a very successful dance organised by the prefects under the leadership of Christopher Brennen and Jennifer Egan. Everybody concerned is to be congratulated upon the organisation of such an enjoyable evening's entertainment which was highly appreciated by the members of staff, their wives and the senior pupils of the school.

* * *

Finally, we thank all the editors of School Magazines who have sent us copies of their publications and who are too numerous to mention individually.

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PRIZE-DAY, 1959

The Annual Prize-Giving Ceremony took place on Wednesday, 28th October, in the Johnston Hall. We were privileged to have Mr. M. May, Minister of Education for Northern Ireland, and Mrs. May as guests of honour. The ceremony was attended by a large number of parents, and past and present pupils.

Rev. Dr. James Johnston, B.A., chairman of the Board of Governors, who presided, welcomed all the visitors. He said that, unfortunately, Dame Dehra Parker, G.B.E., M.P., was unable to be with them, but she had sent her good wishes to the school.

Dr. Johnston went on to congratulate Mr. May on being appointed Minister of Education since he was last at the school. He said Mr. May had introduced maintenance grants for senior pupils in need of financial help. At the same time, he had defended against strong opposition the incidental allowances to Grammar School pupils.

He was to be commended for his courageous generosity to all teachers in respect of salaries. Every former settlement of teachers' salaries left unsatisfied grievances. This last settlement, under his Ministry, met with general approval. As a member of the salaries' committee and well acquainted with all that led up to this settlement, he gladly acknowledged Mr. May's courage and influence in procuring from the Ministry of Finance the extra £1 million required to implement these increases in salaries.

Continuing, Dr. Johnston said :—"The 1947 Education Act set up three main types of schools to cater for the varied abilities and aptitudes of children. Since then administrators and teachers have more and more become the slave of their own particular type of school and are more and more determined that, like Pharoah's lean cattle, it shall eat up the other two types. We have therefore, Intermediate schools endeavouring to develop a variety of streams and we now hear of Technical Intermediate and Technical Grammar chools. Northern Ireland educationalists, it seems to me, have not risen to the level of understanding the varied needs of children enshrined in the Act.

The Ministry of Education, all the more because of Mr. May's guidance and encouragement, have endeavoured faithfully to administer the Act and to do justice to all three types of schools. The Minister has endeavoured to preserve all three types of schools and to see that children of varied abilities and aptitudes have an equal chance of educational development in a school designed, equipped and staffed to meet their need. In other words, he has not become the slave of one type of school. He has remained the guide and friend of each type of school within its own field."

Dr. Johnston congratulated the Headmaster and staff and the pupils on a year of outstanding and varied success. He said they were accustomed to excellent reports in the Rainey. Mr. Todd had the honour of presenting one of the most excellent reports the school had ever produced.

Referring to financial matters, Dr. Johnston stated the playing fields and the buildings were now finished and the total bill of costs paid. The total cost had been £137,000. This meant that the Board of Governors would have to meet, after the Ministry grants, a sum of £50,000. This was eight to ten thousand more than they anticipated. To meet this extra charge they had to take out a supplementary loan.

This meant that the present building fee of £4 per year had been increased as from 1st October last by £1 per year. Owing to the increases in teachers' salaries, the tuition fee had, from the same date, to be increased by an extra £2 10s. to £3 for Juniors, with a corresponding increase for Seniors.

On behalf of the Board and the school, he thanked all subscribers to the Building Fund and all who worked with so good a will for its success in the different districts. The subscriptions were as follows :—Ballyronan

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and Saltersland, £545 17s; Bellaghy, £320; Castledawson, £1,186 19s. 5d.; Randalstown, £146 3s.; Draperstown, £100; Tobermore, £382 2s 11d.; Maghera, £1,195 9s 2d.; Tamlaght O'Crilly, £126; Cookstown and Moneymore, £843 13s 7d.; Rocktown, £51 16s 2d.; Magherafelt, £2,171 19s 9d.; Staff £2,109 11s 9d.; and Old Pupils, £1,035 2s, making a total of £10,214 14s 9d.

Dr. Johnston said that but for the generosity of the subscribers and the asssitance of the workers, the cost of the recent scheme of buildings and playing fields would have "swamped" the school.

In presenting his report, the Headmaster gave details of the pupils last year. He said Helen Fields was awarded an Open Scholarship in Modern Languages to Trinity College, Dublin. On the results of the Senior Certificate Examination, Derrick Crothers was awarded a State Exhibition—1st place in Northern Ireland in the Scientific Group, with an average of over 93 per cent. in Advanced Maths. and Science. Christopher Brennen was awarded 4th place in the same group. Audrey Weir was the only girl in Northern Ireland to be awarded a State Exhibition on the Scientific side. Harold Dunlop gained a major Further Education Scholarship in music and was now at the Trinity College of Music, London. Eleven pupils obtained County University Scholarships. They had presented candidates in no less than 14 advanced subjects.

"Often on occasions such as this," went on Mr. Todd, "one is apt to dwell too much on the senior side of the Grammar School. We must not forget that the Rainey has also a very flourishing Preparatory Department. Two of our Exhibitioners, Derrick Crothers and Christopher Brennen, as well as half the scholarship winners, were products of our own Kindergarten and Preparatory Departments.

"Senior results were satisfactory—though we had our disappointments —some of our pupils failing to gain a certificate on account of English Literature. There is a strong feeling, shared by many teachers, that this year's English Literature paper was much more difficult than usual. This was most unfortunate as English Literature is virtually a compulsory subject for all scientists.

"Junior results were good. Eleven pupils who entered the Rainey unqualified were successful in Junior Grade, while 10 pupils, again unqualified on entrance to the school, were successful in Senior—some of these 10 are taking advanced level subjects this year. In congratulating these pupils, I must also congratulate their parents, who had the wisdom, foresight and courage to give their children their chance at a Grammar School, often at considerable personal sacrifice. I may say that a few of our qualified pupils failed both Junior and Senior. I have been a school-master for over 20 years and I would not like to have to decide which school a child in the border-line band should go."

Mr. Todd stated that the sports side of the school's year had also been most successful and at the school's sports 12 new records were set up and at the County Derry Sports, the Girls' and Boys' Championships were won by the Rainey. They had also done very well at the Ulster Grammar School Sports at Cherryvale.

Continuing, Mr. Todd said Mr. Davison joined the Mathematics Department of the school in September and he wished him and his wife many happy days in the district. He thanked Dr. McFadden and the staff for their invaluable co-operation, unfailing loyalty and wholehearted support in every phase of the school life. The Prefects had also contributed in no small measure to the successful day-to-day running of the school. During the past year they had a number of talks on careers and their careers' master was busy collecting information which would be of great help to those leaving.

"There are," said Mr. Todd, "quite a number of pupils in our district who remained an extra year at a Primary school in order to sit the Review

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Examination. If they are unsuccessful, and come to a Grammar school, they will have to remain fee-payers until Senior Certificate. The reason for this is due to a change in the regulations regarding qualifying on the results of Junior Certificate. From 1962 on, the pupil must be under 15 years of age on 1st July. This means that an unqualified child should enter a Grammar school when he is under 12 years 2 months on 1st September."

In his address, the Minister of Education stated that it was a very special pleasure for him to be present as he knew Dr. Johnston for many years and during that time he learned something of his dedicated work for the Rainey School and his determination to see that it should remain in the forefront of their grammar schools.

Mr. May said that Rainey was one of the oldest schools in the Province, having been founded in 1713, and in the present age, when so much money was spent on education, it was well to remember that the original foundation was due to a private citizen, Hugh Rainey, and the endowments of the Worshipful Company of Salters. So, for more than two centuries, the school owed little or nothing to public assistance and the secure place which it had established for itself in the community was due to unselfish work and devotion by those who were determined that young people should have an opportunity for Grammar school education.

Since the passing of the 1947 Act, when there were about 350 pupils at the school, it had naturally gone from strength to strength, so that to-day there were more than 500 pupils on the roll. The School Board had taken full advantage of the 1947 Act for the carrying out of extensions and improvements.

Referring to the Headmaster's comments on the difficulty of the English Literature paper in the Senior Examination, Mr. May stated that he would like to welcome an improvement in the standard of English throughout the Province. It was important to realise that a high standard of English was necessary for success in almost every walk of life.

He knew that in his school-days there was a tendency on the part of mathematicians and scientists to regard English as an unfortunate necessity, but the business community generally and those engaged in industry realised that the ability to express oneself clearly and fluently was an absolute necessity for those who had to fill important positions.

In his own profession (accountancy), for instance, there was no difficulty in getting young men who had facility in the manipulation of figures, but it was much rarer if they also had the ability to write a lucid report or letter and, in his own view, it was desirable that the standard of English should be raised rather than lowered.

The Minister said that in his young days tens of thousands of intelligent children had no opportunity of obtaining a Grammar school education, however academic their abilities, for the simple reason that their parents could not afford to pay the necessary fees. As a result many highly intelligent people were condemned to a life of uninteresting drudgery and it was to try and remedy this state of things that the 1947 Act was passed. Under the Act huge sums of money had been spent and would continue to be spent and he thought they could now say that children of ability had a chance to rise to any heights. It was up to them.

If they simply did what they must do there would come a time when some opportunity for a good position and for an interesting occupation would pass them by.

Success in life was not simply a matter of luck as was often supposed. It consisted, in his view, of seizing opportunities as they arose and making the most of them, and if a man or woman had not taken full advantage of the

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educational opportunities available it might well mean that such opportunities of success would simply not be available to them.

In a tribute to the school, Mr. May said: "The traditions of this school are great: it has a record of achievement in the past of which you may all be proud, and I have every confidence that in the fture those traditions will be maintained and those achievements surpassed."

The prizes were handed over by Mrs. May and special plaques were presented to the head girl (Jennifer M. Egan) and the head boy (Christopher Brennen). A bouquet was presented to Mrs. May by little Maeve Armstrong.

A vote of thanks to Mr. and Mrs. May was proposed by Rev. T. McGonigle, B.A., and seconded by Mr. W. J. Logan, J.P

The proceedings concluded with the singing of the National Anthem, after which the visitors were entertained to tea.

SCHOOL ACADEMIC RESULTS, 1959-60

Trinity College, Dublin
Helen A. Fields—Entrance Exhibition in Modern Languages

State Exhibitions
£80 a year for four years, awarded by the Ministry of Education
D. S. F. Crothers, 1st Scientific Group (boys and girls)
C. Brennen, 4th Scientific Group (boys and girls)
Audrey G. Weir, Scientific Group

Royal College of Music, London
C. H. Dunlop, Entrance Examination

University Scholarships awarded by County Education Committees

COUNTY LONDONDERRY

Margaret E. Berryman	Vivien G. Jeffers
C. Brennen	I. A. Martin
P. I. Burton	Frances M. McLernon
Jennifer M. Egan	I. B. McQuiston

COUNTY ANTRIM

D. S. F. Crothers	F. I. Johnston
T. J. N. Fulton	

Grant for Further Education (County Londonderry)
C. H. Dunlop

Training College Scholarships

Margaret E. Evans	Frances M. McLernon
Elizabeth J. Kennedy	Margaret E. A. Purvis
Jane E. Millar	Agnes I. Young
W. J. McKay	

Imperial Civil Service
Edith I. A. Farley

Northern Ireland Civil Service
Rebecca J. Patrick

Review Examination, 1959

R. P. Brown	C. J. A. McClelland
W. R. Logue	M. J. McGuckin
J. P. Mornin	S. E. Robinson

Qualifying Examination, 1959

Margaret A. Ritchie	A. D. Scofield

Junior Certificate Examination, 1959

GIRLS

Annie E. Allen	Cherry Junk
Nancy S. Anderson	Lorna E. Kennedy
Honora A. Berryman	Marguerite M. Lee
Elizabeth M. Chambers	Mary E. Moore
Anne Dawson	Barbara E. McIver
Jennifer H. Dennis	Adeline F. McKeown
Eileen Dickson	Mary E. M. Phillips
Frances M. E. M. Henderson	Georgina Quinn
Roberta V. Holmes	Annie E. Richmond
Gwendoline J. Johnston	Ethel D. Shannon
Patricia E. Johnston	Frances M. Timmins

BOYS

H. J. W. Beare	R. J. Michael
R. A. C. Boggs	G. H. McCartney
C. W. Burrows	W. J. L. McCready
K. J. Connell	R. W. C. McLernon
J. B. Crilly	J. Nelson
R. G. Crockett	E. C. O'Neill
S. J. Devlin	J. Paterson
F. T. A. Dunlop	C. Radcliffe
D. D. Fowler	W. J. Richardson
F. S. Graham	R. J. Simpson
R. L. Gregg	G. S. Sloane
J. J. Hinfey	R. J. Smyth
S. H. G. Hutchinson	S. H. Stewart
R. J. Hyndman	R. J. Stockman
J. F. Johnston	D. A. Webb
J. A. Kelly	V. J. A. Weir
R. A. Kempton	D. Wilson
P. C. Mercer	

The following completed the Senior Certificate Examination

GIRLS

Hilary A. Black	Olive M. Mawhinney
Margaret O. R. Boggs	Annie Menet
Madeline F. Broderick	Rachel McClelland
Eileen Bruce	Adela A. McCormack
Mary A. Evans	Eileen E. McCormick
Pearl Forsythe	Rebecca J. Patrick
Heather Hamilton	Sarah E. D. Paul
Dorothy E. Harkness	Margaret E. A. Purvis
Margaret F. Harris	Elizabeth K. Purvis
Evelyn E. Hartley	Dorothy E. Watters
Mary B. Keightley	Agnes I. Young
Elizabeth I. Logan	

BOYS

R. J. Bole	P. O. Mulholland
J. N. Forsyth	E. A. Murray
E. J. Gallagher	E. J. McClure
P. J. Gribben	T. N. McCord
M. Griffin	D. A. McMaster
G. N. Houston	A. W. Oliphant
J. Q. Johnston	J. B. Stewart
B. Maynes	D. S. Waddell
J. J. Mitchell	W. A. Wilson

Supplementary Candidates

GIRLS

Margaret E. Berryman...... ADVANCED—Maths. General D; Maths. Pure P; Maths. Applied P; Physics P; Chemistry P.

Jennifer M. Egan ...... ADVANCED—Latin P; French P; German P; Spanish P.

Elizabeth Ellis ...... ADVANCED—English Literature P; French P; German P at O; Spanish P.

Margaret E. Evans ...... ADVANCED—English Literature P at O; French P at O; Modern History P.

Edith I. A. Farley ...... ADVANCED—English Literature P; French P; German P at O; Spanish P.

Helen A. Fields ...... ADVANCED—Latin D; French D; German P; Spanish D.

Vivien G. Jeffers ...... ADVANCED—English Literature P; French P; Spanish P; Modern History P.

Elizabeth J. Kennedy ...... ORDINARY—English Lang. P; English Lit. P; French P; German C.
ADVANCED—Geography P.

Jane E. Millar ...... ORDINARY—English Lang. P; English Lit. P; Geography P; Maths. Trad. C; Domestic Science P.

Frances M. McLernon...... ADVANCED—English Literature P; French P; Modern History P.

Rhoda E. Porter ...... ORDINARY—English Lang. P; German C; Maths. Trad. P; Domestic Science P.

Audrey G. Weir ...... ORDINARY—English Lang. P.
ADVANCED—Maths. General D; Maths. Pure D; Maths. Applied D; Physics D; Chemistry D.

Betty Young ...... ADVANCED—Maths. General D; Maths. Pure D; Maths. Applied P; Physics P; Chemistry P.

