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THE HOMING NEWS

And Pigeon Fanciers' Journal.

NO. 275. VOL. XI.

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FRIDAY, APRIL 6, 1894.

[Registered at the G.P.O.

as a Newspaper.]

WEEKLY, 1D.

REMEDIES.

The charge for the insertion of Trade Advertisements, is Two words for id., minimum charge 6d. prepaid.

THE "PERFECT" GRAVEL, JENKINSON'S

Far surpasses anything and everything known for Homing Pigeons. Perfect Gravel neutralises disease, and keeps it in check; it supplies all the chemical constituents of the blood to keep it pure, no other gravel or grit in the world does this. The Perfect Gravel makes the strongest, stoutest, and tightest muscles possible. The Perfect Gravel is a splendid brain food, makes it clear, bright, and vigorous. For rearing strong, bright, vigorous youngsters, youngsters that will soon be out of the nest, and soon be on the wing, flying vigorously, lively, bright and winning youngsters, nothing in the world equals Perfect Gravel. The best results and the greatest possible success are only to be obtained by its constant use. Avoid all the imitations of it now in the market, especially medicated ones. Have the Perfect Gravel and nothing else. Our sales constantly increase; last year they were close on 30 per cent. more than any previous year. Testimonials we could publish by the thousand. Sold in bags, cwt. 12s., $\frac{1}{2}$ cwt. 6/6, $\frac{1}{4}$ cwt. 3/6, 14lbs. 2/-, 7lbs. 1/3, by very many corn dealers, etc., or may be had direct from the works; $\frac{1}{4}$ cwt. is the lowest weight now charged by the railway companies.

IMPORTANT TESTIMONIAL.

Farnworth, near Bolton, Jan. 20th, 1894.
Mr. J. H. Dixon Jenkinson—Dear Sir,—I have now had many years' experience with your Perfect Gravel, and having found it comes up to my expectations, I now use no other for my Racers.—Yours very truly,
ALF. DARTSHIRE.

"REVIVERS"—JENKINSON'S. "TONICS"—JENKINSON'S.

Are another great and grand boon and blessing to pigeons, Homing pigeons particularly. Thousands of fanciers give them to their birds once or twice a week during the breeding season, to keep them fit and right to breed and rear the best possible youngsters, and also during the training and racing season, to keep the birds always fit, right, and ready to go into the basket. These and the Perfect Gravel always keep them fit for anything, tight, right, and ready to go through storm or sunshine, and the nearest way home.

Sold in boxes 1/-, 2/6, 5/-, and 10/- each, from corn dealers, etc., or post free direct.

Our Special Remedies for each and every disease, 1/-, 2/6, etc., far surpass all others.

Prepared only by

J. H. DIXON JENKINSON,

The Live Stock Hospital,

HANDSWORTH, BIRMINGHAM.

Central London Agent:—J. DAY, 11 Waterloo Road, S.E.

APPLIANCES.

The "PERFECT" MARKING RING.

As used by all the leading Flying Clubs. Price with year only, 2/6 per 100; numbered consecutively, 4s. per 100; Initials, 1s. per letter per 100. Marked with a letter between, thus, 18 N 94, 4/6 per 100; numbered, 6s. 100. Sample doz., numbered, 6d.; with initials, 1s.

ALUMINIUM RINGS.

1s. per 100 extra. Sample dozen, numbered, 8d., with initials, 1/2. Enamelled rings, with year only, 10s. per gross, 1s. per dozen. Numbered consecutively, 1/6 per dozen. No initials on enamelled rings. Samples and testimonials sent on application to

MACKIE BROS.,

WITTON ROAD, ASTON, BIRMINGHAM.

1894 ALUMINIUM RINGS.

WILL not corrode. Price, year only, 2/6 per 100; numbered consecutively, 4/- per 100; initials, 1/- per 100 per letter; sample dozen, year and numbered, 6d.; initials and numbered, 10d. Aluminium rings to open, 3/6 per 100; sample dozen, 7d. consecutively numbered.—Carter & Co., 37 Howard street, Birmingham.

HEATH'S

(VETERINARY SURGEON)

'Jubilee Special' Gravel

FOR PIGEONS AND POULTRY.

A SINGLE trial of this preparation will satisfy the most sceptical of its grand quality. Pigeons eat it with avidity. It preserves the health, and very materially assists the bird during the breeding season. Its effect upon prisoners is simply marvellous. It is sharp, pritty, and health giving. Price: 1 cwt., 10/-; $\frac{1}{2}$ cwt., 5/6; $\frac{1}{4}$ cwt., 3/-. Sample bags, 1/-.—From J. Lister, Manager, 'Jubilee Special' Gravel Co., Salford, Blackburn.

SELECTED TICK BEANS, 21/- 252 lbs.; Maple Peas, 22/- 252 lbs.; Dari, 16/- 240 lbs. Agent—Jenkinson's Gravel.—John Ker, 53 Inglefield Terrace, Glasgow.

BELGIAN TRAP.

As recommended by *Homing News*.

Pigeon Foods, Houses, & Appliances of every description.

Illustrated List (270 pages) post free for 2d. to prepay postage.—WILLIAM CALWAY, Severn Works, Sharpness, Glos.

APPLIANCES.

WALKER'S RIGHT-AWAY REMEDIES

FOR PIGEONS. (Welbird Brand)

PREPARE your Birds for the Flying Season by giving Walker's "Plok-me-Ups," the favorite Tonic, 1/3 and 2/6 per box.

For Lump in Wing use "Walker's Ointment," 1/3 per pot.

To rear strong healthy youngsters use the Squeaker's Pill, 1/3 and 2/6 per box.

Remedies for Roup, Canker, Diphtheria, &c., each 1/3 and 2/6.

List with Testimonials free from the Sole Inventor and Maker—W. WALKER, Chemist, The Fancier's Laboratory, Finton, Manchester. Competitors absolutely defied.

1894. RINGS. RINGS. 1894.

PRICE 2/6 per 100 (with year only), sample dozen, 6d.; numbered, 1/6 per 100 extra; initials, 1/- per letter per 100 extra. Enamelled rings, 10/- per gross, sample dozen, 1/-; numbered, 1/6 per dozen. These rings, as supplied to the principal Clubs. Numerous testimonials.

The New Aluminium Rings.

1/- per 100 extra. Sample dozen, numbered, 8d., with initials, 1/2. Order early.—J. Baker, 8 Ennis road, Finsbury Park, London.

1894—Write to-day for "The Amateur Pigeon Fancier's Guide" for 1894, post free. Contains practical instructions on the Management of Pigeons, by R. Woods, Esq. (Author of "A Practical Guide to Successful Pigeon Culture") is filled with engravings and complete description of all Pratt's world-famed latest registered Feeding Hoppers, Nest Pans, Water Fountains, Baths, Salts, etc., etc.—Address, Pratt, Stoneware Works, Dudley.

MARK YOUR PIGEONS

A pure rubber stamp, name and full address, 2s.; same pattern as below, up to 2 inches, 2s. by the wide, either oval, square, or cut corners.

2s. THE PLUMSTEAD UNITED HOMING PIGEON SOCIETY "LORD RAGLAND."

2s. J. WATERHOUSE CAVERSHAM, Nr. READING 2s.

Set of 10 moveable figures, 1s. 8d. complete with box, pads, and ink. Post free on receipt of amount. Wm. Bancroft, Esq., Solicitor, Northwich, writes us:—"The Stamp you have supplied me, gives a good, clear impression." CLEVELAND STAMP CO., Albion House, Meersbrook Park rd., Sheffield. Established 1875. Hundreds testimonials. All orders acknowledged.

APPLIANCES.

The charge for the insertion of Trade Advertisements, is Two words for 1d., minimum charge 6d. prepaid.

PIGEON REGISTER STUD BOOK.

Entered at Stationers' Hall.

Price 1/- each, by Post 1/4.

— H. BOWLER, Claremont, Saltaire. —

LEAD SEALS, 50 for 1/-, free.—Senior, 26 Green street, Worsbro' Dale, Barnsley.

F. J. MILLINGTON MOLLART & HANLEY SELL THE BEST TRAINING LABELS

100, 2/3. 50, 1/6. Sample free.

RUBBER STAMPS (name and address). Pad, &c., complete. 1/4 post free. Set 10 movable figures, 1/6.—Address A. Woodhead, 11 Alma-st., Queen's rd., Manchester. Est. 1880.

NEST PANS.—Best white stoneware, 2/9 per dozen, packed. Nest Eggs, 9d. per dozen. Trade supplied.—Cooney's, Dale End Potteries, Birmingham.

TRAINING Panniers from selected buff willows.—Williams, Basket Manufacturers, Commonhall-st., Chester. Established 1847.

1894 MARKING Rings in Aluminium, Aluminide, enamelled and silver plated. Send stamp for sample.—T. Reeves, 62b Spencer street, Birmingham.

STONWARE PIGEON NESTPANS.—Homer size, 3/- dozen, packed; not porous Biscuitware described as white stoneware. Pigeon Feeding Hoppers, Fountains, Nest Eggs, Perches, Saltcats, &c. Write for Illustrated Catalogue and Amateur Pigeon Fancier's Guide, post free.—Pratt, Stoneware Works, Dudley.

— GIBSON'S —

Photographic TIMING-IN CLOCK.

Mr. DAVID HEDGES (the eminent Lytham photographer) certifies after thoroughly testing the apparatus, that it is impossible to tamper with it in any way without detection. Now ready, 35/- each.—S. Gibson, Hutton.

TRAINING LABELS, none will equal Partington's. Send for sample and testimonials. 50, 1/4; 100, 2/3.—Partington, Advertising Agent, Westhoughton.

TRAINING LABELS.

25, 3d. per 100, post free. Best and cheapest. Recommended and used by all the leading clubs. Send stamp for samples and testimonials.—Kay & Sons, Printers, Haworth, Yorks.

"BELGIAN Homing Pigeons, their Rearing, Training, and Management," 1s. free.—Messrs. Hartley, Shooter's Hill, Woolwich.

SHOWS.

Clitheroe Agricultural Association.

1894.

THE Annual Exhibition of Cattle, Horses, Sheep, Pigs, Goats, Dogs, Poultry, Pigeons, etc., will be held on Whit-Monday, May 14th, 1894. Prize Lists and Entry Forms on application.—W. A. DEWHURST, secretary, Church-street, Clitheroe.

DARWEN AND DISTRICT AGRICULTURAL ASSOCIATION.—4th Annual Show at

DARWEN, May 5th.

22 Pigeon Classes, 5 Open Classes for Homers, Numerous specials. Entries close April 24th. Bank Chambers. J. AINSWORTH, sec.

CLUB ADVERTISEMENTS.

West Lan. Saturday Federation.

President: H. J. Longton, Esq., Earlestown. THE five clubs comprising the above Federation, namely, City of Liverpool, Earlestown, Seaforth, St. Helens, and Wigan, have fixed the following training and race stages for 1894:—OLD BIRDS—

WELLINGTON	Training, Saturday, May 19th
WORCESTER	Race " " 26th
SWINDON	" " " June 2nd
VENTNOR	" " " " 9th
CHERBOURG	" " " " 23rd

WELLINGTON	Training, Saturday, July 21st
WORCESTER	Race " " 28th
GLOUCESTER	" " " Aug. 4th
SWINDON	" " " " 11th

We are willing to undertake the care and liberation of clubs' birds at any or all of the above stages at reasonable charges. A competent conveyer will be in charge. For further information apply to A. Mallus, hon. sec., 122 Rimrose road, Bootle.

The CITY of LIVERPOOL F.C.

HAVING purchased a Measuring Wheel are prepared to hire it out on reasonable terms.—For further particulars apply G. and H. Glover, 47 Barnes-street, Liverpool.

THE WILTS FLYING CLUB will be sending a conductor to Ostend, and Mr. Barker will attend to and liberate birds for the Brussels race. They are prepared to liberate non-members' birds as follows: Ostend, 1/-; Brussels, 1/6 per bird.—Particulars obtained of the hon. sec., E. SWAIN, Chippenham.

The Homing Pigeon Protection Society will be glad to receive fanciers resident in any part of the country as members. Subscription 2s. per annum, for which sum the entire cost of prosecuting persons who may shoot, or steal birds, the property of its members, will be borne by the Society. Full particulars from Hon. Sec.—Mr. Wm. TAYLOR, Phoenix St. Mill, Oldham.

The Midland Homing Pigeon Protection Society will undertake to prosecute for illegal detention, and all shooting cases, &c., where the committee consider the evidence sufficient to obtain a conviction. Subscription per annum, 2s.—Secretary, Mr. J. LONDON, 394 Nethells Park road, Birmingham.

THE FEDERATION.

WITH a view to assisting clubs or individual fanciers situate in any part of England, to train their birds for the forthcoming

GRAND NATIONAL RACE,

the Federation Committee are willing to convey and liberate birds at reasonable charges, at Valognes, Avranches, and Nantes. For details apply to hon. sec., GEORGE YATES, Clayton Bridge, Manchester.

MEASURING FLYING DISTANCES.

THE Secretary of the Manchester Flying Club and his staff are prepared to measure the Flying Distances of any club situated in Great Britain, on specially prepared maps.—For particulars and terms apply to GEORGE YATES, Clayton Bridge, Manchester.

LONDON COLUMBIAN SOCIETY.—The committee of the above society having decided to race from the South of Ireland, would accept a few members, whose inclination is to give this route a trial. Application for membership to be made to Secretary, John Day, 11 Waterloo-road, S.E.

HOMERS.

The charge for the insertion of Fanciers' Advertisements, is Three words for 1d.; minimum charge 6d. prepaid. Letters must be addressed to Manager, 'Homing News' Co., Oldham, not to the Printers.

The Dane Loft!

1894 SQUEAKERS. Printed list 1d. For prizes won see *Homing News*, Feb. 2nd. Apply—Chas. R. Earle, Northwich.

SQUEAKERS.—Mr. G. E. Walker, South Reddish, Stockport, offers all Squeakers bred from his numerous winners, and parents of winners in Manchester Flying Club for sale, price 10/-, 15/-, and 20/- per pair.

F BIRCHAM, Gibbon road, Kingston-on-Thames, is still open to book a few more pairs of his reliable squeakers at 10/- a pair; 5/- deposit to be paid at time of booking. They are rung with conference ring, or I am willing to ring them with any fancier club ring. If lost in training under 100 miles this season, replaced. Also a few good stock birds still for sale, price from 7/6 upwards. Write for lists of prizes won and stock birds now for sale, which will be forwarded to likely purchasers on receipt of two stamps.

MANOR LOFT.—Squeakers for sale from February 28th.—Mr. Ince's birds have bred the winners of eighteen 1sts, seventeen 2nds, and twelve 3rd prizes, eight special prizes and cups, and scores of other prizes, including Rennes 2nd, 3rd, 8th, and 9th, La Rochelle 1st and cup, and the whole of the 1st and special prizes for one year in the Midland and Dudley Flying Clubs' V. B. races. Loft includes sons and daughters Old Boley, hero of English channel, Delmotte's best, Pioneer and Staahope, Logan and Pietinckx's best strains; free printed list on application.—H. W. J. Ince, The Manor House, Kingswinford, near Dudley.

I AM now booking Squeakers at working-men's prices from some of the choicest blood in England, namely, Allen's champions, Gilson, N. Barker, Gits, and many other noted strains, and I will give splendid gold medal for best velocity done by any youngsters bred and sold by me; no prisoners; list one stamp.—Chadwick, contractor, Chorlton-st., Blackburn.

G P. POINTER, President of the North Middlesex Flying Club, will have a few Squeakers ready next week, from birds that have flown Newcastle, Aberdeen, Arbroath, and Banff. The birds from this loft won more prizes and diplomas last season in races and shows than any other in N.M.F.C. Prices from 10/- each upwards. List ready shortly.—Truro road, Wood Green, N.

C BUSWELL, Torquay, has a few pairs of Squeakers for sale, price 5/-, 7/6, and 10/- pair, from his birds which flew Shifburn, Andover, and Basingstoke last year; strains: Heap's Little Red, Sirjacobs, Duerinck, Ince, and Grooter.

ALFRED WOOD, Haworth, will have a limited number of Squeakers to dispose of from birds that have flown the channel, including Jersey, also winner of the cup for best average in the Keighly and District F. C. One pair now ready from my second prize Jersey, Airedale F. C. and Yorkshire Federation. Price 12/6, and several others from 10/- per pair.

MR. H. C. BURRIDGE has pair blue chequers, rung Stanstead Flying Club, rings 9 and 11, grandsires and granddam flown Cherbourg, Nantes, Exeter, Penzance 1st prize and special, and Scilly Isles, 1893, 12/6; also few pairs of stock birds and squeakers, from 7/6. Further particulars and pedigree.—96 Malham-road, Forest Hill, Kent.

HOMERS.

LECKHAMPTON LOFTS.

SQUEAKERS.—J. Barrett, Nurseries, Leckhampton, Cheltenham, whose breeding stud of sixteen homers recently cost over £70, wishes to dispose of a few youngsters at a reasonable price. The birds comprise three recently purchased from H. Stanhope, Esq., a granddaughter of Old Aberdeen, and others of his strain, Cove's Banff Cock, Price's Thurso Hen, a daughter of M. Jurion's Old Bayonne, a daughter of M. Pletinckx' Renowned Mealy, a granddaughter of M. Delmotte's Old Mealy, the father of Thirionet's winner of two Grand Nationals, relatives of Voliere, Old Red, etc.; and include the following winners—special, cup, and 2nd for best average velocity, 1st, 2nd, 2nd 3rds, and 6th Berwick, 3rd, 4th, 6th, and 7th Arbroath, 2nd Banff, two 1sts and 1st series Leeds, 1st and 3rd Derby, 1st Sheffield, 3rd, 5th, 9th, and 14th Newcastle, 3rd and 5th Durham, 7th Northallerton, 8th York, etc. Young from untrained birds in flyers' loft, 10/- pair. Others, 15/- to 80/- Lists free.