BOYS

C. Brennen ...... ADVANCED—Maths. General D; Maths. Pure D; Maths. Applied D; Physics D; Chemistry D.

P. I. Burton ...... ADVANCED—Maths. General D; Maths Pure P; Maths. Applied D; Physics D; Chemistry D.

D. S. F. Crothers ...... ADVANCED—Maths. General D; Maths. Pure D; Maths. Applied D; Physics D; Chemistry D.

C. H. Dunlop ...... ORDINARY—English Literature P; German C; Maths. Trad. P.
ADVANCED—Music P.

J. R. Fullerton ...... ADVANCED—Physics P at O; Chemistry P.

T. J. N. Fulton ...... ADVANCED—Maths. General P; Maths. Applied P; Physics P; Chemistry P.

W. F. Hartley ...... ADVANCED—Maths. General P; Maths. Applied P; Physics P; Chemistry P.

F. I. Johnston ...... ADVANCED—Maths. General D; Maths. Pure P; Maths. Applied D; Physics D; Chemistry D;

I. A. Martin ...... ADVANCED—Maths. General D; Maths. Pure P; Maths. Applied D; Physics D; Chemistry P.

W. J. McKay ...... ADVANCED—English Literature P; Physics P at O; Chemistry P.

I. B. McQuiston ...... ADVANCED—Geography P; Physics P; Chemistry P.

J. J. Walls ...... ORDINARY—English Lang. P; English Lit. P; German C; Geography P; Maths. Trad. C.

FORM PRIZES

P1
W. R. Kennedy

P2
Maeve Armstrong
R. C. Malseed

P3
Jennifer Todd
G. T. Martin

P4
Jennifer I. Johnston
Kathleen E. Bridge

P5
D. Malseed

P6
Daphne R. Scott
Jacqueline F. Cowan
N. W. Raw
Kathleen M. Wilson

P7
Margaret A. Ritchie
A. D. Scofield

A. M. Burton
Audrey M. B. Forbes
D. D. Leslie
Sheelagh K. B. O'Connor

J1A
D. W. M. Alexander
Ethel M. Johnston
A. T. Graham
J. H. A. Crooks
R. M. Irwin
Elizabeth V. Garvin

J1B
D. Streahorn
C. J. A. McClelland
S. P. Browne
S. R. Loughrey

J1C
M. J. McGuckin
W. A. McIlmoyle

J2A
C. J. Grimes
B. T. Steele
Margaret C. Greer
W. R. B. Weir
M. G. D. O'Connor
Stephanie M. Egan

J2B
J. E. Scullion
A. J. O'Neill
Mary O. V. Simpson
Rachel N. Young

J2C
Jean P. Hamilton
Irene McCormack

J3A
Barbara E. McIver
J. Nelson
R. A. Kempton
R. L. Gregg
J. A. Kelly
Gwendoline J. Johnston
F. S. Graham
P. C. Mercer
R. A. C. Boggs
K. J. Connell
Patricia E. Johnston

J3B
Roberta V. Holmes
S. J. Devlin

J3C
Anne Dawson

S1
M. D. Brennen, 1st Mathematics, 1st Physics, 2nd Chemistry.
Gladys M. W. Broderick, 1st History.
J. M. Brown, 2nd Physics.
Margaret J. Davis, 1st Domestic Science.
Rosemary E. Mornin, 1st Latin, 1st French, 1st German, 1st Spanish.
Laota V. McConkey, 1st Art.
Jennifer McLernon, 2nd German, 2nd History.
Jane E. Parsons, 2nd Geography.
T. J. Smyth, 1st Chemistry.
Margaret E. Stewart, 1st Geography, 2nd English.
Laverne E. Symonds, 1st English, 2nd Mathematics.
General proficiency :
C. R. Bates, S. G. S. Nesbitt, Oonagh A. Redmond, Sarah I. Thompson.

S2
R. J. Bole, 2nd Mathematics.
Madeline F. Broderick, 1st History, 2nd Latin, 2nd French, 2nd German.

J. N. Forsyth, 1st eq. Mathematics, 2nd Physics, 2nd Chemistry.
Heather Hamilton, 1st Spanish.
Margaret F. Harris, 1st Domestic Science.
Evelyn E. Hartley, 1st eq. Mathematics, 1st Chemistry.
G. N. Houston, 1st Geography, 1st Art.
Elizabeth I. Logan, 1st English, 1st Latin, 1st French, 1st German, 2nd Spanish.
Eileen McCormick, 2nd English.
D. A. McMaster, 2nd Geography.
W. A. Wilson, 1st Physics.
General proficiency :
Eileen Bruce, Rebecca J. Patrick, Sarah E. D. Paul, J. B. Stewart.

S3
C. Brennen, 1st Chemistry, 2nd Mathematics, 3rd Physics.
D. S. F. Crothers, 1st Mathematics, 1st Physics, 2nd Chemistry.
C. H. Dunlop, 1st Music.
Jennifer M. Egan, 2nd Latin, 2nd French, 2nd German, 2nd Spanish.
Helen A. Fields, 1st Latin, 1st French, 1st German, 1st Spanish.
Vivien G. Jeffers, 1st English, 1st History.
Frances M. McLernon, 2nd English, 2nd History.
I. B. McQuiston, 1st Geography.
Audrey G. Weir, 2nd Physics, 3rd Mathematics, 3rd Chemistry.
General proficiency :
Margaret E. Berryman, P. I. Burton, T. J. N. Fulton, F. I. Johnston, I. A. Martin, Betty Young.

Special Awards
Edith I. A. Farley, Music and Drama.
E. J. McClure, Music and Drama.
Jennifer M. Egan (Head Girl)
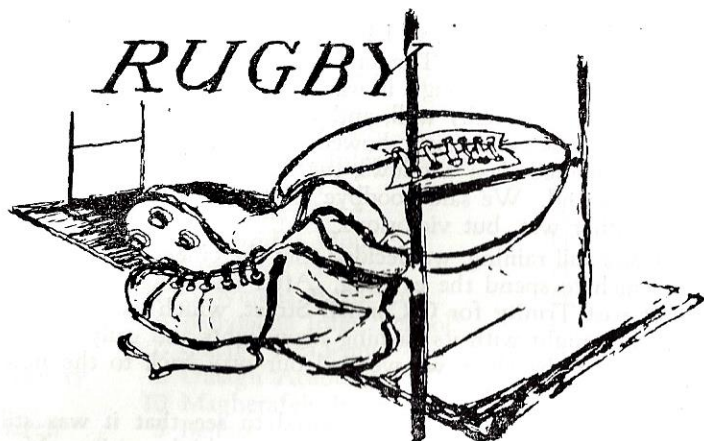C. Brennen (Head Boy)

1st Hockey XI, 1958-1959
Margaret E. Evans (captain)
Mary A. Evans
Pearl Forsythe
Denise E. Getty
Dorothy E. Harkness
Elizabeth I. Logan
Annie E. Michael
Jane E. Millar
Rosemary E. Mornin
Oonagh A. Redmond
Derna M. F. Sheppard
Audrey G. Weir

1st Rugby XV, 1958-1959
J. J. Walls (captain)
J. O. Brennan
C. Brennen
M. D. Brennen
J. M. Brown
D. S. F. Crothers
H. J. Diamond
C. H. Dunlop
R. W. Gordon
R. L. Gregg
W. F. Hartley
F. I. Johnston
T. R. Kennedy
D. A. McMaster
H. H. McPeake
I. B. McQuiston
J. W. Turner
D. S. Waddell

OLD PUPILS' SUCCESSES
Queen's University, Belfast
J. H. A. Black, M.B., B.Ch., B.A.O.
T. I. Campbell, Foundation Scholarship—£80 a year for two years—in Applied Science.
J. B. Dunlop, B.Sc., Electrical Engineering.
Emily I. E. McGaw, B.A.
Rebecca H. McGucken, M.B., B.Ch., B.A.O.

RUGBY

Perhaps the most disappointing factor in this closing year has been the rather tame ending of what promised to be one of the best seasons for the rugby club. Results were satisfactory but the number of games cancelled, because of weather conditions and cup commitments in January and February caused the season to drag to a close.

Playing membership had risen so there was no difficulty in fielding five teams on a Saturday morning: the 1st XV and Medallion got off to a good start, the former winning ten out of the fourteen games played before Christmas, whilst the Medallion won seven out of their eleven games to the same date. However, after the holidays, when we passed through three weeks without a game for any of the teams, results afterwards reflected this local lack of match practice.

After a bye in the 1st round, the 1st XV put up a good performance against Portora Royal School in the second round of the Schools' Cup and were perhaps unfortunate to be beaten by a penalty goal to nil, after holding a territorial advantage for most of the game.

In the Medallion Shield, the school were beaten by 2 goals to 1 goal and 1 try, by Ashfield Grammar School.

Our congratulations go to D. Crothers, E. O'Neill, and D. Kennedy who were chosen to play in the Co. Derry team against Co. Antrim during the Christmas holidays. Crothers captained the Co. Derry team. E. O'Neill was also chosen for an Ulster Schools' Trial. The annual trip was made to Ravenhill for the Schools' Cup Final, but another more venturesome journey was undertaken by a bus load of players from all the school teams; to the Wales v. Ireland International at Dublin. Although the bus left Magherafelt at 8.00 a.m., and didn't return till nearly midnight, this first ever visit to an International at Lansdowne Road, was enjoyed by all and will, we hope, become a yearly fixture on the rugby calendar.

As noted before, this year's results from all the teams were quite encouraging, but perhaps even more so was the spirit and enthus-

iasm shown by the players right through the school from our 'Under 13' to the 1st XV. Training and practice sessions were well attended and a real effort was made to get fit: an essential for this game of rugby. If any weakness could be detected throughout the Club, it was the lack of place-kickers—this was brought home very forcibly to the 1st XV when on one occasion they were beaten by three goals to four tries. Again this can only be rectified by practice.

In conclusion, I would like on behalf of the Rugby Club to say "Thank you" to the Headmaster and all those members of staff who have assisted and encouraged the teams by coaching, refereeing and travelling throughout the season.

Our thanks also to Miss Cousley and her staff in the kitchen, for their services on Saturday morning, and to Robert for all his work on our pitches.

1st XV

Captain : D. Crothers. Vice-Captain : F. Hartley
Results : Won 13, Drawn 1, Lost 6, Points for 148, against 117
Colours (Re-Awards): D. Crothers (capt.), C. Brennen, M. Brown, M. Brennen, F. Hartley (v.-capt.), F. Johnston, L. Gregg.
New Colours: D. Kennedy, T. Kennedy, E. McKeever, C. Brown, M. McSwiggan, E. O'Neill, E. McClure, D. McLean, R. Stockman, J. Hinfey, J. Forsyth.

The team this year had quite a successful season, winning more games than any previous 1st XV. Seven 1st XV players had returned to school, and with this nucleus the team soon took shape. Positions in the backline were quickly filled, except that of scrum-half, where after several unsuccessful attempts had been made to fill the gap. McSwiggan was brought up from the Medallion and quickly made this berth his own for the rest of the season. The pack gave rise to more problems as there were approximately twelve equally good forwards from which to choose our 'eight', and a resulting challenge for positions here, throughout the season.

The results achieved cannot be said to be the work of any outstanding individuals in the team, but were the reward for hard work and determination by all, on the field of play and in training. In many games, the high standard of fitness did much to counter the weight of bigger opponents, with only Methodist College and C.A.I. putting up the big scores, which have been all too frequent against us, in the past. In fact, in three of the six games lost during the season, the margin of defeat was only three points.

Many of the finer skills of rugby were still missing in the forward play yet good progress was made in line-out drill, in scrummaging and in defensive covering. A weakness in the pack? Perhaps its lack of tight binding and close tackling which often allowed opposition forwards to slip through the loose mauls.

As the season progressed the defence from the backline improved but the three-quarters still lacked confidence in their own ability to score tries.

It is unfair with this year's XV to single out individuals for special mention for the strength of the team lay in its ability to play as a team: it is more simple to sum them all up together in that under the captain, Derrick Crothers, their behaviour on and off the field of play was exemplary.

And what of next season ? With a return of a possible eleven of this year's regulars, the team can look forward perhaps to an even better season than that just past if the same team spirit will again prevail. So looking forward to '60—'61 with confidence, we say good-bye to those who are leaving after three or even four seasons on the 1st XV, and thank-you for their services to the Rugby Club.

RESULTS

September	19	Dalriada	A	D	3—3
„	26	Foyle College	H	W	9—0
October	3	Regent House	H	L	12—15
„	14	Ballyclare H.S.	A	W	8—0
„	17	R.B.A.I. 'A' XV	H	W	3—0
„	24	Limavady G.S.	A	W	6—3
November	4	Ballyclare H.S.	H	W	19—3
„	7	Annadale G.S.	H	L	0—8
„	12	M.C.B.	H	L	0—34
„	14	Ballymena Academy	H	W	8—3
„	21	B.R.A. 2nd XV	A	W	17—5
„	28	Omagh Academy	A	W	3—0
December	12	M.C.B. 2nd XV	H	W	9—6
„	16	Old Boys' XV	H	W	14—8
January	9	C.A.I.			Cancelled
„	16	Dalriada	H	W	14—3
(2nd rnd. Cup)					
January	23	Portora R.S.	H	L	0—3
February	2	Omagh Academy	H	W	9—0
„	6	R.B.A.I. 2nd XV	A	L	0—3
„	13	Limavady G.S.			Cancelled
„	20	Ballymena Academy			Cancelled
March	5	Coleraine A.I.	A	L	0—17
„	12	M.C.B.			Cancelled
„	26	Foyle College	A	W	14—3

2nd XV
Captain : J. Brennan

Results :—Won 1, Drawn 1, Lost 7. Points for 20, points against 75

Although this year's results for the 2nd XV are not impressive, the team, under the captaincy of John Brennan, showed a remarkable improvement on that of the previous year.

Statistically, in an equivalent number of matches played last year, to that given above, only 11 points were scored for and 143 against. Apart from statistics, the challenge for places on the 1st XV by members of the second team was an added incentive to

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players on both teams, and on several occasions the 1st team fielded as many as five forwards of the regular 'seconds' without any noticeable weakening of the 1st XV pack.

The Wednesday practices, generally hard-fought battles were invaluable to the 1st XV, and it can be said for the 2nd XV that they were seldom beaten by more than eight points. The team weakness was in the back line which lacked determination in defence and attack.

Many of the players featured on the 1st XV, but outstanding amongst the regular members of the 'second' team, were Brennan, J., Gribben P. J., Woolsey E. and Hardy T. and the latter mentioned two, returning for another season at school, may well give similar service to the 1st XV.

RESULTS

September	26	Foyle College	A	L	0—14
October	3	Regent House	H	D	0—0
„	17	R.B.A.I.	A	L	0—20
November	7	Annadale G.S.			Cancelled
„	14	Ballymena Academy			Cancelled
„	21	B.R.A.	A	W	17—0
February	6	R.B.A.I.	H	L	3—6
March	5	C.A.I.	H	L	0—24
„	26	Foyle College	H	L	6—11

Medallion XV
Captain : A. McConnell

Results :Won 7, Lost 7, Drawn 1. Points for 91, against 82

With only one match still to be played at the time of writing, the Medallion team this year can be said to have had a satisfactory half-season. This abnormal state of affairs arose out of the very bad weather we experienced locally during January and February, when no less than 6 matches had to be cancelled. During the Autumn term, we had a very successful period winning 8 out of 11 games. Unfortunately, we lost the most vital Shield game against Ashfield. Without wishing to detract from the skill of our opponents, the exceptionally wet day made open rugby—or indeed any rugby almost impossible, and luck was almost as effective as ability. As usual we held our own very well against the smaller schools and even a few of the larger, but the teams from the city schools are usually too heavy and too skilled for us.

Special mention must be made of our captain, A. McConnell, who at all times set an excellent example on the field, especially as leader of the forwards. Crooks and Boyle invariably played a good game as loose forwards. The back line were usually the strongest element in the team—though still inclined to act too much as individuals and to forget that co-operation is essential. With more experience most of them should make very good players in the Senior school, and we wish them well.

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September	19	Dalriada	A	W	11—0
,,	26	Foyle College	H	W	16—5
October	3	Regent House	H	W	9—0
,,	17	R.B.A.I.	H	L	0—3
,,	24	Limavady G.S.	A	W	11—5
November	7	Annadale G.S.	H	W	5—3
,,	14	Ballymena Academy	H	D	0—0
,,	21	B.R.A.	H	L	0—14
,,	28	Omagh	A	W	11—5
December	5	Ashfield	H	L	8—10
,,	12	M.C.B.	H	L	3—14
January	16	Dalriada	H	W	14—0
February	6	R.B.A.I.	A	L	3—9
March	5	C.A.I.	A	L	0—9
,,	26	Foyle College	A	L	0—5

Under-14 XV
Captain : J. Crooks

From the point of view of results, this was a very poor season for the Under-14 XV, but more important in this very junior stage of rugby is a good grasp of the basic essentials of the game. This was soon apparent in the pack, which in spite of being outweighed in nearly every game, always gave a good account of itself, Bell, Crooks and McShane being the outstanding forwards. Too many elementary errors were common, however, especially failure to bind in the loose scrums and a tendency to hold on to the ball when a quick pass was required.

The backs in general were too inclined to take their passes standing and were loth to tackle their opponents anywhere lower than waist level. McGurk at full back was the exception, making up for slowness by intelligent covering, while Logan also showed promise.

RESULTS

September	19	Dalriada	A	W	3—0
,,	26	Foyle Sollege	A	L	5—0
October	17	R.B.A.I.	A	L	11—0
November	7	Annadale G.S.	H	L	11—0
,,	14	B.R.A.	A	L	20—0
,,	21	Ballymena Academy			Cancelled
December	12	M.C.B.	A	L	42—0
January	9	C.A.I.			Cancelled
,,	16	Dalriada			Cancelled
,,	23	Portadown College			Cancelled
,,	30	Omagh Academy			Cancelled
February	6	R.B.A.I.	H	L	22—3
,,	20	Ballymena Academy			Cancelled

March	5	C.A.I.	H	L	3—0
,,	12	M.C.B.	H	L	15—0
,,	26	Foyle College	H	L	0—11

J. K. Mc.

Under-13 XV
Captain : C. Brennen

This team has shown great enthusiasm during the season, and though soundly thrashed by a good C.A.I. team, were well worth two excellent wins against B.R.A. and Dalriada. In the latter especially there were praiseworthy attempts to run and pass, with a very good try scored by Casidy as a result. Brennen captained the team very ably, and showed great determination in his wing play. Wilson and Casidy were also prominent among the backs, Gordon, McGucken and Mornin being the outstanding forwards.

RESULTS

November	14	Ballymena Academy			Cancelled
,,	21	B.R.A.	A	W	6—5
December	12	M.C.B.	A	L	11—0
January	9	C.A.I.			Cancelled
,,	16	Dalriada	H	W	8—0
,,	30	Omagh Academy			Cancelled
February	20	Ballymena Academy			Cancelled
March	5	C.A.I.	H	L	24—0
,,	12	M.C.B.	H	L	9—3

J. K. Mc.

CROSS-COUNTRY RUNNING

Although very little had been done during the year in the way of training or racing, we decided to accept the invitation of Coleraine Academical Institution to send a team to compete in the Senior Section of the Co. Derry Schools' Championship at the end of the Easter term. We were pleasantly surprised in the result, since we came second in the team event, our first man home being B. Tagg who was fourth in the race in a time of 25 minutes 48 secs. Other finishers were: J. O'Flynn (6), T. McCord (13), T. Kennedy (15), P. Gribben (16) and F. Hartley (18).

INTER-SCHOOLS CHAMPIONSHIPS

The following were successful in gaining places at the Londonderry County Inter-schools Championships held at Limavady on May 23rd. As a result of the successes noted below, we gained both the boys' and the girls' championship cups.

BOYS : JUNIOR.
B. Nelson—1st Long Jump, 1st 100 yds., 4th Javelin, 3rd 220 yds., 2nd
    High Jump.
W. Crooks—2nd Long Jump, 4th 100 yds., 5th Javelin, 2nd 220 yds., 4th
    High Jump.
Relay—R.E.S. 1st.

BOYS : INTERMEDIATE.
J. O'Flynn—1st 880 yds.
M. Brennen—2nd Long Jump, 1st 100 yds.,* 1st High Jump,* 1st 220 yds.,*
    2nd Javelin, 3rd Discus, 1st Triple Jump, 2nd Shot.
J. Mawhinney—2nd High Jump, 5th 220 yds.
B. Wallace—6th Long Jump.
A. McConnell—5th Triple Jump, 3rd Shot.
S. Stewart—5th 880 yds.
Relay—R.E.S. 3rd.

BOYS : SENIOR
L. Gregg—1st 880 yds.,* 1st Mile,* 3rd 220 yds., 3rd High Jump.
D. Crothers—1st Triple Jump, 1st High Jump,* 1st 440 yds.,* 1st Long
    Jump.*
F. Hartley—6th 100 yds., 2nd Triple Jump, 2nd 220 yds., 2nd Long Jump.
J. Forsythe—5th Discus.
T. McCord—4th 880 yds.
M. Brown—2nd 100 yds.
C. Brennen—3rd 440 yds.
Relay—R.E.S. 1st.
*New Records.

GIRLS : JUNIOR.
J. Johnston—1st High Jump, 2nd Long Jump.
E. Browne—4th 150 yds., 1st Long Jump, 3rd 100 yds.
M. Johnston—3rd Cricket Ball
L. Gregg—2nd 100 yds.
Relay—R.E.S. 2nd.

GIRLS : INTERMEDIATE
R. Ritchie—1st Cricket Ball,* 2nd 220 yds., 2nd High Jump, 2nd 100 yds.
A. Richmond—1st High Jump.
R. Mornin—2nd Long Jump.
M. Sloss—4th Long Jump.
Relay—R.E.S. 2nd.

GIRLS : SENIOR
J. Millar—1st 220 yds., 2nd High Jump, 3rd Discus, 3rd 100 yds.
E. Logan—1st Long Jump, 1st 100 yds.
E. Evans—1st High Jump, 4th 220 yds.
D. Bishop—4th Long Jump.
Relay—R.E.S. 2nd.
*New Record.

ATHLETIC SPORTS, 1959
The annual sports were held in brilliant weather on the after-
noon of May 27th. Events were run off smoothly and, as can be
seen from the tabulated results, several new records were broken.
The prizes were graciously presented by that very good friend of the
school, Mrs. Redmond.

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BOYS JUNIOR.
100 Yards—
    1, B. Crooks, B. Nelson (tie); 3, F. Loane; 4, W. Kennedy (12.4 secs.).
220 Yards—
    1, B. Crooks; 2, F. Loane; 3, B. Steele; 4, I. Standing (29.2 secs.).
High Jump—
    1, W. Kennedy; 2, J. Logan; 3, B. Nelson; 4, I. Standing (4ft. 1in.).
Long Jump—
    1, B. Crooks; 2, B. Steele; 3, B. Nelson; 4, C. Brennen (15ft. 4ins.).
Cricket Ball—
    1, B. Nelson; 2, B. Crooks; 3, G. Scofield; 4, I. Standing (165ft. 2ins.).
Relay—
    1, Walker; 2, Calvin; 3, Parker (55.8 secs.).

GIRLS JUNIOR.
100 Yards—
    1, E. Browne; 2, L. Gregg; 3, S. Egan; 4, D. Hartley (13.0 secs.).
150 Yards—
    1, E. Browne; 2, L. Gregg; 3, E. Egan; 4, D. Hartley (21.0 secs.).
High Jump—
    1, E. Browne; 2, P. Johnston; 3, W. McKeown; 4, P. Haire (4ft. 1in.).
Long Jump—
    1, E. Browne; 2, P. Johnston; 3, J. Dennis, E. Dickson (tie).
    (14ft. 5ins.)*
Cricket Ball—
    1, N. Johnston; 2, P. Matthews; 3, E. Dickson; 4, E. Wilson (92ft. 3ins.)
Relay—
    1, Calvin; 2, Salters; 3, Walker. (52 secs.).

BOYS INTERMEDIATE.
100 Yards—
    1, M. Brennen; 2, B. Wallace; 3, J. Campbell; 4, G. McCartney
    (11.0 secs)†.
220 Yards—
    1, M. Brennen; 2, B. Wallace; 3, A. McConnell; 4, J. Campbell
    (24.8 secs.)*.
440 Yards—
    1, J. Mawhinney; 2, J. O'Flynn; 3, S. Stewart; 4, G. McCartney
    (59.2 secs.)*.
880 Yards—
    1, J. O'Flynn; 2, J. Mawhinney; 3, D. Kennedy; 4, S. Stewart.
    (2 mins. 17.4 secs.).
High Jump—
    1, M. Brennen; 2, J. Mawhinney; 3, J. Kelly; 4, S. Stewart (5ft.).
Long Jump—
    1, B. Wallace; 2, J. O'Flynn; 3, D. Kennedy; 4, S. Stewart. (15ft. 3ins.).
Triple Jump—
    1, A. McConnell; 2, D. Kennedy;   (33ft. 11ins.)
Javelin—
    1, N. Brennen; 2, J. Mawhinney (118ft. 8ins.)*.
Discus—
    1, A. McConnell; 2, B. Wallace; 3, M. McSwiggin; 4, D. Kennedy
    (107ft. 6ins.)*.

GIRLS INTERMEDIATE.
100 Yards—
    1, R. Ritchie; 2, R. Mornin; 3, M. Sloss; 4, L. Symonds.   13.0 secs.
220 Yards—
    1, R. Ritchie; 2, R. Mornin; 3, M. Sloss; 4, A. Lawrence.   29.0 secs.
High Jump—
    1, R. Ritchie; 2, N. Richmond; 3, L. Symonds; 4, D. Getty. 4ft. 3¼ins.

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Long Jump—
1, R. Mornin; 2, M. Oliphant; 3, M. Sloss; 4, A. Lawrence. 14ft. 11 ins.
Cricket Ball—
1, R. Ritchie; 2, R. Mornin; 3, M. Sloss; 4, M. Oliphant. 134ft. ½in.
Relay—
1, Calvin; 2, Walker; 3, Salters.

BOYS SENIOR.
100 Yards—
1, M. Brown; 2, L. Gregg; 3, F. Hartley; 4, T. McCord. 10.2 secs.
220 Yards—
1, L. Gregg; 2, F. Hartley; 3, M. Brown; 4, T. McCord. 25.0 secs.
440 Yards—
1, D. Crothers; 2, C. Brennen; 3, S. Walls; 55.2 secs.
880 Yards—
1, L. Gregg; 2, T. McCord; 3, B. Tagg; 4, C. Brennen. 2mins 4.8 secs.
1 mile—
1, L. Gregg; 2, J. Bole; 3, D. Crothers; 4, T. Kennedy. 4mins. 50.6 secs.
High Jump—
1, D. Crothers; 2, L. Gregg; 3, J. Bole; 4, C. Brennen. 5ft. 4ins.
Long Jump—
1, D. Crothers; 2, F. Hartley; 3, T. McCord; 4, S. Walls. 19ft. 10ins.
Triple Jump—
1, D. Crothers; 2, F. Hartley; 3, T. McCord; 4, S. Walls. 19ft. 10ins.
Javelin—
1, T. McQuiston; 2, P. Gribben; 3, J. Forsythe; 4, T. Kennedy.
113ft. 5ins.
Discus—
1, J. Forsyth; 2, T. Fulton; 3, P. J. Gribben; 94ft. 1½ins.
12lb. Shot—
I. T. Fulton; 2, J. Forsythe; 3, P. J. Gribben; 4, R. Gordon. 32ft. 0ins.
Relay—
1, Walker; 2, Calvin; 3, Parker.

GIRLS SENIOR.
100 Yards—
1, E. Logan; 2, J. Millar; 3, E. Evans; 4, A. McCormick. 12.4 secs.
220 Yards—
1, J. Millar; 2, E. Logan; 3, E. Evans; 4, A. Weir. 29.0 secs.
High Jump—
1, E. Evans; 2, J. Millar; 3, E. McCormick; 4, D. Bishop. 4ft. 5ins.
Long Jump—
1, E. Logan; 2, E. McCormick; 3, H. Fields; 4, E. Crooks. 16ft. 1½ins.
Discus—
1, E. Evans; 2, J. Millar; 3, M. Keightley; 4, J. Egan. 67ft. 5ins.
Relay—
1, Walker; 2, Calvin; 3, Salters; 4, Parker. 58.0 secs.

CUPS AND AWARDS

Junior Boys—
Track Events—W. A. Harrison Cup—B. Crooks.
Field Events—J. D. Rainey Cup—B. Nelson.
Championship—T. S. Fazackerley Cup—B. Crooks.

Junior Girls—
Track Events—J. R. Sharpe Cup—E. Brown.
Field Events—Women Staff Cup—E. Brown.
Championship—Rev. Dr. J. Johnston Cup—E. Brown.

Intermediate Boys—
Track Events—D. S. Badger Cup—M. Brennen.
Field Events—Men's Staff Cup—A. McConnell.
Championship—Old Pupils' Cup—M. Brennen.

Intermediate Girls—
Track Events—Rev. C. C. M. Dickie Cup—Roberta Ritchie.
Field Events—J. H. Hamilton Cup—Roberta Ritchie.
Championship—Rev. W. D. Ewart Cup—Roberta Ritchie.

Senior Boys—
Track Events—Gillespie Cup—L. Gregg.
Field Events—Hutchinson Cup—D. Crothers.
Championship—Walker Cup—D. Crothers.

Senior Girls—
Track Events—S. S. Badger Cup—E. Logan, J. Millar (tie).
Field Events—Redmond Cup—E. Evans.
Championship—Parker Cup—E. Evans, J. Millar (tie).

Championship confined to Pupils of J1—
Norris Cup—O. Hartley, G. Scofield (tie).
Best High Jump—
J. D. Rainey Cup—D. Crothers.
440 yards Senior Boys—
W. H. McCully Cup—D. Crothers.
880 yards Intermediate Boys—
Salters Cup—J. O'Flynn.
880 yards Senior Boys—
J. A. Calvin Cup—L. Gregg.
1 mile Senior Boys—
Kennedy Cup—L. Gregg.
House Championship—
Old Pupils' R.F.C. Cup—Calvin House.
Hutchinson Memorial Plaques—
E. Evans, A. Weir, D. McMaster, S. Walls.

THE SCHOOL DRAMATIC SOCIETY

The Rainey School Dramatic Society presented 'The Public Prosecutor' by Fritz Hochwälder in the Johnston Hall on Monday, Tuesday and Wednesday, 4th, 5th and 6th April. Based on the history of the later phases of the French Revolution, the play is a study of intrigue and counter-intrigue centred around the prosecutor himself, Fouquier-Tinville, who, in his day, has sent many victims to the guillotine on the evidence of perjured witnesses. Finally, just as the notorious Reign of Terror is coming to an end, he is caught in the trap he had so often prepared for others. Although fundamentally a historical drama, there is no doubt that this play has considerable relevance today.

The producers, Mr. H. W. Young and Mr. G. E. Johnston are, I think, to be congratulated on their choice of an interesting but difficult play which is distinctly outside the normal type of drama attempted in the Province. The atmosphere of suspense and terror

was well built-up and the climax in Act III really did provide the high note to which the play had been leading. The contrast between the prosecutor's office with its bundles of dusty but highly dangerous dossiers and the intense life-and-death drama being enacted within its walls was extremely well brought out. The stage-set was the work of Mr. A. Cowan, Mr. A. Burton and Nevin Houston, and provided exactly the right background. Miss D. Madden, as usual, gave the costumes a really authentic touch, particularly in the case of the prosecutor himself who, in contrast to the others, was in black, relieved only by his tricolour sash of office.

Christopher Brennen as the prosecutor gave a performance which was extremely polished and struck the right note of sinister competence. At the same time one could see the occasional flash of humanity behind the monster. Tallien, leader of the revolutionary government, a former blackmailer and criminal, was played by James Forsyth who is by now an experienced actor. His work was competent, but he was a little too genial for the part. One could not imagine him with a murky past. John Burns as Grébeauval, the little clerk, provided the flashes of humour in this rather sombre play. Whatever else happened, one felt that the sly little fellow would emerge safe and sound from the troubles around him. He has, one would say, a splendid sense of comedy. Barbara McIver, as Thérésia Tallien, the only girl in the cast, gave an excellent portrayal of a woman with the sense of power at her finger-tips. Leslie Gregg, although suffering somewhat from laryngitis, was a burly and competent-sounding executioner and Stanley Stewart as Montané, a retired judge, really came to life in Act III where he takes command of the situation after the fall of the prosecutor. Fergus Hartley as Fabricius and Derrick Crothers as Héron gave convincing portrayals of the two unsavoury professional perjurers. Crothers was particularly pleasing in his furtive yet frantic attempts to rescue the dossier of his past life from the sinister office. Peter Burton and Edmund McClure took the parts of the guards in the final scene.

In addition to those already mentioned, Mr. J. N. McAteer and Mr. J. M. Smyth were responsible for the lighting and Mr. G. A. Wareham and Dr. A. E. Gwilliam for the business side of the production; while Hazel Stewart and Lorna Watson acted as prompters.

We are indebted to Mr. D. S. Badger, Mr. Harry Kennedy, Mr. J. Burns, and many other friends of the school for their kindness in lending us furniture and other properties, and especially to Mrs. J. McLernon for her gift of a large carpet—that most necessary of stage 'props.'

Finally, we note that The Rainey Dramatic Society hopes to produce Gilbert and Sullivan's 'The Pirates of Penzance' during the forthcoming winter season thus continuing the tradition started last year with 'The Mikado.'

DRAMATIC SOCIETY—THE CAST

ROBERTA RITCHIE FINISHING THE RELAY

THE LIBRARY

Both the fiction and the reference libraries have progressed steadily during the year. Considerable advantage has, as usual been taken of the County Londonderry Library Committee permanent loan scheme. Many valuable and scholarly books have been acquired in English Literature, Modern Languages, History, Geography, Mathematics, Physics, Chemistry, Music and Art. Pupils taking Advanced Level Courses are now exceptionally well catered for.