THE HURST LOFT.—I am now booking a limited number of Squeakers bred from birds that have won five silver cups, two medals and other special prizes, 1st Avranches, 1st and 4th Cherbourg, 1st, 4th, 5th and 7th Bourne-mouth, 1st and 2nd Swindon, 1st and 3rd Worcester, 2nd Cheltenham, Ashton, Denton, and District Homing Society. Prices from 10/- and £1 per pair.—Apply to Mr. John Cooke, 162 Bentinck street, Ashton-u-Lyne, Manchester.

THE CHIPPENHAM LOFT.

SWAIN & PERRY, 42 Causeway, Chippenham, having more young birds than they require, can spare few pairs at 10/- and 15/- per pair; strains Swain's gold medal hen, Penzance race, 1236 yards, Hedges, Gibson, Malins, Gainer, Hoop, &c.; none but genuine healthy birds sent; particulars given.

THE MORECAMBE LOFT.

SWAIN will have a few more youngsters ready in a day or two, rung with Preston and District ring.—Apply 23 Euston-road, Morecambe.

JOHN DAY, whose birds are so well known throughout the United Kingdom for speed and stamina, can supply pairs of squeakers able to take part in the keenest competition in either short or long distance races; also can dispose of adult, either sex; best flying blood only kept. P.S.—Every fancier should read his practical illustrated work on the Working Homer, a most valuable book for beginners. Price 1/1.—11 Waterloo road, London.

W. DUCKWORTH, 2nd pool (which was 2nd bird back) from Nantes, 1893, with Stacksteads Society, and the following prizes in the Bacup Society, 2nd and 3rd Jersey, 1st, 2nd, 6th, 7th, Cherbourg, 1st and 3rd Ventnor, 1st Chippenham, and many others, has all his last year's young birds for sale, many prize winners, bred from my champion Nantes cock, who has won eight prizes out of eleven races, and a daughter of Old Boley, Kaye's black cheq, and pure Logan. Trained birds, stamped, 15/- to £1 each. Untrained, same strain, 10/- each. Squeakers, which must be ordered, 10/- a pair.—Apply to Wm. Duckworth, c/o Mr. Cardus, Bank, Bacup.

SQUEAKERS, best obtainable, a few choice ones ready in a few days, bred from birds direct from Alderman Gits and N. Barker, Brussels, nominal prices, printed list free, grand chance for beginners.—F. Tanton, Fairview, Tonbridge.

W. ALLEN, Clark's lane, Willenhall, having sold all the 50 birds advertised, will sell any young bred in 1894 from £1 to £1 10s. per pair. See advertisement Dec., 1893.

HOMING NEWS

And Pigeon Fanciers' Journal.

FRIDAY, APRIL 6, 1894.

Terms of Subscription:—

(Post free, payable in advance.)

One Copy,	0 0 1 1	Six months	0 3 4
Three months	0 1 8	Twelve months ..	0 6 6

Special Advertisements.

(PREPAID.)

In our columns we insert Displayed Trade, Club, and other Advertisements, Notices of Sales, Shows, &c., at the undermentioned rates per insertion. Discount for a series.

Per Page	£4 5 0	Per column	1 10 0
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Per inch, in column	0 5 0		

Cheques or Postal Orders should be made payable, and all letters respecting Advertisements addressed to the Manager, "Homing News" Co., Oldham.

Telegrams: "HOMING NEWS, OLDHAM."

Charge for insertion of Short Notices of Purchases of Birds, 1s. 6d. per bird. Detailed Notices charged Fanciers' rates.

MR. W. WRIGHT, 3 Halstead-road, Seacombe, has bought from Mr. James Girven, Red Cheq Cock, bred by Mr. W. Allen, Willenhall; own brother to No. 12 on his 1890 list: sire Sandy, dam Logan 539. Also Blue Hen, white flight, bred from 9 and O 32.

MR. WM. TAYLOR, the hon. sec. of the H. P. S., requests that we will call to the recollection of subscribers and fanciers generally, the fact that subscriptions to the society are already overdue. He has a somewhat lengthy list which he is desirous of publishing, but as the names of many old members will be absent if he does so in the present issue, he has decided to wait another week for additional subscriptions. "More mischief's wrought for want of thought, &c." is very applicable to the subject under review at the present juncture, and we trust that old members, and intending, will without further delay remit to the hon. sec. their subscriptions for the present year.

A SIMILAR appeal may also be made on behalf of our list of liberators, which has already assumed modest dimensions, although not nearly as complete as we should desire it to be, before presenting to our readers.

HOMERS for Naval Purposes.—Arrangements are being made both at Devonport and Portsmouth for the carrying out of experiments with Homing pigeons with a view to training them for the transmission of naval despatches. After the birds have been so trained as to gain a thorough knowledge of their respective localities, they will be sent out in vessels undergoing steam trials, and it is expected that before the next naval manoeuvres they will be sufficiently educated to undergo practical tests. It is intended that the two dockyard ports shall as far as possible co-operate in carrying out the system.

THE tables and diagram that appear in page 138 of your issue of March 23rd, will be acceptable to many besides those who are specially interested in carrier pigeons. It is much to be desired that similar tables were compiled of all competitive performances of bird, beast, and man, as I have urged and explained in a short paper published in the "Hints to Travellers" of the Royal Geographical Society. It is I trust becoming popularly understood, that all such series as those in your tables conform with considerable precision to the law of Frequency of Error, the effect of which is that any one series, however large, may be completely expressed in all its details, and with sufficient accuracy, by only two numbers; in the case of your first table those numbers are 976 and 124; the first defines the average, the second defines the variability. These two cardinal numbers can be declared with somewhat less trustworthiness, from any two of the data in the last column of your table, as from these:—"16.0 per cent. of the birds flew less than 800 yards per minute, and 76.2 per cent. less than 1100 yards." To show how well the calculated results from the two numbers in question agree with the observed facts, I give the observed number of cases, as in your second column, but reduced to per cents., together with the calculated numbers below them. In the observed cases, I have taken small liberties with the two figures marked with asterisks, in order to give a greater smoothness to the series. The real value of the entry 13 is 12.3, that of 3 is 3.7. I have treated these as if the one was 0.3 higher, and the other 0.3 lower than observation made them.

observed	1	1	5	9	19	20	21	13*	4	4	3*
calculated	1	1	5	10	17	21	20	14	7	3	1

A classification based on the class place has the great advantage of being of universal application, and intelligible to all. Thus there can be no doubt as to the meaning, when we say that so-and-so ranks among the first ten per cent. of his class, while if we say that such a bird flies 1350 yards a minute, or such a man jumps across twenty-one feet, the information is only intelligible to an expert. Dr. Venn, in his analysis of the physical powers of Cambridge men, has made much use of a division into ten classes, which has the merit of being simple, and neither too refined nor too coarse for ordinary statistical purposes. I have calculated the limiting values of the ten classes of the homing pigeon, and give them below, in the belief that they may interest naturalists as well as the statisticians who are now occupying themselves with this class of subject, such as Dr. Venn, of Cambridge, Prof. Edgeworth, of Oxford, and Profs. Weldon and Karl Pearson, of University College, London. I should



mention that I have taken the data blindly from your tables, assuming that they are trustworthy, and having no other knowledge whatever of them.

Old Homing Pigeons flying over 90 miles.—If any large number of these birds be divided into ten *equally numerous* classes, in the descending order of their performances, the 1st class being the slowest, and the 10th class the fastest, then the limiting values of the performance of each class would be as below.

No. of the Class.	VELOCITY OF FLIGHT.	
	Yards per min.	Miles per hour.
1 (slowest)	below 740	below 25½
2	740 to 821	25½ to 28
3	821 to 879	28 to 29
4	879 to 929	29 to 31½
5	929 to 976	31½ to 33½
6	976 to 1023	33½ to 35
7	1023 to 1073	35 to 36½
8	1073 to 1131	36½ to 38½
9	1131 to 1212	38½ to 41½
10 (fastest)	above 1212	above 41½

A bird whose performance happened to be identical with any of the above numbers, would occupy a transitional place between the two classes which the number divides. It might with equal justice be placed as the last bird in the class next above the limit, or as the first bird in the class next below it. There is no natural break between the classes, but only an arbitrary one, as the values in every large series of performances run continuously.—FRANCIS GALTON.

P.S.—In the data in your second table which relates to young birds, I notice that a line has dropped out. The totals enable it to be replaced, it is "under 1200—238 cases."