It is a pleasure to acknowledge the generosity of Mr. Ronald Marshall, M.A., who recently presented to the library G. M. Trevelyan's " English Social History " and the fifteen volumes of the Cambridge History of English Literature. We are also indebted to numerous pupils who have presented us with various volumes from time to time As usual the girls of S1 have acted as librarians week by week—a job that gets little praise but one of the most useful and necessary of the many voluntary duties performed by pupils in the school.   J.M.S.   W.Y.

DEBATING SOCIETY, 1959—60

A preliminary meeting was held at the beginning of the year when the following committee was elected :—Misses Oonagh Redmond, Jennifer McLernon, Isa Brown and Fiona Galway; Messrs. Derrick Crothers, Christopher Brennen, Edmund McClure and Frank Johnston.

The first meeting of the Society was held on Friday, 2nd October when, before a full house the motion—" That this house maintains that the modern teenager is an overprivileged member of Society " was debated. In proposing the motion Miss Oonagh Redmond made many points in its favour which were later stressed by Miss Jennifer McLernon, her seconder. But alas, they were overwhelmed by the opposition of Messrs. Crothers and Brennen whose speeches (rather humourous at times) seemed to please the members on the floor. Various members from the floor of the house also spoke and when the chairman put the motion to a vote it was unanimously defeated. At the conclusion of the debate it was decided to hold an " Any Questions ? " programme a fortnight later.

As on previous occasions this proved to be a tremendous success. The members of the panel were Misses Jennifer Egan, Oonagh Redmond, Jennifer McLernon; Messrs. Peter Burton, Edmund McClure and Frank Johnston. The chairman at this meeting was Christopher Brennen and the audience asked questions ranging from " The Film Society " to " Moon Madness." During a discussion on the question of teenagers wearing slacks, Mr. Peter Burton unwittingly remarked that in his view " They were much

handier than skirts." This caused the room to be filled with a tremendous roar of laughter.

Our congratulations are due to Derrick Crothers and Christopher Brennen who enabled the school to reach the semi-final of the debating competition held in Ballymena Academy and organized by Queen's University. We regret that owing to an alteration in the venue for the semi-final, which had been arranged to take place in the Rainey School, and was later changed to Belfast, we felt unable to take any further part in the competition. Up to the time of writing no meetings of the society have been held this term, largely due to the urgent demands on our more active members who are taking scholarship examinations or preparing for our next play. We hope to resume at the earliest opportunity.

PHOTOGRAPHIC CLUB
Hon. Secretary : David Bell

The idea of a photographic club was broached in the summer of 1959 when the Headmaster asked advice from amateur photographers on the staff, about the siting and equipping of a darkroom. He decided to modify one of the small changing rooms behind the stage so that it could be used as a darkroom.

As usual, Mr. Burton was called upon to display his skill with chisel and plane, and Mr. McAteer and he blacked out the room, and installed a fine bench. Three pin electric points were then put in by the electrician; as it was most important that all apparatus should be earthed. Adequate second hand apparatus was then purchased, and we were ready to begin.

There were large atendances at preliminary meetings, and small groups of prospective members were given demonstrations in processing film, and enlarging negatives.

By this time Autumn was leaving us and the weather was mostly unsatisfactory for outdoor photography. However, some stalwarts carried on right through the winter, and there were few weeks when the darkroom was not in use on two afternoons.

We have had one meeting this year, when we discussed " Correct Exposure of the Film," and exposure calculators were distributed to members. Members expressed a desire for photographic outings and competitions, and these will be held now that the sun is beginning to shine again.

The standard is low at the moment, as none of the members has much experience, and mistakes in exposure and development technique are common. However practice will correct these faults, and the quality of work will improve. Our eventual aim is of course an exhibition of members' work, but it may be a year or two before we are ready for this.

We are still short of literature and equipment, and will be glad to hear from any old pupils who have unwanted books or apparatus.

D.B.   E.F.R.

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THE RAINEY FILM SOCIETY

After a lapse of two years the activities of the Society were revived during the winter months. An encouraging start was made when 65 members joined in September for a series of eight shows. These films, mainly American in origin, were chosen to suit a variety of tastes in cinema entertainment, from the sophisticated comedy of Judy Holliday in " Born Yesterday " to the realistic drama of life in New York's dockland as presented in Elia Kazan's " On the Waterfront." Western enthusiasts enjoyed " 3.10 to Yuma," while Frank Capra's film " Mr. Deeds goes to Town," proved just as enjoyable as when first released 20 years ago. The film adaptation of Herman Wouk's novel, " The Caine Mutiny " was well received and raised many interesting points worth further examination. " Knock on Wood " (Danny Kaye), " The Mountain " (Spencer Tracy) and " Operation Mad Ball " were also presented during the Xmas term.

After the last meeting supper was served in the Dining Hall, thus affording members the opportunity to discuss the activities of the Society. The suggestion to continue after the Christmas vacation was enthusiastically supported. The meetings recommenced in January and in spite of very severe weather conditions were well attended. This second series of programmes included " Ninotchka " (Greta Garbo), " Lust for Life " (a film account of the life of Van Gogh, starring Kirk Douglas), the Orson Welles version of " Macbeth " and a delightful 'comedie noire' by Alfred Hitchcock, " The Trouble with Harry." John Ford's " The Grapes of Wrath " lived up to its reputation as a landmark in the history of the cinema. " Kanal," a Polish film of rare cinematic value gave a grim account of Polish patriots' struggles against the Nazis in September, 1944. An evening was devoted to short films and included " The Red Balloon " (France), with " Bow Bells," " O, Dreamland " and " Momma Don't Allow " representing the work of recent film-makers like Lindsay Anderson, Anthony Simmonds and Walter Lassally. The last meeting of the series revived an early Marx Brothers film—" At the Circus "—and was thoroughly enjoyed by all.

During the second series, tea and biscuits were served after each meeting and this innovation proved to be a pleasant success. Members were able to express their views on the films and many interesting informal discussions took place. Our thanks are due to Miss Ann Holland and Miss Margaret Macbeth for providing the refreshments each evening.

Although the average attendance fell slightly during the second half of the session, yet it must be agreed that the attempt to revive the Film Society has been successful. Plans are already under consideration for September next, when it is hoped to present a series of films using as a theme " The British Comedy."

35

BALLIOL COLLEGE,
OXFORD.

19th March 1960

Dear Brennen,

I am glad to be able to let you know
that we are recommending you to the College
for election to a Williams Exhibition to
come up in October 1960. Your work in the
Examination was very creditable indeed, and
we are looking forward to seeing you here in
October. I will be writing to you shortly
with suggestions about the kind of thing you
ought to read between now and October.

Yours sincerely,

J.E. dewel.

C. Brennen, Esq.,
Cranagh Dhu,
Magherafelt,
Co. Derry.

OXONIÆ, TERMINO   S. Michaelis A.D. 19 60.

Die   XVIII   *Mensis* Octobris

Q U O die comparuit coram me

Christophorus BRENNEN

e Collegio   de Balliolo

et admonitus est de observandis Statutis hujus

Universitatis, et in Matriculam Universitatis

relatus est.

Vice-Cancellarius.

BALLIOL COLLEGE,
OXFORD.

29th March 1960.

ear Mr. Brennen,

Thank you for your letter of 27th
rch enclosing your Senior and Junior
rtificates.

I am afraid that it still remains
cessary for you to take Latin either at
nior Certificate level or in Responsions;
e latter examination would have to be taken
Oxford and would involve you in unnecessary
pense. It would seem therefore essential
at you should pass Latin at Senior Certificate
vel in June. Please let me know as soon as
hear the result.

Yours sincerely,

G W Williams

Brennen, Esq.,
nagh Dhu,
herafelt,
Derry, N. Ireland.

BALLIOL COLLEGE,
OXFORD.

22nd March 1960

Dear Mr. Brennen,

I am very pleased to tell you that
the College has resolved to elect you to a
Williams Exhibition to come up in October 1960
to read ~~Engineering~~. Mathematics.

Would you please comply with the
enclosed notice about Responsions.

Yours sincerely,

G W Williams

BALLIOL COLLEGE,
OXFORD.

25th March 1960

Dear Mr. Brennen,

Thank you for your letter of 24th March. I
am glad that we shall see you in October.

There is no difficulty about your being allowed
to read Engineering: I was simply not clear which
subject you wished to read. I shall expect to receive
your Responsions certificates in due course.

Yours sincerely,

G W Williams

C. Brennen, Esq.

From the Senior Tutor,

Balliol College,

Oxford.

20th April 1960

Dear Sir,

Candidates intending to read Science Schools (other than Forestry) are normally expected to pass the Science Prelims before coming into residence.

The particular Science Prelims required for the different Honour Schools are as follows:

CHEMISTRY — Subject (3) Chemistry normally together with either (1) Mathematics or (2) Mechanics and Physics, but other choices (not subject (5) Physics and Chemistry) will be considered in exceptional circumstances.

PHYSICS AND ENGINEERING — Subject (1) Subject (2)

MEDICINE AND BIOLOGICAL SCIENCES (other than Biochemistry) — Subject (4) Biology together with either (5) or (3).

BIOCHEMISTRY — Subject (3) Subject (4)

Exceptions to these stipulations may be considered in special cases.

The University does not permit candidates to enter for the Science Prelims until they are exempt from Responsions.

Yours sincerely,

G.W. WILLIAMS

BALLIOL COLLEGE,

OXFORD.

2nd May 1960

Dear Mr. Brennen,

Thank you for your letter received this morning.

We do require men reading certain Final Honour Schools, including Engineering, to pass Prelims before they come into residence. This is in their own interest since the work for the Preliminary Examinations if postponed until they came into residence would hold up unnecessarily their own Honours work. It is therefore really important for you to make every possible effort to pass these Prelims before October. Since you cannot be exempt from Responsions in time to take the Prelims in June, your only chance of doing this will be in September. The provisional dates set for the beginning of these examinations are:

Prelim (2) Mechanics and Physics
Monday, 26th September.

Prelim (1) Mathematics
Tuesday, 4th October.

Yours sincerely,

G W Williams.

C. Brennen, Esq.

BALLIOL COLLEGE,

OXFOR

19th May 1960

Dear Mr. Brennen,

Thank you for your letter of 17th May.

You seem to have got hold of the wrong papers. The papers you require are 'First Public Examination, School of Natural Science, Preliminary Examination in (1) Mathematics and (2) Mechanics and Physics. These have nothing to do with the Pass School, Group C2.

Yours sincerely,

G W Williams

C. Brennen, Esq.,
Cranagh Dhu,
Magherafelt,
Co. Derry, N. Ireland.

's secretary

BALLIOL COLLEGE,

OXFORD.

3rd June 1960

Dear Mr. Brennen,

The Senior Tutor asks me to thank you for your letter of 28th May.

I have been into the question of the Preliminary Examination papers with the Clarendon Press, and they tell me that these papers are the right ones. Apparentl[y] the papers are the same for the Pass School as for the Prelims. I am therefore returning them herewith.

Yours sincerely,

E. H. Payne

C. Brennen, Esq.

BALLIOL COLLEGE,

OXFO[RD.]

26th August 1960

Dear Mr. Brennen,

Congratulations on passing Latin. That is excellent news.

I enclose entry forms for the Science Prelims. Would you please complete and return th[em] to me, together with the necessary entry fee, not [?] later than 31st August.

It is certainly possible for you to come into residence before the actual term begins at th[e] time when the Preliminary Examinations take place. When detailed timetables are available I shall sen[d] you a copy and ask you at that time what accommoda[tion] you will require.

Yours sincerely,

G. Williams

C. Brennen, Esq.,
Silverbay,
40 Portrush Road,
Portstewart, Co. Derry,
N. Ireland.

First Public Examination.

School of Natural Science, Preliminary Examination.

Subject (2) Mechanics and Physics

Subject (3) Chemistry

The above Examinations will begin on Monday, 26 September, at 9.30 a.m., and will be held at the Examination Schools, except where otherwise stated.

Monday 26 September,	9.30 a.m.	Subject (3) Chemistry I
	2 p.m.	Subject (3) Chemistry II
Tuesday, 27 September	9.30 a.m.	Subject (2) Mechanics & Physics I
	2 p.m.	Subject (2) Mechanics & Physics II
Wednesday 28 September,	9.30 a.m.	Subject (2) Practical Physics (in the Clarendon Laboratory, South Building).
	2 p.m.	Subject (3) Practical Chemistry (in the Inorganic Chemistry Laboratory)

First Public Examination.

Preliminary Examination in Natural Science.

Subject (1) Mathematics.

The above Examination will be held onTuesday, 4 October.

The Papers will be set as follows:

Tuesday, 4 October	9.30 a.m.	Mathematics I
	2 p.m.	Mathematics II.

Candidates are requested to attend at the Examination Schools.

BALLIOL COLLEGE,

OXFORD.

14th September 1960

Dear Mr. Brennen,

Thank you for your letter of 8th September.

Bed and breakfast in Holywell Manor, an annexe of the College, will be reserved for you from 25th September to 2nd October inclusive. Thereafter you should be able to go into your own room and full board will be available from lunch on 3rd October.

Yours sincerely,

[signature]

C. Brennen, Esq.,
Cranagh Dhu,
Magherafelt, Co. Derry, N.I.

BALLIOL COLLEGE,

OXFORD.

Tel: Oxford 49601

19 July 1960.

Dear Mr. Brunner,

I am writing to tell you that Freshmen should come into residence on Thursday, 6th October. The Master asks me to invite you to the Freshmen's Dinner, which is held in Hall that evening at 7.30 p.m. (not evening dress). If for any reason you are unable to come, will you please let me know by 1st October without fail? A seating plan of the tables will be posted in the Lodge and Junior Common Room. The Master and Fellows, the Committee of the J.C.R., and Captains of College Clubs and Societies also attend the Dinner.

I enclose a copy of the College Rules, giving you information about fees etc. and memoranda concerning health services etc. Please read the paper about registration of certificates carefully and, if you have not already sent them to the Senior Tutor, send the appropriate certificate(s) to me as soon as possible. The certificate will be in the College Office, and can be fetched at the beginning of Term.

I also enclose a Matriculation form: this has to be filled up in your own handwriting, and should be returned to me by early September at the latest. The medical form should be sent to the Master by 1st October. You will be matriculated on Tuesday, 18th October.

I shall be writing to you by the middle of September about rooms. Unless you have heard to the contrary from the Senior Tutor, you will have a room (or shared set) in College or in Holywell Manor (a large College Annexe about half a mile away), but it is not yet possible to make definite allocations.

Linen, marked with your name and initials, should be sent in a parcel, at least a week before Term, addressed to The Head Scout, Balliol College, Oxford, with your name on a piece of paper inside the parcel.

Yours sincerely,

R. v. Broadley

(Mrs. R.V. Broadley)

(From the College Secretary, Mrs. R.V. Broadley.)

Tel: Oxford 49601

BALLIOL COLLEGE,

OXFORD.

12 September 1960.

Dear Mr. Brennen.

I am writing to let you know that you have been allotted a

set of rooms

~~bed-sitting room~~

~~shared set of rooms (shared study, single~~
~~bedrooms)~~

in College for next Term.   The rent is £ 21 . 5s per Term.

Your luggage should be addressed to

Balliol College,
Oxford.

Sheets, etc. should be sent in a separate parcel marked
"Linen" addressed to the Head Scout, Balliol College, Oxford,
at least a week before coming into residence.   Your name should
be clearly indicated both inside and outside the parcel.

A copy of the EXAMINATION STATUTES 1960 will be available
for you, free of charge, when you come up.   Please call for it
in the College Office and I will then return your G.C.E. or other
certificates to you.

Yours sincerely,

R.v. Broadley

College Secretary.

Letter 1

19th May, 1960.

University Scholarship

Dear Mr. Brennen,

I acknowledge receipt of your letter of 19th inst. with the information that you will be going up to Oxford in October next, having obtained an Exhibition to Balliol College.

The necessary financial claim forms in respect of your first year at Balliol will be forwarded to you in due course.

Yours faithfully,

M. L. Maitland

Director of Education.

Mr. Christopher Brennen,
Cranagh Dhu,
MAGHERAFELT.

Letter 2

10th October, 1960.

University Scholarship Holder
Christopher Brennen

Dear Mr. Brennen,

Arrangements have been made to pay direct to Balliol College the fees account for the Michaelmas Term in respect of Christopher, less the caution money item of £30 for which you will be responsible. I understand this is a returnable deposit.

Would it be possible for you to furnish the financial claim form and supporting documents as soon as possible.

Yours faithfully,

M. L. Maitland

Director of Education

Mr. W. Brennen, F.R.C.S.
Cranagh Dhu,
MAGHERAFELT.

FIRST PUBLIC EXAMINATION

Preliminary Examination in Natural Science

Vacation 1960

SUBJECT (1): MATHEMATICS

PAPER I

Time allowed: 3 hours

1. Define the differential coefficient of a function. If $y = t \log t$ and $x = t \sin \alpha t$, obtain from first principles the derivative of y with respect to x in terms of t.

2. Differentiate with respect to x,

$$x(x^2+1)^2(x+1)^3, \qquad \sec^{-1}\sqrt{x}, \qquad x^{\sin(x^2)}.$$

3. If u and v are functions of x, find $\dfrac{d^2}{dx^2}\left(\dfrac{u}{v}\right)$. By taking u equal to x, or otherwise, show that $v = \dfrac{x}{Ax+B}$ satisfies the differential equation

$$xv\frac{d^2v}{dx^2} + 2v\frac{dv}{dx} - 2x\left(\frac{dv}{dx}\right)^2 = 0,$$

where A and B are arbitrary constants.

4. State a set of conditions sufficient to ensure that the function $y = f(x)$ has a minimum at $x = x_0$. Which of these conditions is also necessary?

Show that the function $\dfrac{x(x-a)}{(x-1)^2}$ has one turning value only and that it is a minimum for $a < 1$. What happens for $a = 1$?

5. Two ships are steaming with equal velocity u along straight courses which are inclined at an angle θ ($\neq 0$). If at a certain instant they are distant a and b from the intersection of their courses, find their minimum distance apart.

Show also that this is the same minimum distance for two ships with equal constant accelerations starting from rest distant a and b from the intersections of their courses.

6 Z 6

Turn over.

6. Prove that, if $0 < x < \pi/2$,
$$\tan x > x > \tanh x.$$

Show also that $\dfrac{\tan x + \tanh x}{2} > x$.

7. Verify that $V = \dfrac{z \tan^{-1} y/x}{(x^2 + y^2 + z^2)^{\frac{3}{2}}}$ satisfies the partial

differential equation $\dfrac{\partial^2 V}{\partial x^2} + \dfrac{\partial^2 V}{\partial y^2} + \dfrac{\partial^2 V}{\partial z^2} = 0$.

8. Sketch the curve given by
$$y = a \operatorname{sech} u,$$
$$x = a(u - \tanh u),$$

where u is a variable parameter.

Find the equation of the tangent at the point P on the curve with parameter u_0. Let this tangent meet the x axis in Q. Prove that $PQ = a$ for all values of u_0.

9. The time of one complete oscillation of a clock's pendulum is given by $T = 2\pi\sqrt{(l/g)}$ where l is the length of the pendulum and g is the local acceleration due to gravity. g is inversely proportional to R^n, where R is the distance from the centre of the earth and $n > 0$. If taken in an aeroplane 10 miles above sea level, find the percentage change in T. (Radius of the earth is 2,000 miles approximately.)

T is 1 second at sea level. Will the clock gain or lose in the aeroplane and by how much in a day? What percentage change of pendulum length would make the clock keep correct time?

FIRST PUBLIC EXAMINATION

Preliminary Examination in Natural Science

Vacation 1960

SUBJECT (1): MATHEMATICS

PAPER II

Time allowed : 3 hours

1. Integrate with respect to x:

$$\tan^2 x, \quad \frac{1}{x\sqrt{(2x-1)}}, \quad e^{3x}\cos 2x, \quad \frac{x}{x^4-1}.$$

2. Evaluate the following integrals:

(i) $\displaystyle\int_0^1 \frac{dx}{1+2x\cos\alpha+x^2}, \quad \sin\alpha \neq 0$

(ii) $\displaystyle\int_0^1 \left\{\log\left(\frac{1}{x}\right)\right\}^3 dx$

(iii) $\displaystyle\int_0^{\frac{1}{4}\pi} \frac{d\theta}{\sqrt{(\sin\theta\cos^7\theta)}}.$

3. Evaluate $\displaystyle\int_0^{\frac{1}{2}\pi} \frac{dx}{a+b\sin x}$, where

(i) $0 < a < b$,   (ii) $0 < a = b$,   (iii) $0 < b < a$.

4. Prove that, if Ox, Oy, Oz are perpendicular axes and there is a distribution of matter lying entirely in the plane Oxy, then the moment of inertia about Oz is the sum of the moments of inertia about Ox and Oy.

A rigid body consists of three equal circular hoops of radius a lying in three perpendicular planes, each pair of hoops having a common diameter. Find the radius of gyration about one such diameter.

6 Z 5   **Turn over.**

5. A spheroid is formed by rotating the ellipse

$$\frac{x^2}{a^2}+\frac{y^2}{b^2}=1 \quad (a^2 > b^2)$$

about the line $x = 0$.

Find the volume of the spheroid, and show that the mean distance of its interior from the axis of symmetry is $\frac{3}{16}\pi a$.

6. Solve the following differential equations:

(i) $\quad \frac{1}{2}x\frac{dy}{dx}+1 = \frac{1-y}{1+e^y}$

(ii) $\quad x\frac{dy}{dx}+\frac{y}{\log x} = 2.$

7. The variation of x with time is described by the equation
$$\ddot{x}+2k\dot{x}+\mu^2 x = 0.$$
Show that, if $k = 0$, x varies periodically with time, and find the period.

Find, and sketch, the solution if $0 < k < \mu$ and $x = 0$, $\dot{x} = V$ at $t = 0$.

8. Find the position of the centre of mass of a uniform solid hemisphere of radius a.

Show that the centre of mass of a uniform hemispherical shell of radius a is at a distance $\frac{1}{2}a$ from the centre of the sphere.

9. A particle of unit mass moves along the positive x axis, and is subject to a force given in magnitude and direction by $\lambda v \log x$, where λ is a positive constant and v is the velocity of the particle in the direction of increasing x. Initially the particle is at $x = 1$ and has a velocity $v = -\lambda$. Find the velocity at any subsequent time as a function of x, and hence find x as a function of time.

Show that an infinite time must elapse before the particle reaches O.

BALLIOL COLLEGE
RULES

STUDIES

STUDY BEFORE RESIDENCE

Gentlemen admitted to the College may be required to do work set by the College in the interval between admission and residence, and to be examined in it.

FRESHMEN'S ESSAYS

Freshmen are required, unless specially excused by the College, to write an English Essay weekly during at least one of their first two terms on subjects announced by notice posted in the Front Lodge, or set by their Tutors.

COURSE OF STUDY

All undergraduates are required to read for Honours in one of the Final Schools, or, with the leave of the College, for Diplomas or Research Degrees.

CHANGE OF COURSE

An undergraduate who wishes to change his course of study must apply for the permission of the College through his Tutor.

EXAMINATIONS

PRELIMINARY EXAMINATIONS

Candidates for any Preliminary Examination are expected to pass such examination at the earliest date allowed by the University regulations.

The College may at any time require any undergraduate to discontinue residence on the grounds of unsatisfactory work or failure in examinations.

ENTRY

Undergraduates are themselves responsible for entering their names for University Examinations at the times announced by the College Office.

FEES

Examination fees must be paid to the College Office when names are entered.

SCHOLARSHIPS, EXHIBITIONS AND PRIZES

1. ENTRANCE SCHOLARSHIPS AND EXHIBITIONS

TENURE

Entrance Scholarships and Exhibitions are tenable only during residence. The majority are tenable for two years only in the first instance.

RENEWAL

Entrance Scholarships and Exhibitions can be renewed for a further period of either one or two years (depending upon the course which the undergraduate is pursuing), if the College is satisfied with the industry and good conduct of the holder.

EXTENSION

They cannot be extended for a fifth year unless the applicant intends to read for a second Final Honour School, or submits with his application a scheme of work drawn up after consultation with his Tutor and approved by the College. Such applications can be granted only if the Scholarship and Exhibition Fund permits.

CHANGE OF COURSE

If a Scholar or Exhibitioner wishes to pursue a course of study other than that in which he has obtained his Scholarship or Exhibition, he must apply through his Tutor for the leave of the College.

PAYMENT

Scholars and Exhibitioners are paid by deduction from Battels.

EXPENSES

SUMMARY

For an average term the cost of residence, tuition, etc., for an undergraduate living in College may be as low as £125 (£137 in the case of scientists and medical students). The average may be taken as approximately £132 to £144. The difference of cost depends partly on the rent of the room which is occupied, and partly on the undergraduate's habits of living.

In addition to the above costs there are certain non-recurrent charges payable on coming into residence, on taking examinations, and on taking a degree.

Certain gratuities to College servants are customarily recognised.

No provision has been made in these figures for such items as books, entertainment, etc., which vary very much with the individual. For an average undergraduate these items need not exceed about £30 per annum. Other personal expenditure, e.g. on clothes and travel, has not been taken into account.

Most important.—No provision has been made in these figures for expenses during vacations. It may be helpful, particularly to students from overseas, to know that the total minimum cost of a year's residence in Oxford is estimated to be in the region of £650 (exclusive of all travelling expenses).

I. Non-recurrent Charges

A. Payable on coming into residence.   £   s.   d.

(i) To the University.

	£	s.	d.
Matriculation Fee	10	0	0

(ii) To the College.

	£	s.	d.
Entrance Fee	20	0	0
Caution Money (see notes)	30	0	0

(iii) To College Clubs.

	£	s.	d.
Junior Common Room: Entrance Fee	1	0	0
Athletic Clubs: Entrance Fee	1	0	0
TOTAL:	62	0	0

B. Payable at other times.

(i) On taking Examinations.

	£	s.	d.
First Public Examination	5	0	0
Second Public Examination: Final Honour Schools	8	0	0

(ii) On taking B.A. Degree.

	£	s.	d.
University Fee	7	10	0
College Fee	5	5	0

II. Recurrent Charges (terminal)

A. Fixed charges.

(i) To the University: Dues

	£	s.	d.
To the University: Dues	4	4	0

(ii) To the College:

	£	s.	d.
Establishment	24	0	0
Tuition, Lectures, etc.			
Non-Scientists	26	0	0
Scientists	38	0	0
Consolidated Room Charge (including rent)			
Lowest	15	0	0
Highest	28	0	0
Baths		15	0

(iii) To College Clubs:

	£	s.	d.
Junior Common Room	1	5	0
Athletic Clubs	2	16	8
TOTAL: Lowest	74	0	8
Highest	99	0	8

B. Variable charges:

	£	s.	d.
(i) Meals (breakfast, lunch and dinner in Hall, with some allowance for tea), say	31	10	0
(ii) Laundry, say	2	10	0
(iii) Fuel, say	4	0	0
(iv) Expenditure at College Stores, Buttery, etc. (Tobacco, Wine, Fruit, Stationery, etc.), say	5	0	0

C. OPTIONAL SUBSCRIPTIONS. There are other subscriptions which an undergraduate may wish to make, for instance, to the College Musical Society, Balliol Boys' Club, the Oxford Society, British United Provident Association, etc. The premium of £3 3s. 0d. per annum will be paid by the College on behalf of those joining this Association and a charge made of £1 1s. 0d. terminally in Battels.

NOTES

I. NON-RECURRENT CHARGES

1. ENTRANCE FEE.—An entrance fee of £20 is payable on coming into residence. Every member of the College when he leaves will (i) become a member of the Balliol Society without further payment, and (ii) receive the *College Record* and such other College news, etc., as may from time to time be published.

2. CAUTION MONEY.—Undergraduates pay a deposit of £30 Caution Money. £20 will be credited on the final Battel bill on ceasing to reside, the other £10 will be retained by the College for the purpose of paying dues on behalf of those who wish to become eligible for the M.A. or other degrees. Of this £10, £5 would be returnable to those not wishing to continue the payment of dues but who desire to retain their names on the College Books and to be entitled to battel when in Oxford and, if circumstances permit, to occupy a room in College.

II. RECURRENT FIXED CHARGES

1. DUES. (i) UNIVERSITY DUES for undergraduates in residence amount to £4 4s. a term. If in any term an undergraduate is not in residence, or if he ceases to reside after three years, Dues are reduced to 10s. After payment of Dues at either £4 4s. or 10s. a term for four years or after taking a degree, Dues are reduced to 6s. 8d. a term.

(ii) COLLEGE DUES. Members of the College whose names are on the University Books on going down pay College Dues of 16s. a term until the completion of twenty terms from Matriculation, after which Dues are reduced to 2s. 8d. a term.

Members of the College on going down should particularly note that the payment of Dues on their behalf by the College ceases as soon as their Caution Money has been exhausted.

2. THE TUITION FEE covers the general direction and supervision of studies, lectures, classes, and private instruction, inside the College; attendance at lectures in other Colleges and in the University; and most of the normal charges for special instruction outside the College. The normal terminal charge is £26. In addition, scientists pay through the College their University Laboratory fees (usually £12). In other subjects involving particularly heavy external fees, a portion of these fees may be charged in addition to the normal fee.

Bachelors of Arts reading for a further Honour School (including B.C.L.) are charged the normal terminal fee of £26.

B.Phil. Students. The charge is as follows: *1st Year:* £20 per term (of which £15 is available for the payment of outside supervision and tuition fees). *2nd year:* £5 per term, in addition to any fees paid out on their behalf.

Research Students. All research students pay a terminal fee of £5, in addition to any fees paid out on their behalf.

5

Members of the College reading for a Diploma pay a terminal fee of £5 (in addition to any fees paid out on their behalf), except that, where they are receiving full tuition in the College, they pay the normal terminal tuition fee of £26.

Probationers for the Overseas Service and certain other Public Services, who have taken Honours in a Final School after not less than two years' residence as members of the College, pay no tuition fee to the College during their probationary year; others pay £1 13s. 4d. a term. All probationers refund to the College all fees paid out on their behalf by the College.

3. THE ESTABLISHMENT CHARGE is £24 a term. This is reduced to £12 a term (*a*) after four years' residence; or (*b*) after one year's residence in the case of a research student who has completed a full degree course elsewhere; or (*c*) in their first year of research to those who, having completed a degree course elsewhere, and having read a Final Honour School at the College, then proceed to a research degree; or (*d*) to any research student who is married. It represents a contribution towards the maintenance of the Chapel, Library, Garden, Hall, Lecture Rooms, and other parts common to members of the College, including rates, taxes, heating, lighting, insurance, College dues, administration expenses, porters and waiters.

4. THE CONSOLIDATED ROOM CHARGE covers the rent of fully furnished rooms, their upkeep and decoration, normal depreciation of furniture, service, lighting, room rates and taxes, etc At present the terminal charge is £15—£28, according to the rooms occupied.

5. THE CLINICAL MEDICAL COURSE. Members of the College reading the clinical medical course are charged, as recurrent yearly fees, only an Establishment Charge of £18 and a Junior Common Room subscription of £3 15s. 0d.

PAYMENTS

BATTELS (i.e. College bills) are sent out during the Vacation and should be paid *as soon as possible after receipt.* If they are not discharged by noon on the first Saturday of Full Term, permission to postpone payment must be obtained from the Master.

NOTE: The College has Eleemosynary Funds from which grants are made to those in proved need of assistance in so far as the income of the Funds permit.

MEALS

TIMES: Meals are served in Hall at the following times:—

Breakfast: from 8.15 a.m. to 8.45 a.m. on week-days.
8.30 a.m. to 9.0 a.m. on Sundays.
Lunch: from 12.45 p.m. to 1.30 p.m.
Dinner: at 6.45 p.m. and at 7.30 p.m.

CHARGES:

Breakfast: At present 2/6 or 3/3 a day.
Lunch: A buffet lunch à la carte.
Dinner: At present 4/6 a day.

ATTENDANCE:

Breakfast: All residents in College are charged 17/6 or 22/9 a week.
Lunch: Optional.
Dinner: All undergraduates in their first year are charged for a minimum of 46 dinners during term.

Undergraduates resident in College and Holywell Manor during their second and third years are permitted to sign off for 15 dinners and are charged a minimum of 41 dinners during term.

Out-Residents during their second and third years are charged a minimum of 26 dinners during term.

Graduates and undergraduates not included in the above categories should apply to the Dean.

All those wishing to take their names off dinner (subject to the above) must sign the book in the J.C.R. by 2 p.m. Those doing so will have a rebate of 4/6 for dinner. Those who do not sign off and do not come in will be subject to the usual charges.

Out-Residents are required to sign on if they intend dining in Hall on Sundays: those omitting to do so are charged 6d. extra.

DRESS. Gowns should be worn at Dinner in Hall by all members of the College, whether graduate or undergraduate. Failure to do so will involve a Library Sconce of 2/6.