THE following recently appeared in the *Revue Colombophile* in reply to an enquiry "Can pigeons home in the dark?" "From the context of the letter we have received, the fancier in question is evidently contemplating the idea of putting his birds to the test in this matter. Seemingly then, it is not enough to break the backs of our faithful subjects, with what we put upon them throughout a whole five months of the year, nor enough even on the top of this, at any rate with some people, to inflict winter campaigns and concours upon them, but we must exact midnight promenades. In principle we regard the idea as much worse than a mere absurdity, but there is nothing new in it. Night races have been known and organised long ago in Belgium and even in the northern provinces of France. Our Homer certainly can travel in the night time; it is a question of training. What is it indeed that fanciers commonly do on the eve of a great race? They toss their birds some miles away towards 7-30, 8-30, and even nine o'clock in the evening; sometimes absolutely in the dark. And why? Because it is desirable that when the bird takes part in some race of importance, and of legitimate character,

it should not conclude that its day's work is finished before the stars begin to glisten in the firmament. Impressed with this idea, a pigeon trained as we have just mentioned, will find its loft again on the day of toss, when the distance to be flown, will take the average bird until the early hours of the morning after. The latter bird, will make for and beat down upon some shelter for the night, as soon as twilight comes on. A friend of ours at Lille last year, in one of the great races of the season, awaited his bird, and had the satisfaction of welcoming it in its loft at 10 o'clock on the night of the day it was tossed. It becomes clear then, that by training, the pigeon may be brought up to the pitch of dead of night work. But we are not to conclude from this, that it is endowed with the same gift as the bat, that only goes through its gambols during the hours of phantoms and sorceries; that its eyes have the faculty of piercing the darkness through and through. The pigeon cannot see in the dark, as any one may prove who has occasion to go into his loft in the night time, and who in so doing frightens some member of the loft so that it will fall from its perch. It will remain on the floor, unable to find its accustomed place on the perch until daylight. More than this, a hen even when covering the eggs that are dear to her, if she should happen to quit the nest in the dark, cannot recover her way back in the dark, to the objects of her solicitude, although no more than a couple of feet distant from them. We here graze the delicate and mysterious subject of orientation. When a bird takes its flight through the dark shadows of night, it is not sight that guides it; it directs its course as its instinct impels it, just as a man hypnotised, and his eyes bandaged, makes towards the object determined upon for him, by the magnetiser, medium, magician, or whatever name you may call the controlling power. When storks, cranes, teals, and wild ducks and geese are in the act, during their migrations, of crossing immense stretches of sea, it constantly happens that hosts of them dash themselves against our lighthouses. When quail leave our shores in order to cross the mediterranean sea, which with their slow and heavy wings, they cannot do in any single day, it inevitably follows that they must travel day and night. These migratories, without the aid of sight, follow an indefinable magnetic current, to which, repeated experiment, training, &c., brought to bear on our pigeon, would equally accustom it. This is the only logical basis on which to found our conviction, that by judicious and progressive trainings, the homer pigeon would infallibly succeed in finding its loft without being able to see a single atom of it. Moreover, we do know that pigeons in myriads exist on the American continent,

that regularly do this very thing. They belong to the class migratory, and they pass from one quarter to another of that immense continent, at all hours both of day and night, light and pitch dark; and it is, that these birds in their wild state have preserved and developed a quality, which still rests in the temperament and constitution of our homing pigeons, themselves the descendants of the wild stock dove. Our correspondent may proceed with his experiments. As we said at the outset, others have tried the same thing before him, and have obtained very surprising results."

INCUBATION.—The following constitutes a string of phenomena of the most interesting character at the present season. Our readers will gather with pleasure, and we are sure, with advantage, what are the fruits of considerable study and observation on the part of the author, Mons. Eloire, who has presented his writings to the *Aviculteur* of Paris. Albeit that Monsieur Eloire is treating, in the present instance, of birds other than pigeons, his observations are full of interest, and abound in suggestive matter to the pigeon fancier. "A.—The eggs of domesticated birds are not by any means endowed with the same degree of vitality, as those of the bird in its natural state of freedom and wildness. In so many words, the greater the degree of domestication, the greater the loss in vitality to the egg. B.—The greater the delay betwixt the moment of laying and that of sitting, when breeding is in question, the less is the chance of success. After a lapse of from thirty-two to thirty-five days from laying, the egg loses all its faculties, and becomes incapable of further development even under the most favourable conditions of incubation. C.—The texture of the shell plays a most important part in the work of incubation. The egg of the bird reared in captivity, is less regular than that of the bird living in its normal freedom and liberty. The shell of the egg in the first-named bird, is less dense and thick than that of the second. It is simple enough to verify this by holding the two before any strong light. The circumstance of the effect of texture of shell on the results of incubation may, in principle, appear extraordinary or at any rate doubtful; nevertheless it needs no more than a moment's reflection, in order to prove what passes habitually under our eyes. Subjected to incubating temperature, the egg with the thin and less close texture, suffers a loss in its contents through evaporation; this loss is an inverse proportion to the quality of the shell. The denser, closer and more resistant the shell, the less the loss through the action of external elements. In the contrary case, the results obtained are altogether of the opposite character; during the first days of incubation, all passes normally, but towards the fifteenth day, the quantity of liquid lost through evaporation is already so marked, that the embryo feels the effects, its development is arrested, and it will even perish altogether. It is therefore a gross error to suppose, as is so much the case in country parts, that the thinner the shell is, the greater are the chances of successful sitting. I have frequently heard breeders affirm in all the sincerity of conviction, that the thinner the shell, the greater

the ease with which the infant offspring enclosed, breaks its way out at the crucial moment, by reason of the less resistance it experiences. Most unfortunately for any such theory as this, the exact opposite is the case. It is no uncommon thing to find the squab dead, close to the shell, and it is quite as common to find people fixed to the idea, that death has occurred at the last moment, when the shell should have yielded, *i.e.*, at the twenty-first day; in reality death has occurred a couple or three days previously, viz., on the seventeenth or eighteenth day. Examples to prove this are plentiful enough, and it is always to the state of nature I go in order to find those examples, for the simple reason first, that they are to be more easily found, and secondly, that they have not passed through any of the numerous and artificial influences incident to domestication. Well, every year in our farming countries and prairies, where fowls are abandoned to their own resources, given their entire liberty, and freed from all control, we constantly find them laying in the hedgebackings; now in all these cases the shells are very thick and of great resisting power, and it is amongst the rarest things in the world to find a single infertile egg, amongst the whole number thus incubated. Relatively to the size of the fowl, the eggs are often very numerous; notwithstanding this, however, the successful hatchings are astonishing, and other results most marvellous. Experience here is in entire conformity with the results yielded by nature outside, in its wildest conditions. D.—The deeper in tint the shell is, the more certain it is as to the work of incubation; indeed the effect of domestication on creatures most subject to its influences, *i.e.*, the more such creatures advance toward perfection under human tutelage and impulse, the greater the discoloration that ensues in the skin, the tissues, the hair, &c., &c., all of which seem to pale and wend their way towards an uniform tint,—white or its derivatives. The colouring of the egg shell is in no way exempt from this influence. The shell as well as the colouring of bodies in general, has a very pronounced action from the point of view of absorption of heat. It is demonstrated in all courses of instruction in schools of medicine and physical science, that of all colours, black is the one which most absorbs heat, and that white, on the contrary, absorbs it the least of any; whilst in all that concerns light, the same phenomena appear. It becomes inadmissible therefore to think that physical phenomena so important as those we are examining, should be without their influence on the egg and its contents. The frail and delicate embryo must consequently be more or less deeply impressed and affected according to the colouring of the shell; this is an ultimatum that cannot be set aside. The eggs, for instance, which are very white, of Dutch fowls, are quickly affected by the slightest variations of temperature, and the losses during incubation are exceedingly numerous. The eggs of Partridges, on the contrary, which are of deep pearl grey, may be subjected at all stages of incubation to a lowering of temperature of 10, 15, 18 or even 24 days duration, and yet be uninfluenced to any perceivable extent. Four hours of colder temperature are enough to kill the embryo in the egg of the ordinary fowl. The egg of the Cochin-China fowl, the tint of which is more pronounced, enables the embryo

to resist an accession of cold for six hours, whilst the duck's egg will resist for double that time. So that if the eggs of various birds be mixed and put to incubation, the chances of success will lie with all those that are the furthest removed from white. It follows from what we have thus seen, that the greatest attention should be paid to the choice of sitters where the eggs are of white shells, and that where the shells of the eggs to be hatched, are of deep tint, they may be committed without any great inconvenience, to but mediocre sitters. E.—It is after twenty-one days of incubation at a temperature of 41 degrees centigrade, 106 degrees fahrenheit, that the eggs of ordinary fowls hatch, and it has been ascertained, in enquiring into the effect of atmospheric variations on these eggs, that in the first third of the embryonic period, a fall or rise of temperature to the extent of five degrees centigrade, 13 degrees fahrenheit, lasting over an hour and a half to two hours, has no effect on the embryo. At the second period, the variation cannot exceed 8 degrees fahrenheit over the same time, but it is no longer thus when the third period is reached. The embryo at this epoch is advanced in life, and cannot support except with the greatest difficulty, the slightest deviations of temperature. It inevitably dies if the temperature be lowered to 36 degrees centigrade, 96.8 fahrenheit degrees, and maintained at that point for four hours. These phenomena, which seem strange at first sight, are soon and easily explained by simple observation of the embryo. In the first period, nothing very striking takes place in the egg, the embryonic life is not yet sufficiently accentuated to greatly influence the embryo itself, and variations of temperature do not directly reach it. At the second period, life is shaping itself, circulation is established, the influence of cold and heat now makes itself felt, but not completely. Finally, at the third stage, everything is in working order with the embryo, heat is no longer so supportable, it attacks the circulatory system direct, and profoundly influences it. Cold is still more insupportable. The young embryo about to break its shell, enjoys the proper degree of warmth; warmth assists the circulatory apparatus, cold retards the circulation, but without modifying the globules of blood up to the point of disorganisation. If, however, the action of cold be pushed too far, it will bring on congestion, by stopping the blood within its vessels. Herein lies all the difference. To conclude, we must offer one simple observation, viz., F.—From the sixth to the twelfth day of incubation, you will inevitably kill the embryo, if you touch the egg with cold hands.