ENTERTAINING

PRIVATE ENTERTAINING IN HALL

Members of the College may introduce guests to dinner in Hall by signing the book in the J.C.R. before 2 p.m. on the same day. No member of the College may introduce more than two guests to any meal.

When possible a Guest Table is provided for a special dinner at an additional charge. Any member of the College may invite not more than 2 guests, who must not be members of the College.

PRIVATE ENTERTAINING IN ROOMS

Private dinners and luncheons in rooms may be given if service can be provided. Leave must first be obtained from the Dean. Arrangements must then be made through the Domestic Bursar.

SOCIETY AND CLUB DINNERS AND LUNCHEONS

College Societies and Clubs intending to dine in College must first obtain leave from the Dean. All arrangements must then be made through the Domestic Bursar. College Societies and Clubs intending to meet or dine outside the College must obtain leave from the Dean at least eight days before the date proposed and before writing for permission from the Proctors.

PARTIES

Written leave must be obtained from the Dean or from the Praefectus of Holywell Manor for parties, at any hour, to which guests of either sex are invited. The Dean or Praefectus should be informed of the number of guests who will be present. If music is required, special leave must be obtained.

VACATION CHARGES

IN-RESIDENTS

All members of the College remaining up, and residing in College, during Vacation are at present charged 16/6 a day to cover three meals and room charges.

Except in the case of illness no allowance is made for meals which are not taken.

OUT-RESIDENTS

Any meals taken in College are charged for at the terminal rate.

ROOMS AND FURNITURE

GENERAL

Rooms are let furnished.

Rents and Consolidated Room Charges differ according to the size and position of rooms, and are charged terminally.

The following articles not supplied by the College will be required by In-College residents:—

3 dusters.	3 small towels.	Cutlery, plate, linen
3 bath towels.	3 glass towels.	and crockery for tea.
3 pillow cases.	3 pairs of sheets.	

All linen must be marked with the owner's name and initials, and should be sent to the College, addressed to the Head Scout, a week before coming into residence, or to the Porter, Holywell Manor, St. Cross Road, Oxford, if going into residence at Holywell Manor. The owner's name should be included in the parcel.

DAMAGE

The furniture provided in College rooms is the property of the College, and the tenant is responsible for any damage to it.

Residents in College are held accountable for any disturbance or damage which takes place in their rooms.

If walls are defaced with drawing-pins, nails or adhesive tape, redecoration will be charged to the occupant of the rooms.

ALTERATIONS AND REPAIRS

All alterations and repairs require the permission of the Domestic Bursar, and will be carried out by the College.

Members of the College are not allowed to make any alterations or additions to the electric circuits, or use any electrical appliance, or change the wattage of the lamps, without the leave of the Domestic Bursar.

All members of the College should extinguish their lights when they leave their rooms; failure to do so may involve a fine of 2/6.

When furniture or decorations are specially renewed at the request of a tenant, the cost will be charged to him in Battels.

PRIVATE FURNITURE

Before private furniture is brought into College rooms the Domestic Bursar's permission must be obtained. The College will not purchase such furniture.

SERVANTS

1. College Servants are forbidden to order goods from tradesmen for undergraduates without written authority from the Dean.

2. The College recognises the sum of £1 as a proper present to the Porter on taking a degree or on ceasing to reside at the University. The payment must not exceed £2.

3. Certain gratuities to College Servants are customarily recognised, besides which additional gratuities may properly be given in respect of special services.

4. Messages carried by the College Messenger are charged in Battels at 1d. each.

LEAVE OF ABSENCE

Undergraduates may not be absent from Oxford during term without leave.

(a) Leave for individuals:
  Leave for the day is given by the applicant's Tutor.
  Late leave: leave to return to College or Holywell Manor after midnight is given by the Dean or Praefectus. The form, obtained from the Dean or Praefectus, is handed in at the Lodge before leaving.
  Exeat: leave of absence for the night is given by the applicant's Tutor and the Dean or Praefectus. An exeat form, procurable at the Lodge, is signed first by the Tutor and then by the Dean or Praefectus: it is handed in at the Lodge before leaving.

(b) Leave for College teams:
  Leave for the day will be granted to College teams for matches out of Oxford on the following conditions: at the beginning of term the Captain of each Club may apply to the Dean for leave for one out-match, and two days before a match so approved a list of those playing must be sent to the Dean.

(c) Law Dining Terms:
  When the whole of the Law Dining Term falls within the University Full Term members of the College keeping their Law Terms are allowed to go down from Friday afternoon to Sunday evening, or from Saturday afternoon to Monday evening, after notifying the Dean or the Praefectus of Holywell Manor.

CHAPEL SERVICES

The following Services are held in the College Chapel:—

ON SUNDAY.	Holy Communion, 8.15 a.m.
	Evensong, 6 p.m.
ON WEEKDAYS.	Evening Prayers, 10.15 p.m.

On Sundays, Commoners and Exhibitioners attending Chapel wear gowns, Scholars wear surplices.

On Weekdays, all wear gowns.

LIBRARY

The hours at which the Library is open will be posted on the Library door.

Gentlemen are asked to study the Library Rules, which are posted in the Library, and to observe them. Readers must record on the vouchers provided the details of the books they borrow from the Library: the breach of this rule is a serious offence.

In any difficulty, application should be made to the Sub-Librarian, from whom copies of the Rules may be obtained.

MISCELLANEOUS

VACATION RESIDENCE

Gentlemen wishing to reside in Oxford during the Vacation, whether in College, Holywell Manor or in lodgings, must obtain the permission of the Master. Application should be made to the Domestic Bursar during the periods announced each Term on the Notice Board in the Lodge.

ILLNESS

An undergraduate who is ill must inform his Scout before 9 a.m. in order that his name may be placed on the Aeger List. If an undergraduate is confined to his rooms for more than one day he must call in the College Doctor.

Any undergraduate who has occasion to take medical advice about his health, or meets with an accident necessitating such advice, is expected to acquaint the Dean that he has done so. The same applies to undergraduates who, before coming up or during vacations, undergo a course of medical treatment which has to be continued in Oxford.

SOCIETY MEETINGS

Permission must be obtained from the Dean for the formation of new College Societies, for all meetings of University Societies held in College, for all meetings at which members of other colleges are present by invitation, and whether the meetings are organised privately or by a College Society.

GUESTS

Guests may spend the night in College or Holywell Manor in Guest Rooms. If not available, camp beds may be hired from the Lodge.

WOMEN VISITORS

The entertainment of ladies in College or Holywell Manor is forbidden before 12.0 noon, and after 10.30 p.m., without special leave of the Dean or Praefectus. Before 12.0 noon, ladies may enter the College only to attend lectures and tutorials.

Ladies leaving the College or Holywell Manor between 7.30 p.m. and 10.30 p.m. must be accompanied by the undergraduate who has entertained them, and he must sign his name in the book at the Lodge when they leave.

Ladies are not allowed in the Stores.

MUSIC

Music is allowed in College or Holywell Manor only between the hours of 1—5 and 7.30—9.30 p.m., unless special permission is granted by the Dean or Praefectus.

No pianoforte, gramophone, or wireless instrument may be introduced into College or Holywell Manor without permission from the Dean or Praefectus.

Leave will not be given for a wireless instrument unless the applicant produces a wireless licence, and complies with the College regulations about installation; outside aerials are not allowed.

Firearms

No weapons or ammunition of any kind may be brought into College or Holywell Manor except by leave of the Dean or Praefectus.

Fire

Bonfires are prohibited.

Fireworks and inflammable liquids must not be introduced into College or Holywell Manor on any account; the servants are required to report to the Dean or Praefectus any infringement of this rule.

It is essential to the safety of the College and Holywell Manor that Fire Extinguishers should not be improperly used. Any member of the College who discharges one without good cause will be fined £5, and will, in addition, have to pay for the repair of any damage which has been done.

Bicycles

Gentlemen wishing to keep bicycles in College are required to register their bicycles with the Head Porter and to use the storage accommodation provided, the charge for which is 10/- per Term.

Bicycles must not be left in the Porches, nor ridden in the Quadrangles.

Cars and Motor-Cycles

Members of the College *in statu pupillari* (i.e. until they have taken their M.A. degree) are forbidden by proctorial regulations:—
   (*a*) To keep a motor vehicle without registering it at the Proctors' Office.
   (*b*) To drive in the Oxford area in non-registered motor vehicles, i.e. they cannot borrow or hire to drive any non-registered vehicle.
   (*c*) To hire any motor vehicle (save a taxi), or borrow one, without the written leave of the Dean.

Leave to apply to the Proctors for permission to have a car or motor-cycle in Oxford must be obtained from the Dean. Leave will not normally be given to an undergraduate in his first year.

No motor vehicle may be brought to Oxford without previous permission being obtained from the Dean.

Tradesmen

Tradesmen are not allowed to enter College rooms except by permission of the Domestic Bursar, on request of the tenant of the rooms.

Gowns

Gowns must be worn in Chapel (except by Scholars on Sundays, who then wear surplices), at dinner in Hall, at Lectures and Tutorials, and at official interviews with the Master, Fellows or Tutors.

Dean

The Dean will normally be in his room on weekdays from 1.0 to 1.15 p.m. to deal with requests for leave and any other Dean's business.

July 1960.

[*Subject to revision.*]

BALLIOL COLLEGE

Freshmen: Michaelmas Term 1960

		Adams, F.R.	Ruskin College
	s	Ades, T.R.	Eton
		Alexander, J.B.A.	Westminster
B.8	e	Allsopp, C.J.	Bootham School, York
C.18	r	Ashman, R.F.	Wabash College, Indiana
	R	Atkinson, J.R.	University of Manchester
	O	Bakuname, L.K.	Tabora Government School, Tanganyika
C.1	r	Balabanian, D.M.	Harvard University
	s	Barnes, T.D.	Queen Elizabeth Grammar School, Wakefield
		~~Barry, J.A.~~	~~Gordonstoun~~
C.20		Besant-Jones, J.E.	St. Peter's School, Bournemouth
		Bevan, N.V.	Shrewsbury
C.21		Blackburne, J.S.	Hymers College, Hull
C.9		Bleasby, P.F.	High Pavement Grammar School, Nottingham
D.11	e	Brennen, C.	Rainey Endowed School, Magherafelt, N.I.
D.20		Brice, P.	Reigate Grammar School
	O	Burengelo, F.K.	Makerere College
C.4		Byrom, T.	Bedales
	R	Cardnell, P.H.M.	King's College, University of London
D.17		Cartland, J.B.	Rossall
D.21	s	Colligan, J.A.	King's School, Canterbury
	s	Crabtree, J.R.	Canford
C.2	s	Crothers, D.S.F.	Rainey Endowed School, Magherafelt, N.I
B.7	s	Dallas, D.M.	Royal Grammar School, Newcastle upon Tyne
		Davis, B.H.	University College of Wales, Aberystwyt
B.3		Donovan, L.J.	Magdalen College School
A.21	e	Dyson, R.D.	Huddersfield New College
E.7		Easton, D.J.	Stowe

			Egerton, M.B.	St. Clement Danes Grammar School
	R		Evans, D.A.	St. John's College, Cambridge
B.14		√	Evans, M.	Poole Grammar School
D.9		√	Fixter, L.M.	Sir William Turner's Grammar School, Coatham
B.12	e	√	Fox, W.M.	Netherthorpe Grammar School
		√	Fremantle, E.V.E.	Eton
	e	√	Fulton, K.A.O.	Eton
	s	√	Gatehouse, D.F.	Royal College of Music
	e	√	Gilkes, P.S.	Shrewsbury
B.6	s	√	Gill, J.D.	Nottingham High School
C.17		√	Glen A.M. de C.	Stowe
	B	√	Goldsworthy, D.J.	University of Adelaide
E.1	s	√	Gordon, D.S.	Clifton
	B		Griffin, K.B.	Williams College, Williamstown, Mass.
A.2		√	Griffith, I.P.	Roundhay School, Leeds
C.11	s	√	Gutch, C.J.W.	Winchester
	e	√	Gwynne, P.	King's College School, Wimbledon
		√	Hall, J.	Roundhay School, Leeds
E.20		√	Hanslip, T.W.	Harrow Weald County Grammar School
A.5	e	√	Hay, R.	George Watson's College, Edinburgh
			Herrick, G.G.	Harvard University
C.10		√	Hodge, S.M.G.	Chigwell School
	s	√	Holden, A.L.	Dulwich College
	s	√	Holland, S.K.	Christ's Hospital
	s	√	Holt, M.	Bradford Grammar School
			Horsfield, D.F.M.	Chesterfield Grammar School
A.1		√	Hutton, J.	Poole Grammar School
			Ingleby, J.C.	Poole Grammar School
	O		Irwin, M.D.R.	St. John's College, Cambridge
C.7	e	√	Jeffery, K.C.	Queen Elizabeth's Grammar School, Ashbourne
		√	Johnson, P.T.	Wellington College
C.23		√	Joshi, V.R.	University of Bombay
	e	√	Keen, P.G.W.	Reading School

			Kentleton, J.A.	Finchley Grammar School
	e	✓	Ker, I.T.	Shrewsbury
	o		Kuta, T.	Keffi Government College, N. Nigeria
D.4		✓	Lascelles, P.J.	Eton
D.10		✓	Lawton, P.J.	Sir William Turner's Grammar School, Coatham
D.8	r	✓	Legassick, M.C.	University of Cape Town
A.14	s	✓	Leggett, T.D.	Beaumont College
		✓	Lewis, J.M.	King Edward VI School, Southampton
A.4		✓	Lidwell, M.O.	Mill Hill
		✓	Lloyd, C.	Rossall
		✓	Macfarlane, J.D.	Selhurst Grammar School
	eR	✓	McLaughlan, R.L.	University of Glasgow
E.17		✓	Mathew, T.D.	Downside
A.18		✓	Miller, W.E.	Loretto
			Mohamad, A.I.	University of Khartoum
	s	✓	Needham, B.D.	King Edward VII School, Sheffield
B.1		✓	Newman, C.H.	Yale University
D.7	r	✓	Nimetz, M.	Williams College, Williamstown, Mass.
C.19		✓	Norway, Crown Prince Harald of	Royal Norwegian Military Academy
	o		Okafor, A.E.	University College, Ibadan
D.1		✓	Osborn, F.A.	Leys School, Cambridge
C.3		✓	Parrott, M.E.	Tonbridge School
	s	✓	Parsons, T.M.C.	Bradfield College
E.6		✓	Pay, A.F.	Crossley and Porter School, Halifax
C.6		✓	Peacock, A.	Sir George Monoux Grammar School, Walthamstow
CD.24		✓	Platts-Mills, T.A.E.	University College School
E			Potocki, P.	Colegio Ida, Madrid
		✓	Read, P.	Royal College of Music
			Redman, D.R.	St. John's College, Cambridge
	s	✓	Reeve, M.D.	King Edward's School, Birmingham
C.14	s	✓	Rennard, D.G.	Bradford Grammar School
E.25	r	✓	Rodrick, T.L.	University of Colorado, U.S.A.
E.4		✓	Seigal, A.M.	Clifton

		Name	Institution
		✓ Selzer, M.I.	Bedales
	R	Slater, B.H.	St. John's College, Cambridge
	B	✓ Sluga, H.L.	University of Munich
	R	Speden, R.N.	University of Otago, New Zealand
E.11	r	✓ Stager, D.A.A.	Ontario Agricultural College and Johns Hopkins University
		Street, D.G.	Poole Grammar School
		✓ Sykes, W.G.D.	Worksop College
B.4	e	✓ Symonds, R.W.	Magdalen College School, Oxford
		Tarrant, J.M.	St. John's College, Cambridge
		Taylor, S.	University of Bristol
	O	Taylor-Lewis, P.E.O.	Fourah Bay College, Sierra Leone
	R	Thomas, M.A. Ward	University of Sydney
		Thompson, J.J.	St. John's College, Cambridge
A.22	r	✓ Thurow, L.C.	Williams College, Williamstown, Mass.
		Trouern-Trend, J.B.G.	St. John's College, Cambridge
		Tuck, M.A.R.	University of St. Andrews
C.15		✓ Usborne, J.C.	Charterhouse
A.15	s	✓ Vanston, N.J.	Thornleigh Salesian College
		Vernalls, D.F.	Caerphilly Grammar Technical School
D.12		✓ Walsh Atkins, A.G.	Mill Hill
E.12		✓ Walter, N.M.R.E.	Beaumont College
B.22	s	✓ Warwick-Evans, L.A.	King's School, Canterbury
	s	✓ Watson, I.	Tynemouth School
		✓ Wilson, R.C.	University College School
E.18	e	✓ Winder, A.D.H.	Downside
	O	Woode, D.R.	University College of Sierra Leone
	R	✓ Ziegler, A.M.	Massachusetts Institute of Technology

BALLIOL COLLEGE

H.M. = Holywell Manor
L.P. = Library Passage
L.S. = Library Staircase

M.L. = Master's Lodgings
 D. = Dicey
( ) = Not in residence
Dons underlined.

Michaelmas Term: 1960

Abbott, G.R.A.		Bingle, R.J.	
✓ Abernethy, J.D.W.		✓ Blackburne, J.S.	16.7
Adams, F.R.	3.8	Blakely, D.M.P.	
Ades, T.R.	6.4	✓ Bleasby, P.F.	11.7
✓ Agrell, P.H.	2.4	Blenkinsop, P.J.	
✓ Alberti, K.G.M.M.		Board, D.F. Miles	H.M. 23
✓ Albery, W.J.		Bohlen und Halbach, A.A.W. von	
✓ Alexander, C.D.	H.M. 4	Bowersock, G.W.	
Alexander, J.B.A.	14.6	Boyd-Carpenter, M.H.	H.M. 7
Allen, F.J.D.		✓ Brahams, M.H.	15.10
Allison, J.R.	4.3	Braterman, P.S.	
Allison, Prof. P.R.		✓ Brennen, C.	15.13
✓ Allsopp, C.J.	21.4	Brett, M.	H.M. 31
✓ Arblaster, A.E.		✓ Brice, P.	20.8
Armstrong, A.G.A.M.		Briggs, T.C.	2.11
✓ Ashman, R.F.	13.5	✓ Brink, Dr. D.M.	2.1
Aspinall, J.B.		✓ Brooke, H.	
Atkinson, J.R.	H.M. 6	Brown, G.M.	
Auchincloss, K.	18.4	Brown, M.S.	
		Bryer, A.A.M.	10.5
Baird, B.M.		Bryson, Mr. J.N.	L.S.1
Bakuname, L.K.		✓ Buckman, P.M.A.	12.2
✓ Balabanian, D.M.	4.4	Bungay, G.T.	
(Balogh, Dr. T.	19.4)	Burengelo, F.K.	
Bamford, D.J.		✓ Burge, P.	H.M. 10
Banfield, C.P.		Burrow, Prof. T.	
Barnes, T.D.	2.10	✓ Buxton, Hon. M.C.	H.M. 18
Barry, J.A.	5.1	✓ Byrom, T.	22.6
Bartlett, R.S.			
✓ Bayley, P.M.		Cahill, A.E.	2.3
✓ Beastall, J.S.	13.1	Campbell, Mr. A.	L.P.3
✓ Beith, A.J.	D.12	Cann, R.W.	
Bell, Mr. R.P.	23.4	Cannon, G.J.	
Bellany, I.	21.7	Cardnell, P.H.M.	H.M. 34
✓ Besant-Jones, J.E.	5.1	✓ Carleton, P.J.	
Bevan, N.V.	H.M. 30	✓ Cartland, J.B.	H.M. 28
Bewsher, M.R.	H.M. 29	Catto, R.J.A.I.	10.10
Biggs, M.A.R.		Cawasjee, S.D.	D.10

✓ Dallas, D.M.   15.5
✓ Danby, P.C.G.
✓ Daubeney, P.E.G.
  ~~Davinson, D.R.~~
  Davies, D.R.   22.5
  Davies, H.E.   H.M.36
  Davies, J.T.
  Dawber, P.G.
  Dawkins, C.R.   H.M. G.R.
  Dennett, J.R.   7.2
✓ de Wet, Mr. J.S.   L.P.2
  Dick, Mr. M.W.   20.4
  Dickinson, B.H.B.   6.6
  Dignum, A.P.
  Doherty, R.D.
  Doman, B.G.S.
✓ Domestic Bursar
     (Mr. P.G. Bennett)   Bursary
                              Staircase 3
  Donaldson, R.H.
✓ Donovan, L.J.   22.6
  Douglas, I.
✓ Douglas-Hamilton, D.H.   3.11
  Doyle, M.   H.M.16
  Drumm, W.G.   16.5
  Duffy, C.J.
  Duncan, G.C.   10.11
  Dunham, A.C.
  Dyas, E.B.   2.9
  Dyson, E.T.
✓ Dyson, R.D.   21.11

  Clifford, A.A.   H.M.13
  (Cochrane, M.R.)
  Coles, N.A.
✓ Colligan, J.A.   15.24
  Cooke, M.H.
  Cooper, T.A.   20.2
  Corbett, Mr. J.P.   L.S.2
  Cottrell, J.
  Cousins, A.R.
  Cowper, C.J.P.
  Crabtree, J.R.   15.19
✓ Crook, C.T.   H.M.17
  Crooks, J.E.
✓ Cross, D.C.
✓ Crothers, D.S.F.   15.6
  Crow, J.W.

✓	Easton, D.J.	H.M.12
✓	Egerton, M.B.	20.3
	Elland, W.J.K.	7.4
	Elliott, C. Le C.	13.9
✓	Ellis, R.I.	20.7
	Emerson, M.R.	2.7
	Engelhardt, H.W.	22.1
	English, Mr. S. (Schoolmaster Student)	18.2
	Entwistle, H.R.	
	Evans, D.A.	17.2a
	Evans, J.G.	
✓	Evans, M.	20.3
	Evans, P.G.	
	Fairbairn, D.H.L.	
✓	Fairbrother, J.R.F.	H.M.17
	Fairbrother, P.F.	7.1
	Faulkes, A.R.	
	Fawcett, T.	
	Field, F.	
	Finn, C.B.P.	
	Firth, J.A.	
✓	Fixter, L.M.	2.2
	Fluendy, M.A.D.	
✓	Forrest, M.C.L.	12.6
	Foster, B.E.	
	Foster, F.	
	Foster, J.C.B.	10.1
	Fowkes, F.B.M.	
✓	Fox, W.M.	15.12
	Francis, M.J.O.	
	Franklin, M.J.B.	H.M. GRA
	Fremantle, E.V.E.	H.M.30
	Fulton, K.A.O.	3.9

	Games, G.A.C.	14.2
✓	Gardner, J.R.	1.1
	Gatehouse, D.F.	D.1
	George, R.	17.1
	Gibson, M.D.	
✓	Giles, R.N.	6.1
	Gilkes, P.S.	11.2
✓	Gill, J.D.	22.7
✓	Glen, A.M. de C.	14.3
	Glynn, D.R.	D.8
	Goitein, M.B.	H.M.34
	Goldsworthy, D.J.	

	Gomm, C.P.M.	
✓	Gordon, D.S.	21.12
	Gould, J.J.	3.11
✓	Gowrie, Earl of	H.M. 15
	Graham-Yooll, R.M.R.	
	(Greaves, M.R.)	
	Green, A.J.	3.7
✓	Gretton, F.	15.9
✓	Gretton, L.	
	Griffin, K.B.	
✓	Griffith, I.P.	20.5
✓	Gutch, C.J.W.	10.2
	Gwynne, P.	16.8

Horsfield, D.F.M.	22.3	
✓ Houston, G.A.C.D.	15.26	
Howell, P.A.	12.9	
Howie, J.M.		
Hunt, Dr. R.W.		
Hutton, C.P.	20.1	
Hutton, D.	19.6	
✓ Hutton, J.	21.6	
I'Anson, C.		
Ingleby, J.C.	22.3	
Irving, E.		
Irwin, M.D.R.		
Isaac, R.L.	22.4	
Jarvis, E.K.		
✓ Jefferies, R.D.		
✓ Jeffery, K.C.	15.3	
✓ Jennings, R.	H.M. 9	
Johnson, P.S.		
Johnson, P.T.	H.M.28	
Johnstone, H.D.		
Jones, C.P.	H.M.32	
Jones, C.R.	H.M. 3	
Jones, D.P.	H.M.26	
Jones, J.D.F.		
Jones, J.R.		
Jones, T.E.W.		
Jordan, C.K.		
✓ Joshi, V.R.	10.3	
Julian, K.		

✓ Hackman, R.J.	13.8	
✓ Haines, M.J.	15.23	
Hall, I.M.		
✓ Hall, J.	21.6	
✓ Hanna, A.W.	H.M. 4	
✓ Hanslip, T.W.	20.5	
Hare, Mr. R.M.	3.4	
Harlow, Prof. V.T.	19.7	
Harris, Mr. D.R.	13.6	
Harris, S.J.	H.M. 19	
✓ Hawkes, D.J.	D.6	
✓ Hay, R.	10.9	
Healey, J.M.		
Heath, C.R.	3.7	
Hein, P.L.R.		
Hellawell, J.M.	15.20	
Henderson, M.M.	H.M. 1	
Herlihy, F.E.	H.M. 24	
Herrick, G.G.	H.M. 12	
Heygate, R.J.G.		
Hill, Mr. J.E.C.	19.9	
Hillier, A.G.		
Hillman, J.		
Hoare, D.G.		
✓ Hodge, S.M.G.	11.7	
Hodgkin, L.H.		
✓ Hogarth, D.A.	15.24	
Holden, A.L.	21.3	
✓ Hole, J.A.P.	D.5	
✓ Holland, S.K.	4.5	
Holt, M.	15.16	
✓ Horrobin, D.F.	12.5	

Lewis, J.M.   H.M.27
Lewis, M.S.
Lewis, P.M.
Leys, Mr. C.T.   L.S.1b
✓ Lidwell, M.O.   13.2
Liley, N.R.
Lindsay, A.S.
Lloyd, C.   21.9
Lloyd, K.H.S.
Long, C.W.   H.M.38
Lonsdale, Mr. R.H.   2.5
Lovatt, R.W.
Luckham, A.R.
Lukes, S.M.

✓ Macaulay, A.T.
McDermott, D. St. J.
✓ McDonnell, J.B.W.   12.7
✓ MacDougall, J.D.   19.5
Macfarlane, J.D.   13.2
Mack, A.L.
McLaughlan, R.L.   15.1
✓ MacPhail, B.D.
Macphail, E.M.
Malhoutra, M.
Mandel, G.
Martin, R.
Mash, R.F.   H.M.33
Masters, G.R.J.

Keen, Mr. H.H.
Keen, P.G.W.   16.2
✓ Keene, D.W.   15.11
Kemp, J.M.
Kemp, M.B.   6.2
✓ Kennedy, J.P.   17.7
Kentleton, J.A.   11.3
Ker, I.T.   22.8
King, P.D.
✓ Kingslake, R.   21.13
~~Kingston, M.K.~~
Kitching, J.M.
Knight, A.S.B.
Knighton, J.J.L.   12.3
Kuhn, A.T.
✓ Kuhn, Dr. H.G.   11.5
Kuhn, N.J.
Kuta, T.

Lambert, D.L. (Skynner Student)   3.2
Lane, A.J.   11.8
Langton, D.M.L.   3.6
✓ Lascelles, P.J.   22.2
✓ Lawton, P.J.   H.M.27
✓ Leedham-Green, C.R.   13.3
✓ Legassick, M.C.   17.4
✓ Leggett, T.D.   15.2
✓ Leigh, J.T.P.
Lewis, E.L.   D.2
Lewis, J.E.

Page, Mr. E.	21.5
Pandya, R.V.	
✓ Parrott, M.E.	6.3
Parsons, R.A.R.	14.7
✓ Parsons, T.M.C.	4.1
✓ Pataudi, Nawab of	12.1
Paton, Professor W.D.M.	
Pau, R.	H.M.38
✓ Pay, A.F.	11.3
✓ Peacock, A.	21.1a
Pearce, T.E.V.	
Peel, J.D.Y.	13.4
Phizackerley, Dr. P.J.R.	20.6
✓ Platts-Mills, T.A.E.	H.M. 2
✓ Pockley, R.P.C.	15.22
Potocki, P.	
Potts, T.C.	
Powicke, Sir Maurice (Hon. Fellow)	
Pratt, J.M.	
Prest, Mr. J.M.	23.1
✓ Prince, J.H.	11.9
Pring, M.	16.9
Pritchard, R.E.	
Pugsley, P.F.	
Pullan, D.J.	
Qurashi, M.M.	

✓ Mathew, T.D.	17.6
Mayhew, D.W.	
✓ Meiggs, Mr. M.	19.1
Merringon, W.J.	12.4
✓ Miller, W.B.T.	H.M. 5
✓ Miller, W.E.	17.3
✓ Minns, J.C.	12.8
Minshull, J.A.	
Mitchell, M.N.	
Mohamad, A.I.	17.8
Morris, R.G.	
✓ Murray, R.	D.11
Murray-Rust, P.	17.2
Needham, B.D.	15.17
Newitt, M.D.D.	
✓ Newman, C.H.	H.M. 2
Nicholson, J.B.	H.M.25
Nimetz, M.	6.5
Norman, C.W.	
✓ Northam, A.H.	H.M.37
✓ Norway, Crown Prince Harald of	10.6
✓ Ogilvie, Mr. R.M.	19.3
Okafor, A.E.	
O'Neill, B.C.	
Onwood, D.P.	
Orr, G.R.	H.M.11
Orr, M.M.	16.6
✓ Osborn, F.A.	6.3

Sheehan, R.M.		
Sheil, A.G.R. ✓		
Sherwin, J.R.		
Shipp, A.B.	H.M.20	
Shroff, R.		
Sinfield, R.A.		
Slater, B.H.	21.14	
Slater, M.D.		
Sluga, H.D.	3.3a	
Slymon, B.D. ✓		
Smith, J.D.	H.M. 9	
Smith, L.J.		
Snow, N.S.		
Snow, P.J. ✓		
Southern, Mr. R.W.	M.L.3	
Speden, R.N.		
Spender̶x̶x̶J̶x̶C̶.		
Sperryn, A.N. ✓		
Stacey, D.N.		
Stager, D.A.A. ✓	10.4	
Stone, T.J.		
Stonor, R.T.C.G.S.	H.M.15	
Street, D.G.	3.3	
Streeten, Mr. P.P.	23.3	
Sudley, Viscount	21.10	
Swift, D.S.	21.2	
Sykes, W.G.D.	22.7	
Symonds, R.W. ✓	15.25	
Tarrant, J.M.	Ripon Hall	
Taylor, D.W.		
Taylor, S.		
Taylor-Lewis, P.E.O.	17.9	
Thomas, D. ✓	H.M.22	

R̶e̶a̶b̶x̶x̶F̶x̶		
Rea, G.F. ✓	15.14	
Read, P.	15.4	
Redman, D.R.		
Reeve, M.D.	2.8	
Rennard, D.G. ✓	15.21	
Reynolds, J.A.	7.3	
Rhodes, M.P.		
Rixon, J.L.	20.2	
Roberts, B.R.	13.7	
Robinson, R.J.	11.6	
Robinson, R.R.		
Robson, D.I.		
Rodrick, T.L. ✓	21.8	
Rodger, Mr. A.B.	23.2	
Rogers, S.J.		
Ross, G.A.		
Rowley, C.R.		
Rubenstein, R.E.		
Rutherford, G.M. ✓		
Ryan, A.J.	D.4	
Sammut, C.		
Scarlett, R.D.C. ✓	H.M. 5	
Scott, I.J.	14.1	
Scrutton, M.C.		
S̶e̶x̶t̶o̶n̶x̶x̶R̶x̶		
Seddon, Q.N.G.	D.3	
Seigal, A.M. ✓	19.8	
Selzer, M.I.	3.1	
Sharp, R.A.W. ✓	H.M.21	
Shaw, M.D.M.	2.6	

Werner, J.	
Wheeler, A.C.R.	
Wheeler, K.P.	
White, P.E.	15.18
✓ Whybrew, E.G.	H.M.35
✓ Wilkinson, C.D.W.	19.6
Williams, A.A.J.	14.8
Williams, Mr. E.T. (Warden of Rhodes House)	
Williams, Mr. G.W.	3.5
Williams, R.H.	
✓ Willis-Bund, Rev. F.L.M. (The Dean)	Back Gate
Willoughby, C.R.	H.M.20
Willoughby, R.J.	
Wilson, R.C.	11.4
✓ Winder, A.D.H.	3.10
Winkleman, B.L.D.	
Winkworth, A.S.W.	
Wise, M.J.G.	11.1
Wiseman, T.P.	
Woode, D.R.	
Wratten, S.W.H.	14.5
Wright, A.P.M.	
✓ Wyman, C.G.	D.9
Yates, K.	
Young, H.J.S.	
Zafiropulo, A.	10.8
Ziegler, A.M.	17.5

Thomas, G.C.	
Thomas, J.G.	16.4
Thomas, M.A. Ward	21.14
Thomas, R.R.	
Thompson, J.J.	22.9
Thorne, A.R.	
Thorne, W.I.J.	
✓ Thurow, L.C.	14.4
Tilney-Bassett, R.A.E.	
Trouern-Trend, J.B.G.	
Tuck, M.A.R.	22.9
Turner, G.	
Tylor, Mr. T.H.	L.P.1
Tyacke, N.R.N.	H.M.8
Tyzack, C.R.P.	
✓ Usborne, J.C.	D.7
✓ Usborne, T.P.	10.7
✓ Vanston, N.J.	15.8
Vernalls, D.F.	3.3
Waddell, E.W.	
Waite, N.S.	4.2
✓ Walker, J.W.A.	15.15
✓ Walsh Atkins, A.G	20.8
✓ Walter, N.M.R.E.	11.4
✓ Ward, D.J.	21.1
✓ Warwick-Evans, L.A.	15.7
✓ Waters, Dr. W.A.	18.3
Watson, I.	16.3
✓ Weatherley, J.C.	H.M.14

BALLIOL COLLEGE

FACULTY LIST

Michaelmas Term 1960.