THERE is a rather common affection amongst young pigeons and young turkeys of the present time, which certain authors have compared to smallpox, but which is not to be so compared; it is an affection analogous to the *Molluscum Contagiosum* in man, and known in veterinary practice under the name of *Epithelioma Gregarinum*, a malady of the skin of birds, due to the presence of microscopic parasites called *Gregarines*. These *epitheliomas* are a kind of wart, and develop in the head, and over regions deprived of feathers, at the root and hinges of the beak, in the lower parts or lobes of the ears, in the face, around the eyelids, in a word everywhere where the surface is denuded of feathers. Sometimes, however, they spread to the feathered parts of the head, the nape of the neck, and under the body and wings. In the last-named circumstances, it is

very possible the disease attacked the sufferer, whilst very young and naked; its feathers not having sprouted until after the disease had planted itself in regions last specified. The skin of the young pigeons, in the diseased, presents a species of tumour, having the form of flat tubercles. Later on they leap out, so to speak, and become prominent, like warts; their volume varies from the size of a grain of colza to one of maize. The colour of them goes from a clear red to a greyish yellow. When very young, these tumours present the shades of the rainbow; in general they are hard to the touch, then, their surface covers itself quickly with a scale or scab of a dirty grey or brownish red. They are to be found in varying numbers and in different regions of the body. Their dimensions vary with their age. Now their surfaces are granulous, and now they present the aspect of warts covered with vegetations of the form of myrtle berries. Accordingly as they are isolated, or confluent, these vegetations may have the size of a lentil, a pea, a cherry-stone, or a bean; they are to be met with in even greater size still. The parts affected become the more wrinkled and irregular as the wounds get older. When this eruption of pseudo tubercles develops itself on the eyelids, these swell, thicken and stick together. The junction is generally attacked, and tumefies, projects from betwixt the eyelids, and presents all the signs of catarrhal inflammation up to the point at which eruption takes place, it has a yellowish colour, and is covered with scales; later on the inflammation increases, and becomes purulent; if it spreads to the globe of the eye, it provokes *Keratitis*, a sort of abscess in the cornea, or horny membrane in the forepart of the eye, which, like the skin, becomes covered with a warty vegetation; the whole of the eye gets to be covered with this vegetation, and presents the appearance of a strawberry protruding from under the eyelids of the sufferer. In general, this disease or malady, which the Italians have qualified as *gregarinous diphtheria*, is less grave than real croup or diphtheria. Often the cure comes of itself by an effort of nature, the vegetations detach themselves and drop off spontaneously. The parts of the beak, the tongue and the forepart of the neck and throat, cure themselves without treatment. It has been reported that one or two fanciers have contracted this disease at the Halles Centrales of Paris, by artificially feeding pigeons affected with it from their own mouths; we much regret not having received any direct communication concerning the two cases reported, in view of the great interest of them, from the point of view of preventive sanitation; they have, however, been referred to at the academy of medicine, by Dr. Trasbot. But the spontaneous cure, just noticed, is not without exception, even where the disease presents itself in only a modified form and degree. Frequently enough the birds attacked, grow thin, form marasm or flesh-wasting, and die. At other times, the disease, which is only apparent on the surface of the skin, spreads to the digestive and respiratory organs; the bird loses appetite, and saddens; its feathers become dull, and bristle up, and in from three to five weeks at most, it dies. The cause of the disease is not an *acare*, but a *gregarine*, or kind of microscopically small body, round in form, which lodges in the epithelial cells, whence its name of *epithelioma*, or tumour of the epithelium. As treatment, we advise crocylated glycerine. The parts affected are painted with a very fine brush dipped in the following composition:—Crocyl (Jeyes), five grammes; Distilled water, 100 grammes; Glycerine, 100 grammes. (A gramme is equal to 0.035 of an ounce English). Glycerine applied by itself kills the *gregarines*, by removing the water from their composition. When there is reason to suppose that the pigeon is attacked internally, a teaspoonful of pure glycerine

should be administered, or a tablespoonful according to the size of the patient. It will of course be obvious that in addition to the administering of the medicine and treatment above specified, the strength of the bird must be maintained by the supply of rich food of the best quality; and that strict hygiene must be instituted, will be well understood. Chopped meat, ox blood, hard eggs powdered, coffee in the drink, wheat, oats, and small maize, the grains to be of the best quality and of medium size. Pastes and poultices so dear to some breeders and fanciers, must be avoided. Separate the sickly birds from all their companions; give them full liberty, and at nights, when not cold, lodge them where they can have abundance of air; in a shed or barn, well protected from rain and wind. The loft from which they were taken, must be thoroughly and searchingly disinfected, whitewashed, and powdered with quicklime, wherever the brush of the white-washer cannot reach or penetrate, as for instance the nests and laying pans. The birds affected even when cured must not be reinstated in the loft until time has confirmed the cure.—A. ELOIRE, in the *Estafette*.

BEANS.—Amongst the different varieties of bean, the two most important and best known are the large Windsor bean, which is the most generally cultivated, and the bean of the field, commonly known as the horse bean. Independently of the starch, gum, and sugar, which make up about fifty per cent. of its composition, the Windsor bean contains in addition, twenty-five per cent. of nitrogenised matter; the leguminous property in beans which is in marked analogy with animal cheesy substance, as a nutritive aliment, is of the first order; this nitrogenised matter, according to the analysis of Mons. Payen, exists in a higher proportion, viz., 30-80 % in the horse bean, for which reason it is held to be the bean *par excellence*. The horse bean is cultivated principally in Alsace and the Flanders, where it is much appreciated as food for cattle, on account of its richness in the element of nitrogen. Its volume is generally more than double that of the ordinary horse bean which is used as food for our pigeons, the last named, however, of the two classes of horse bean, does not constitute a separate class. In point of fact, when cultivated in good land, they finish by giving out a volume quite equal to that of the ordinary bean. They cannot therefore be considered as a distinct class, but as a product obtained, either by sifting or by imperfect growth in less fertile and swampy lands, such as the tracts of Holland, in which the bean known as the Dutch bean is principally cultivated, this being the bean very commonly used by pigeon fanciers of the north. Cribbling or sifting, and culture in but poorly productive land, can hardly be regarded as conditions calculated to endow the bean cultivated under them, with a quality as sound and good as that of its rivals springing under better conditions as regards land, etc., or with volume as large, or consistency as firm; notwithstanding these considerations, however, it is none the less considered, and with just reason, by our fanciers, as amongst the richest and most nutritive of pigeon food. What proves the imperfect growth of this bean is the fact that, in comparing a sack of ordinary beans with one of pigeon beans, the latter are found to contain a much larger quantity of flattened items amongst them, these not having the firm consistency and fulness to be found in the ordinary bean; notwithstanding all this, however, their price is none the lower, no doubt on account of the ever increasing demands of pigeon fanciers upon them. Compared with the large ordinary bean, they are an inferior product. The small red bean of which we spoke at length in our last article on this

subject, cannot be charged with either of these marks of inferiority. Although of much smaller volume, it presents as hard a consistency, and as great regularity as the ordinary bean when this last-named is at its soundest; it is even of a much rounder form, and a good proportion of the grain has nothing to envy as regards volume and regularity, from the large vetch or the well dried green pea. The red bean seems to have a greater resisting power to cold than the white. It is earlier and of superior yield. We have more than once noticed maturity even in inferior husks, in the second fortnight of July, and seen the crop gathered in by mid August. Its yield, especially in rich soil, and when well sheltered, is at times most extraordinary, stems being to be found bearing as many as from 125 to 150 grains. Its yield may be estimated at a ratio of 35 to 1 of seed sown. Its color of a fine red purple gliding into a rosy brown, is its principal distinctive characteristic. Many hypotheses are put forth on the subject of its colour. It would be interesting to make a comparative analysis of the red skin which surrounds its nutritive substance, with the white or grey skin of the ordinary bean, and to see whether amongst the 3.60 per cent of mineral salts forming its constitution, there may not be an infinitesimally small quantity of salts of iron, whereby to explain this particular coloration. We have not been able ourselves to make these researches, but intend next year to make the experiment of sowing the necessary seed in a ferruginous soil, so as to test the influence thereof, on the bean and its particular colour. The flower of the red bean differs equally from that of the ordinary article; it is not of that dead white, on which the two little black spots decry themselves in so vivid and trenchant a manner, which taken as the emblem of death in ancient times, have caused many mysterious influences to be attached to it, from which in some parts of our country, the superstition arises that large numbers of people go mad when it bursts its bud; it possesses on the contrary a tint of reddish grey with faint shadings of violet, from which the two little black spots stand out in somewhat less pronounced a degree. All fanciers of the North (France) love to recall the balmy odours rising from a field of beans when in full flower. This is at the time when our races are at their height, and when more than ever, our fanciers bring their attention to bear minutely on the choice of food for their birds. It is not generally known to what extent a very small bag of horse beans will propagate itself. As all of us know who have anything to do with the homing pigeon, this bean is of the utmost value as an article of food. The subject of its culture is what will engage us in the following lines, and from these we hope to show how readily and with what benefit to his birds, also to himself, a fancier may enter upon the task of becoming his own producer of the article of diet in question. Undoubtedly to become the food grower as well as the breeder of his pigeons, will extend the area of a fancier's occupation, and it may only be the few who can enter upon this extended area. But to those who can, the result will be to widen the field of interest, and by diversification, lighten the burden of work and anxiety, incident to the career of every fancier who is ambitious of celebrity. The culture of the bean is one of the simplest, and involves scarcely anything of importance as regards expense in the matter of manure. The horsebean is not indeed a plant that exhausts the soil. It has the advantage of deriving much from the atmosphere, and so consumes but very little manure. In our own case, we have the best proof possible in the excellent results we have obtained in cultivating it during successive years in the self-same ground and even the same garden.

In the open fields it may not always perhaps be the same, for the soil there, is often less productive in consequence of manures less potent and less frequently renewed. It is evidently in the more modest sphere of the garden, and we might add the more homely and comfortable sphere, that many fanciers may make their first experiments. There are many who have gardens, and it is to these that we address ourselves at the present moment, endeavouring meanwhile to render what we have to say, as interesting as possible. In the first fortnight of March, the spade should have been at work turning up a suitable patch, and into this a small quantity of ordinary manure, to which should be added a light sprinkling of pigeon excreta swept from the loft. Lines or small furrows of about 2 inches in depth, and 11 inches distant from each other, should be traced. In these furrows, the grains should be sown one by one, the larger sized ones a trifle nearer each other, in order to produce smaller beans, say at $3\frac{1}{2}$ inches apart, the smaller grains should be at greater distance from each other, so as to bring up the size, say at four inches; in these respects however, the fancier will be governed by his own ideas as to the size of bean he wishes to obtain, for the size or volume of the grain is not of much importance to the adult pigeon; indeed sportsmen have often spoken to us of finding acorns in the crops of ring-doves shot by them.

(To be Continued.)

LOCAL INFLUENCE.—The *Homing News* of March the 9th, contained an article on this subject, translated from the *Martinet*. It is doubtful whether I am in a position to add much to the information contained in that article, but feeling the subject to be a deeply interesting one, I have taken up the pen to draft a few notes, which, if of no other service, may give the novice a useful theme for consideration. It will be remembered that in the *Homing News* of March 24th, 1893, I dealt at some length with the subject of "freaks of youngsters," and my advice to the novice was (and for the matter still is), that if he wished to establish a strain of Working Homers, he would find it more economical to breed from all young birds he purchased before training them. The following quotation is from the *Martinet* article to which I have referred. "We have experimented and set the truth of this at rest ourselves; having obtained the pure breed of another province, we entered our purchase for a race. Part did nothing, the others were lost. We have obtained similar birds, i.e., from the same province, and have preserved them for adaptation to new conditions of life by crossing, we have obtained the finest results." My own experience agrees most emphatically with this view. I have purchased and imported birds from all parts and their young were absolutely worthless as young birds, but I crossed their young and persevered with them, and their excellence was proved beyond a doubt. I have also found that in many cases where the young bred from imported birds would not work systematically at all, if nursed their first year, rested entirely the second, they were quite naturalized by the third season, and capable of doing anything asked of them, if birds of known race. I have known fanciers who have lived in a locality for a year or so never able to make a show, they have moved perhaps a distance of five or six miles, and with exactly the same birds won prizes in every race in which they have competed. Then again I have known fanciers who have never been able to get their birds to come well from one direction, put them to another route and never be out of the prizes. I maintain that local influence has much to do with this, as I hope to be able more clearly to demonstrate. And in speaking of local influence, I consider it may have as great effect at 5, 10, 20, or 50 miles as

at as many hundreds. It cannot be denied that each county, each province, each suburb has some local difference in its topography, general atmospheric temperature, soil, and surroundings, and does it not seem feasible that these should have some influence on birds as well as kind. I contend that by the continual training of a loft of birds by a fancier in any particular locality on the principle of the survival of the fittest, that although almost imperceptibly he is breeding a race of birds adapted to work under the condition imposed by him, and thus favouring local influence. I have seen it stated by some fanciers that "there is no such thing as any special strain of Homers for any special work, as a good bird when properly trained can travel one route as well as another." This may be true, but I am inclined to think may be defined and an argument based on the subject. For instance, by years of careful breeding and training, I produce a strain of birds that will cross the water well and consistently, for this purpose we will assume these birds are of the emerle type, they fly high and are very reliable, but at short distances seldom take a place in the prize list. I have no time or inclination to breed or keep many birds, by continually breeding from only those birds which do the long-distance work, does it not follow that I am producing a race constructed mentally, externally, and physically suitable for this particular class of work, under the circumstances imposed upon them by my particular treatment, and therefore it seems to me if after many years thus breeding from the best birds that have done well over a particular route, I am establishing a strain suitable for this particular work. Having regard to this, the novice who wishes to speedily hold his own with his fellows, by purchasing birds that have continually flown the route he desires to train, is more likely to obtain a bird suitably constructed for the purpose. Assume for instance I dwell in a neighbourhood situated low, which has a smoky foggy atmosphere, from the factories with which it is surrounded, by the continual racing and training my birds year after year, and breeding from the best, it is palpable I am creating a strain that will in time circumvent the unfavourable circumstances they have to contend with. I have always suggested that much of a fancier's success depends upon the situation of his loft, having regard to the situation of those of his fellow competitors. It will be often noticed a fancier attains much success in one club, but in another to which he belongs, with even less competition, and in which he races the same birds, he is simply nowhere. It cannot be denied that local influence has a great effect on crops of particular kinds of soil, the atmosphere and the surroundings; besides this, the continual training of the crops in a locality, and the breeding and rearing from the best seedlings suitable to the soil, has had much to do with this. We all know Norfolk is noted for its geese and turkeys, local influence is surely the cause of this. The great naturalist Darwin continually refers to his belief in local influence. Speaking of a particular strain of pigs in a certain locality, he shows how all the white pigs bred there were poisoned by a certain berry which was very plentiful, but the black ones never died from its ill effects. By continually breeding from these blacks, the farmers produced a strain impervious to the poison, in fact that thrived on it. Dorking is famous for its strain of fowls, Aylesbury for its ducks, and if local influence has so much effect on these species, why should it not on strains of homing pigeons? If it has then it amounts to this, if a fancier has established a strain capable of great performances subject to the conditions imposed upon them by him and local influence, it does not follow in their pure

state they will be worth their salt to a fancier in some other locality. Now here is a problem I am anxious to solve. In my loft we will assume I have two distinct strains—(1) we will call the mealy strain, (2) the blue chequer. Of the mealy strain, year after year I am getting birds home shot; of the chequer strain I lose a small percentage more than the meales, but seldom have one return that has been wounded. Because I have some birds home shot which all in win as many prizes as the others, ought I to discard all the shot birds, and only breed from birds that have never been shot, so as to produce a race of high flyers that can be relied on flying well out of gun shot, or on the other hand, shall I by breeding from only those birds that have been shot, produce a strong hardy race that will take a lot of killing? Of course it can be argued that the birds that have been lost may only have been wounded, and the supposed high fliers have had the luck to be missed by the guns. This problem I have had under consideration some time, and am still considering. "In our opinion no country beyond Belgium will ever succeed in localizing, with all its qualities, the bird which we possess." This is another quotation from the *Martinet* article. Is it not and should it not be a warning to the novice. If this contention is true, and I believe there is much in its favour, is it not perfectly clear that we in this country would do far better with our money by purchasing birds from known fanciers in our own little island, who have done good work, than by continually importing Belgian birds, which take at least two years to localize, and may even then prove useless. In my opinion, at the present time we have better and stouter-hearted birds in this country than there are in Belgium. I am inclined to believe myself that homing pigeons do not entirely rely on sight as a guide for home. Whilst admitting this may be the greater factor, as they cannot in thick foggy weather be relied on, still, on the other hand, it cannot be contended a bird can rise to a height as to be able to see such a distance as 400 miles, and this journey was performed by a bird belonging to Mr. Taylor, of Newcastle, in 1880, which returned to Mr. Mills, of Brussels; the bird was a hen three years old, and had never been trained over any of the ground it crossed. Instances of even larger journeys than this done off hand can be quoted. Of course it can be contended these were only chance performances, that the wind might have happened to have been blowing in a favourable direction, and as a stray pigeon or bird usually travels with the wind, these birds by a fluke found their homes. I do not think it can be disputed the eye of the pigeon is microscopic. As proof of this, notice frequently how the flock will dash off the house on a heron or some bird coming into view which it will take at least some minutes for the human eye to make out. But I am inclined to think there is something beyond sight alone inherent in the Homing pigeon guiding it to its destination, and local influence may have much to do with it. In these circumstances if there is anything in the arguments I have advanced, it appears to me the novice would do far better when purchasing birds to obtain them from a local fancier of repute, than to be continually buying from here, there, and everywhere. By adopting my plan, he would at once obtain a ready-made bird habituated to live under the climatic influences by which he is surrounded. Again, I would warn the novice it is most dangerous to introduce too many crosses into a strain of birds, once having obtained birds that are Homing well don't over estimate the value of a cross because it emanates from a fancier with a big name, but however good the reputation introduce all crosses with caution, more par-

ticularly mating a new purchase to one that has become thoroughly localized, this being far better than crossing two birds both introduced from a distance. I could add many examples that would support the theory I have advanced, and could likewise give some interesting tables showing the result of systematic breeding having regard to local influence, but fear I have already taken too much space with a subject of perhaps insufficient general interest, but I would warn the novice that it is the study of minute and apparently trivial details such as this that go to make the successful Homing pigeon fancier.—SQUILLS

CORRESPONDENCE.