CLASSICS

ADES, T.R.

BARNES, T.D.

FULTON, K.A.O.

HORSFIELD, D.F.M.

KER, I.T.

LLOYD, C.

PARROTT, M.E.

PARSONS, T.M.C.

REEVE, M.D.

WILSON, R.C.

MATHEMATICS

CROTHERS, D.S.F. ✗ 2

JOHNSON, P.T. ⅄

OSBORN, F.A. 2

RODRICK, T.L.

WINDER, A.D.H.

CHEMISTRY

BLEASBY, P.F.

DALLAS, D.M.

FOX, W.M.

GUTCH, C.J.W.

GWYNNE, P.

HUTTON, J.

STREET, D.G.

VANSTON, N.J.

PHYSICS (cont'd)

DYSON, R.D. 2

EGERTON, M.B. 2

~~GILL, J.D.~~

HALL, J.

LAWTON, P.J. 2

LEGASSICK, M.C. 1

LEGGETT, T.D.

LIDWELL, M.O.

MILLER, W.E. F

BIOLOGICAL SCIENCES

ASHMAN, R.F. (Physiology)

BLACKBURNE, J.S. (Physiology)

FIXTER, L.M. (Biochemistry)

GRIFFITH, I.P. (Biochemistry)

HOLDEN, A.L. (Biochemistry)

MACFARLANE, J.D. (Physiology)

PLATTS-MILLS, T.A.E. (Physiology)

REDMAN, D.R. (Medical Clinical)

TROUERN-TREND, J.B.G. (Medical Clinical)

LAW

EASTON, D.J.

EVANS, M.

HODGE, S.M.G. 1st

PAY, A.F.

SYKES, W.G.D.

PHYSICS	HISTORY
ALLSOPP, C.J. 2	BRICE, P.
COLLIGAN, J.A. 2	CRABTREE, J.R.

HISTORY (cont'd)	P.P.E. (cont'd)
DIRIR, Y.	NEWMAN, C.H.
DONOVAN, L.J.	NIMETZ, M.
FREMANTLE, E.V.E.	PEACOCK, A.
GILKES, P.S.	STAGER, D.A.A.
GLEN, A.M. de C.	THUROW, L.C.
HAY, R. 2nd	WALTER, N.M.
HOLLAND, S.K. 1st	J.D. GILL 1st
INGLEBY, J.C.	

RESEARCH

KENTLETON, J.A.	ATKINSON, J.R. (Chemistry)
LASCELLES, P.J.	CARDNELL, P.H.M. (Chemistry)
MATHEW, T.D.	EVANS, D.A. (Physics)
MOHAMAD, A.I.	McLAUGHLAN, R.L. (History)
SEIGAL, A.M.	SLATER, B.H. (Math. Logic)
SELZER, M.I.	SPEDEN, R.N. (Pharm.)
SYMONDS, R.W. 2nd	THOMAS, M.A.W. (Biochemistry)
VERNALLS, D.F.	ZIEGLER, A.M. (Geology)

ENGLISH

OVERSEA SERVICES COURSE

ENGLISH		OVERSEA SERVICES COURSE
BYROM, T. 1st	m	BAKUNAME, L.K.
	m	BURENGELO, F.K.
KEEN, P.G.W. 2nd		IRWIN, M.D.R.
	m	KUTA, T.
WATSON, I. 1st	m	OKAFOR, A.E. (Diploma in Public and Social Administration)
		TAYLOR-LEWIS, P.E.O.
	m	WOODE, D.R.

P.P.E.

BARRY, J.A.

CARTLAND, J.B.

GORDON, D.S.

HERRICK, G.G.

HOLT, M.

JEFFERY, K.C.

JOSHI, V.R.   *1st.*

LEWIS, J.M.

NEEDHAM, B.D.

MISCELLANEOUS

B.PHIL.

BALABANIAN, D.M.   (?)

GOLDSWORTHY, D.J.   (Pol.)

m   GRIFFIN, K.B.   (Econ.)

SLUGA, H.D.   (Phil.)

B.C.L.

DAVIS, B.H.

EDUCATION DIPLOMA

TAYLOR, S.

THOMPSON, J.J.

TUCK, M.A.R.

DIPLOMA IN ECONOMICS AND POLITICAL SCIENCE

NORWAY, CROWN PRINCE HARALD OF

ENGINEERING

BESANT-JONES, J.E.   *2nd*

BRENNEN, C.   *1st*

HANSLIP, T.W.   *T.W. HANSLIP 2nd*

POTOCKI, P.

RENNARD, D.G.   *1st*

USBORNE, J.C.   *3rd*

WALSH-ATKINS, A.G.   *2nd*

GEOGRAPHY

BEVAN, N.V.

MODERN LANGUAGES

ALEXANDER, J.B.A.

MUSIC

GATEHOUSE, D.F.

READ, P.

THEOLOGY

TARRANT, J.M.

P.P.P.

ADAMS, F.R.

WARWICK-EVANS, L.A.

O.U.R.F.C. Freshmen's Trials—'C' TEAM v. 'D' TEAM
Iffley Road Ground, Oxford, Tuesday, 11 October 1960
Kick-off 1.30 p.m.

'C' TEAM	'D' TEAM
1. A. S. HACKING (Warwick and Lincoln)	1. J. BAMBER (Kirkham G.S. and S.P.H.)
2. M. POPOV (Sherborne and Lincoln)	2. M. H. PRITCHARD (Campbell College and Magdalen)
3. P. M. W. STAFFORD (Birkenhead and C.C.C.)	3. R. FIELDING (Wallington G.S. and St. John's)
4. G. MEAD (Cotham G.S. and Jesus)	4. J. P. L. R. O'R. CICCONI (Downside University)
5. D. L. SMITH (Christ's Hospital and Hertford)	5. D. HARRISON (Eton and University)
6. J. R. BARRON (Q.E.G.S., Wakefield and Brasenose)	6. M. S. CUNNINGHAM (St. George's, Rhod. and Lincoln)
7. A. COLE (Monmouth and Exeter)	7. A. J. HEAGARTY (Rugby and Oriel)
8. J. R. HEATH (Truro and St. Edmund Hall)	8. R. M. DAVIES (Cardiff H.S. and University)
9. C. E. SYKES (Marlborough and St. Edmund Hall)	9. C. G. RUDGARD (King's, Canterbury and Trinity)
10. W. R. WING (Blackpool G.S. and St. John's)	10. P. GAMBY (Lewes C.G.S. and Jesus)
11. J. A. H. REDDICK (King's and S.P.H.)	11. B. M. DREW (Alleyn's G.S. and University)
12. T. P. MILLS (University College School and Balliol)	12. W. E. MILLER (Loretto and Balliol)
13. R. G. PARKER (Cardiff H.S. and St. John's)	13. R. H. BATCHELOR (Truro and Hertford)
14. M. M. STEWART (Glenalmond and New College)	14. G. D. HARRISON (Keighley G.S. and Merton)
15. R. P. BELL (Marlborough and New College)	15. D. H. GREGORY (Rossal and Lincoln)

RESERVES

Wing: J. G. ROBERTS (Newport H.S. and University).

Fly-half: D. WILDMAN (Q.M.G.S., Walsall and

Centres: R. M. VINTCENT (Diocesans S.A. and Trinity) and C. BRENNEN (Rainey and Balliol).

Scrum-halves: J. O. ARNOLD (Bradford G.S. and St. Catherine's) and T. GARLAND (City of Bath and Worcester).

Hookers: D. J. EASTON (Stowe and Balliol) and R. S. BOWEN (King Henry VII and C.C.C.).

Prop: R. F. WATERHOUSE (K.E.S., Birmingham and St. John's).

Second Row: R. M. SCOTT (Leys and Merton).

Back Row: K. M. CARLISLE (Harrow and Magdalen), D. R. HAYES (Stowe and Brasenose), D. M. DALLAS (Newcastle G.S. and Balliol) and J. L. FOSTER (Denstone and Brasenose).

Chris Brenner.

BALLIOL COLLEGE R.F.C.

Fixtures, Michaelmas Term, 1960

Captain

C. D. ALEXANDER

Secretary

J. S. BEASTALL

O.U.R.F.C. INTER-COLLEGE LEAGUE—Michaelmas Term, 1960

DIVISION II   AGAINST.

	New Coll.	Corpus	Exeter	Balliol	Queen's	Magd.	S.P.H.	Wadham
Wadham								
St. Peter's								
Magdalen			3	3				
Queen's								
Balliol	14	0	11		10	3	10	
Exeter				8				
Corpus				14				
New Coll.				5				

(FOR)

Date	Opponents	Ground	Result
FIRST XV			
OCTOBER			
Wednesday 12	St. Catherine's	Home	16 - 0 W
Saturday 15	Richmond Vikings	Home	5 - 14 L
Wednesday 19	Corpus Christi (League)	Away	0 - 14 L
Saturday 22	Lewis School, Pengam	Home	8 - 3 W
Wednesday 26	Wadham (League)	Home	10 - 9 W
Saturday 29	Stow-on-the-Wold	Home	3 - 0 W
NOVEMBER			
Wednesday 2	Magdalen (League)	Home	POSTPONED 17-3 L
Saturday 3	Bancroft's School	Home	6 - 6 D
Monday 7	Durham Medicals	Home	10 - 12 L
Wednesday 9	Exeter (League)	Away	11 - 8 W
Saturday 12	U.S. Marines	Home	CANC.
Wednesday 16	New College (League)	Home	14 - 5 W
Saturday 19	R.M.A. Sandhurst Pirates	Away	40 - 0 W
Wednesday 23	St. Peter's Hall (League)	Away	3 - 8 L
Saturday 26	St. John's, Cantab	Home	
Wednesday 30	Queen's (League)	Home	
SECOND XV			
OCTOBER			
Monday 17	Christ Church	Home	36 - 3 W
Thursday 20	Brasenose	Away	5 - 18 L
Monday 24	Corpus Christi	Away	CANC.
Monday 31	Mishaps v. Trinity	Home	8 - 14 L
NOVEMBER			
Tuesday 1	Queen's	Home	CANC.
Thursday 3	Oriel	Home	CANC.
Tuesday 8	St. Peter's Hall	Home	CANC
Thursday 10	Mishaps	Home	8 - 9 L
Monday 14	Magdalen	Home	CANC.
Saturday 19	Old Southfieldians	Home	6 - 5 L
Monday 21	Exeter	Away	
Thursday 24	St. Catherine's	Away	
Monday 28	Wadham	Away	

THE COMMITTEE

President   Peter Snow
Secretary   Robin Murray
Treasurer   Paul Burge

BALLIOL DRAMATIC CLUB

ANNUAL DINNER

November 28th
1960

Massey Room
Balliol

Toasts

THE QUEEN

THE CLUB

THE TOAD IN THE RÔLE

THE CATS BEHIND THE FLATS

Menu

Cocktail aux Crevettes

Creme de Champignons

Bourgogne
Passe-tout-grains
1955

Faisan aux Choux
Pommes Croquettes
Celeries Braisés

Biscuit Pralinée

Harvey White Cap   Café à Dumb Waiter

Michaelmas Term 1960

president	P. J. Snow
treasurer	P. Burge
secretary	R. Murray
ex-presidents	W. J. Albery
	G. M. Rutherford
senior member	J. N. Bryson, Esq.

Wednesday, 12th October.
A reading of **St. Joan,** by **George B. Shaw,** produced by Peter Snow.

Sunday, 16th October.
The Alchemist, by **Ben Jonson,** produced by John Albery.
Playhouse, 2.30 and 7.45 p.m.

Wednesday, 19th October.
A reading of **The Sleep of Prisoners** by **Christopher Fry,** produced by Peter Keen.
Also
a recording of **Under Milk Wood** by **Dylan Thomas,** produced by Peter Snow.

Wednesday, 26th October.
A reading of **Roots** by **Arnold Wesker,** produced by Anthony Williams.

Monday, 31st October — Friday, 5th November.
O.U.D.S. Cuppers Competition. Balliol are entering Peter Snow's production of **The Dumb Waiter** by **Harold Pinter.**

Wednesday, 9th November.
A reading of the film script of **Inherit the Wind** by **Robert E. Lee,** produced by John Hole.

Wednesday, 16th November.
A reading of **Each His Own Wilderness** by **Doris Lessing,** produced by Michael Haines.

Wednesday, 23rd November.
Snap productions:
Krapp's Last Tape by **Samuel Beckett,** produced by Peter Snow
and
Dock Brief by **John Mortimer,** produced by Paul Burge.

Monday, 28th November.
Dramatic Club Dinner
Massey room 8.00 p.m.

Wednesday, 30th November.
Snap productions:
A Resounding Tinkle by **N. F. Simpson,** produced by Peter Buckman.

———

It is hoped to arrange a visit to Stratford.
If anyone would like either to read or act in a snap production please see respective producer.
All meetings are at 8.00 p.m. in Dicey: 11.

The president of the Balliol Dramatic Club

request the pleasure of

Chris Bremner 's company

at the annual dinner & charades on Monday Nov. 28th 1960

R.S.V.P.
Robin Murray

Black Tie
Shuns 7.30 XVI:2

Ulster Schools' Rugby trial.—An attack by the "Whites" checked at the "Blues" 25 during yesterday's trial at Bladon D...

BOXING

Ireland's big task against England

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RUGBY FOOTBALL

Ulster Schools XV to meet Connaught

In the Ulster schoolboys' first representative team of the season there are ten who have already played for their Province. The side, which was chosen yesterday afternoon after a trial match at Bladon Drive, will meet Connaught at Galway on December 22.

It contains no fewer than seven boys from outside Belfast, but they are confined to two schools — Ballymena Academy, who provide the full back, right centre, lock, and a wing forward, and Coleraine Academical Institution who supply the out-half, and a prop, and second row forward.

Ulster beat Connaught last year by a goal to nil, and Munster 18-3, but lost to Leinster, 11-5. The match with Connaught is of more recent establishment than that with Leinster, or even with Munster, and of the five played, Ulster have been successful in them all. The team is as follows:

Full-back — A. Gault (Ballymena Academy).

Threequarters — J. Reeves (Grosvenor High School), D. Bamber (Ballymena A.), N. S. Kelly (R.B.A.I.) captain, S. D. Johnston (R.B.A.I.).

Half-backs—S. Moore (Coleraine A.I.), R. M. Young (M.C.B.).

Forwards — B. Downing (Annadale G.S.), A. Frazer (Grosvenor H.S.), G. Crawford (Coleraine A.I.), J. Nicholl (Coleraine A.I.), R. Bethel (Annadale G.S.), G. F. Miller (Belfast Royal Academy), H. Marquess (Ballymena A.), and A. Sears (Ballymena A.).

Subs to travel — W. A. B...... (M.C.B.), and P. Ha...... raine A.I.).

Governor, Lord Wakehurst. Instead of the teams lining up on the field as has been the ...... two captains will ...... only the that will be done ...... and Lord Mayor, ... Kinahan, will be ...... band of the Roya ...... will play. The ...... Bernard Marie (...

Another e...... Spri......

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RUNNERS AT THURLES

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2 miles.—Candy St......
Hal Culleen, ...
Irish R......
Cool Co......

2-30 —
2 miles.-
Jalen-Be......
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man, S......
View, V......
Copenh......
Sonata.

3-0—
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3-30 -
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12-45—LITTLETON ...
0/00 Sagebush 6-9-6......
211 Heckley 9-9-2 (......
Star 5-9-0......
...read