Will Correspondents who desire a reply please note that a stamped addressed envelope must be enclosed for the purpose. All letters must reach us by TUESDAY AT THE LATEST, written on one side of the paper only, and must not be addressed to printers. We cannot return rejected Copy.

E. ROBERTS.—Thanks, the information will be very interesting.

R. QUINION.—You omitted to stamp your letter.

ENGLISHMAN.—Probably we shall act upon the suggestion contained in your letter.

A.P. SCOWCROFT.—It was done last year, we believe.

G. W. HENSON.—Thanks, we shall consider the suggestion.

H. MARSHALL.—Will you send dates when the alterations were made.

IDENTIFICATION.

To the Editor of the *Homing News*.

Sir,—Your correspondent "Squills" and myself have occupied the space which is usually set apart for correspondence quite long enough, and this is my last line on the subject. I say the proof's the thing that is wanted. "Squills" says the proof's the thing that would be wanted, and under my system he could cheat easily and systematically, because it would be impossible to detect the fraud. Well, now then here is a nice chance. I want to bet either "Squills" or any other fancier, be they either English or foreign, £5 to £1 that they cannot cheat under my system without my detecting it. I have heard a lot lately about how easy it is, now let us see, and if it happens to be someone that objects to a wager, I will give without betting to anyone that can cheat *once* without me detecting it, one sack of best tic beans. I don't want anyone to think that because I have issued this challenge that it is because I am not able to argue the question, but if we argued a donkey's hind leg off we could make no impression on some people. I have tried both systems, and thoroughly understand the working of them, and in my opinion there is no comparison betwixt the different systems for safety of identification, and as a preventative of fraud. There is only one point I wish to call attention to in "Squills" letter, that is this, "Squills" carefully investigated a case of supposed fraud, and found it not guilty, therefore in his opinion, my statement that dozens of races had been fraudulently obtained under the stamping system was without foundation. Surely "Squills," you don't suppose that I should dare to put such a statement in print if I could not prove it if required to do so. I have a system which I thoroughly and honestly believe cannot be walked over if it is properly carried out, and further, it is no interest of mine to parade this system before the fancy. I don't care two pence whether anyone else adopts it or not, the only reward I get is a lot of correspondence to answer, and a lot of trouble and expense in showing and explaining it to those who feel interested enough to enquire. I know the system is sound enough, whatever the fancy may think about it.—Yours, etc., L. R. HALSTEAD.

To the Editor of the Homing News.

Sir,—In some clubs where the marking is in the hands of some old and trusted member, who has given satisfaction to every member of the club for years, doubtless stamping birds for races is the simplest and cheapest method; but it is widely different when the marking is done by a committee of flying members, say of six, who, although they retire when their own birds are being marked, yet they mark the birds of their friends, and two of the markers themselves may be boon companions well met. Now the number of any bird being known, and the member having received a telegram from the secretary announcing the time of liberation, often hours before the arrival of the first bird, he has only to calculate a velocity which he thinks suitable to the day and await results. "Squills" will admit the disagreeable fact that in some clubs there are cliques formed who work together for other than the benefit of the club to which they belong. What would be simpler than for these men to shuflle themselves into the marking committee, and so work into each other's hands. The Belgian clubs must have had grave reasons for practically discarding stamping in place of the rubber ring. Nowadays a bird rung or stamped, if caught, is often subjected to a life long captivity, and the best safeguard a bird can have, if lost, is to be neither rung nor stamped. A bird marked has acquired a certain market value, and often from 2 6 to 5/- will be asked for them by the dealer. Now a bird only rung with a rubber ring will lose all identity as a race bird on its removal, and consequently its value, should it get into wrong hands.—Yours, C. E. VYNER, Gleadless.

SHOOTING HOMING PIGEONS.

To the Editor of the Homing News.

Sir,—If the shooting of homers is to be stopped, something more is needed than the presentation to the House of Commons of a single petition by a single member. What is needed is a hundred or a thousand petitions, presented by fifty different members. You could print cheaply a form of petition to sell for a copper or two each. Every flying club in the kingdom should have one, and the secretary should get the members to sign. At the same time, every individual fancier should start a petition. In thousands of cases homers are household pets, and the decimation of the household dove-cote can be petitioned against, not only by John Smith the fancier, as a member of a club, but by John Smith as a private individual, and by Mrs. Smith, and by all the little Smiths who can write their names. During the next month you could invite reports from fanciers throughout the country as to the places where shooting is going on, and publish the list in the *Homing News*. Every club secretary could cut this out and forward it to his local M. P. when sending up the petitions.—Yours, J. FAWCETT CARTER.

TRAINING STAGES.

To the Editor of the Homing News.

Sir,—Will any fancier training on the North Road kindly tell me the best stations to make use of between King's Cross and Holme? Last year I sent four birds to Biggleswade, only two returned after sixteen days, yet after a rest they flew Holme for the next stage in good time. In another case, a young cock flew from Stevenage in excellent time, but failed altogether at Biggleswade. Doubtless the situation of some stations make them unsuitable for tossing. I should be grateful to receive an answer, though going by the fact that most of the queries remain unanswered when fanciers are appealed to, I am afraid I shall be disappointed.—Yours, THE SILVER KING.

EGGS NOT HATCHING.

To the Editor of the Homing News.

Sir,—Kindly allow me space in your columns to ask the fancy if anyone can give me a reason for my birds' eggs not hatching. I have averaged only one youngster out of every eleven eggs laid; the old birds sit them without any fault, until hatching time, then the mystery commences; the shells begin to chip, and the youngsters will get their beaks out and then they stick fast, the skin inside the shell seems to tighten round the birds, and keeps the prisoners in the shell to die. I feed my old birds on the best of the following obtainable, viz: grey peas, vetches, and tick beans. I also give them fresh water for drinking and bathing every day.—Yours, J. D.

STONEWARE NESTPANS.

To the Editor of the Homing News.

Sir,—May we ask you or your readers to kindly give their opinion as to the merits of the various kinds of stoneware nestpans in the market? We would like especially to know if glazed ware is more advantageous to the breeder than unglazed, and if this is the case, should the nests be glazed inside or outside or both inside and outside? The difference in the cost of production is so slight that one kind might equally as well be made as the other, and if it could be definitely decided which particular kind was best, manufacturers need only make that kind. Fanciers would then have the advantage of procuring the correct thing without difficulty or extra cost.—Yours, E. COANEY & CO.

CLUB NOTICES.

NOTE.—Requests to Fanciers to join societies must be inserted among club advertisements and paid for at fanciers' rates, 3 words for 1d. Terms for displayed advertisements on application to Manager.

MEETINGS TO BE HELD.

- April 6th—Finsbury Park F. C., important general, at clubhouse, at 8 p.m. sharp. A matter of the utmost importance will be brought forward.
- April 7th—Barnley and Dis. F. C., monthly meeting, St. Leger, at 7.30.
- April 7th—Wellingborough and District H. S., general at club house, at 6 p.m. Members to bring their running distances.
- April 7th—Northampton Dis. H. S., general. Subscriptions due.
- April 7th—New Mills F. C., general, at 7.30 p.m. prompt. Members are requested to bring running distances.
- April 8th—Peaseley Cross H. S., New Vaults, Peaseley Cross Lane, St. Helens. General at 8 p.m. Important.
- April 9th—Earlestown H. S., special general to settle mode of timing in at 7.30.
- April 9th—Batley Dis. H. S., general meeting. All members' running distances, &c., certain.
- April 10th—Daisyfield H. S., Blackburn, general at 8 p.m.
- April 11th—Coatbridge F. C., general at 1 Bank street, 8 p.m. Business: Federation.
- April 12th—Brighton F. C., general meeting at Richmond Hotel, 8.30, important. All members earnestly requested to attend.

MEETINGS OF SOCIETIES.

South London F. C.—At a special meeting held March 22nd, the members met to take into consideration the advisability of amalgamating with C. P. F. Club, when it was decided to do so, as the majority of the members wish to fly their birds from the continent.—E. H. DELLA ROCCA, hon. sec.

Chelsea F. C., Cheyne Walk.—At a committee meeting held on 27th March, it was decided that there be ten diplomas for each race during the season. The committee are now measuring the running distances of each member.—J. HAWES, JUN., sec.

Stockport and District (N. E. Cheshire) Federation.—A meeting (adjourned from Mar. 20th), was held at the Stockport and District club house, Hare and Hounds, Market Place, on March 29th, to further discuss the question of forming the above federation, and hear the reports of the representatives in attendance, as to the manner in which the various suggestions talked over at last meeting had been received by their members. In each case the report was in favour of forming the federation on the suggested lines, and it was unanimously decided that such a federation be formed. The name decided on was the Stockport and District Fed., this being thought more appropriate than N. E. Cheshire. Mr. F. S. Watson, New Mills, was elected president; Mr. G. E. Walker, South Reddish, Stockport, hon. sec., and a representative from each club enrolled will complete the committee of management. Mr. Jas. Hampson, Stockport, was appointed convoyer. The meetings of the committee will be held alternately at the club houses of the clubs enrolled. The race points suggested at the previous meeting were adopted, viz., Worcester, May 19th; Swindon, May 26th; Ventnor, June 2nd; Cherbourg, June 16th, for old birds, and Worcester, July 27th; Cheltenham, August 4th, for young birds. The following clubs were enrolled at the meeting:—New Mills, Macclesfield, Marple, Ashton, and Stockport. Denton H. S. will probably join at next meeting which will be held at Stockport club house, at 7.30. Wednesday, April 18th. Representatives of clubs interested are cordially invited to attend. The Federation is open to convoy for clubs which are not prepared to join, or will take individual birds at a reasonable charge.

Essex H. S. held a meeting on Tuesday, the 27th ult., at the club house, Engineers' Arms, Queen street, Stratford. After the minutes of previous meeting had been read and adopted, it was proposed and carried that the money subscribed to the optional pools shall be divided as follows: Retford, 20 per cent.; York, 20 per cent.; Durham, 25 per cent.; and Berwick, 35 per cent.; and in the event of any of the races proving disastrous, viz., any pool birds not arriving by the time the various races close, the money to be divided amongst the successful pool winners. Young birds as follows: Pinchbeck, 25 per cent.; Sleaford, 25 per cent.; and Branstons, 30 per cent., and 20 per cent. for the late Chatteris race, and in the advent of any of the races proving disastrous, the same rule will apply as in the old bird races. A letter was read from our new member, Mr. Prince, stating that his birds had been killed by a cat with the exception of one, and he wished to resign as he had made up his mind not to get any fresh blood. The members present expressed their sympathy with Mr. Prince, and with regret accepted his resignation, when the meeting adjourned till the following Tuesday, it having been decided to hold the meetings every Tuesday evening for marking squeakers and general business.—R. NICHOLS, sec.

Crewe H. S.—A special general meeting was held at the club house, on March 31st, when the following races for the season were fixed:—Old Birds—Cheltenham, May 19th; Bournemouth, June 2nd; Cherbourg, June 16th. Young Birds—Worcester, July 21st; Chippenham, August 4th. Will members please note that all subscriptions must be paid by April 14th, the next general meeting, after which date no one will be admitted.—WM. SNELSON, sec.

Morley Dis. H. S.—Members' Flying Distances for 1894. Members are requested to keep this copy. Any objection to their measurements must be made within fourteen days.—J. FIELD, hon. sec.

Name	Ambergate	Coalville	Rugby	Banbury	Didcot	Winchester	Ventnor	Cherbourg	Ron. Dis.	Time
H. Pearson	47 352	68 425	95 320	116 792	147 1408	186 938	219 1320	284 470	1150	3 50
E. Lobley	47 352	68 425	95 320	116 792	147 1408	186 938	219 1320	284 470	1120	3 44
T. Bentley	47 660	68 750	95 750	116 1280	147 1740	186 1340	219 1630	284 930		
G. Bywater	47 520	68 565	95 200	116 940	147 1535	186 1050	219 1370	284 680	800	2 40
T. Scarth	47 1000	68 1180	95 860	116 1500	148 275	186 1595	220 125	284 1120	200	50
G. Wilkes	47 1180	68 1235	95 1020	116 1660	148 430	186 1740	220 275	284 1280	400	1 20
T. H. Scholes	47 1175	68 1235	95 1020	116 1660	148 430	186 1740	220 280	284 1260	260	0 52
B. Gott	47 1210	68 1280	95 1080	116 1710	148 485	186 1740	220 325	284 1315		
H. H. Watson	47 980	68 1160	95 860	116 1500	148 280	186 1600	220 180	284 1135	300	1
H. Bentley	48 520	69 570	96 280	117 925	148 1450	187 1060	220 1320	285 550		
G. Warings	47 1220	68 1275	95 1060	116 1700	148 470	187 20	220 315	284 1320		
F. Bentley	48 520	69 570	96 280	117 925	148 1450	187 1060	220 1320	285 550		
C. Brown	47 1000	68 1180	95 860	116 1500	148 275	186 1595	220 125	284 1120	190	40
H. Sykes	47 980	68 1160	95 860	116 1500	148 280	186 1600	220 160	284 1135		
J. Lowe	47 980	68 1160	95 860	116 1500	148 280	186 1600	220 160	284 1135		

Wombwell Dis. H. S.—Members' Flying and Running Distances, and Time Allowances.

Name	Ambergate	Derby	Coalville	Rugby	Banbury	Didcot	Winchester	Ventnor	Cherbourg	Rennes	La Rochelle	R.D.	Foot	HeorBl
J. Guesb	31 1466	41 528	53	78 1548	100 1173	132	171 234	204 234	269 460	375 492	512	1448	5 45	3 15
C. Savage	31 1600	41 725	53 180	78 1700	100 1395	132 175	171 420	204 450	269 680	375 694	512 180	1350	5 15	3 0
J. White	32 400	41 1220	53 720	79 300	101 352	132 70	171 990	204 915	269 1170	375 1185	512 650	440	1 45	1
A. Beardsall	32 520	41 1370	53 865	79 450	101 528	132 800	171 1090	204 1035	269 1295	375 1300	512 800	1882	45	15
W. Swift	31 1466	41 540	53 20	78 1530	100 1173	132	171 230	204 234	269 480	375 485	512	1476	5 45	3 15
W. Beardsall	31 1420	41 526	53	78 1505	100 1130	131 1730	171 215	204 225	269 460	375 440	511 1740	1526	6	3 15
J. Lisle	31 1100	41 200	52 1420	78 1205	100 820	131 1415	170 1610	203 1690	269 100	375 130	511 1400	1760	7	4
A. Richmond	30 1615	40 755	52 230	77 1700	99 1320	131 210	170 492	203 528	268 600	374 690	511 403	2808	11 15	6 15
A. Bayliss	32 960	42 200	53 1380	79 1115	101 750	132 1380	171 1600	204 1680	270 110	376 155	512 1370	1333	5 15	3
T. Tunstall	32 1550	42 700	54 120	79 1640	101 1325	133 115	172 380	205 400	270 615	376 630	513 103	1798	7	4
J. Madin	33 1210	43 455	54 1540	80 1215	102 1200	134 90	173 176	206 117	271 420	377 515	514	4966	19 45	11 15
G. Gadsby	32 660	41 1700	53 1090	79 820	101 460	132 1100	171 1337	204 1375	269 1580	375 1510	512 1055	980	3 45	2 15

Daisyfield H. S., Blackburn.—The following is the list of members' flying and running distances, and time allowances. Members are requested to keep this copy of *Homing News*, and any objections to measurements, &c., must be lodged with the secretary before April 23th. H. Bolton has four minutes per mile allowed for bicycle time.—E. ROBERTS, sec.

Name	Crewe	Stafford	Worcester	Bath	Bournemouth	Jersey	R.D.	T.A.
J. Bradley	48 1166	68 1366	110 236	167 1286	212 1533	318 286	1815	6 3
J. Boyle	47 1631	68 71	109 751	166 1731	212 211	317 751	85	17
W. Byrom	47 1656	68 96	109 96	166 1756	212 206	317 776	360	1 12
J. Brookhurst	47 1636	68 76	109 756	166 1736	212 246	317 756	265	53
H. Bolton	46 1431	66 1631	108 551	165 1531	211 41	316 551	2081	4 45
W. Chadwick	48 351	68 551	109 1231	167 451	212 721	317 1231	735	2 27
P. Comer	47 586	67 786	108 1466	166 686	211 956	316 1466	682	2 16
T. Carr	47 971	67 1171	109 91	166 1071	211 1341	317 91	1751	5 50
J. Forrest	48 311	68 511	109 1191	167 411	212 681	317 1191	740	2 28
J. Gillibrand	47 1656	68 96	109 776	166 1756	212 266	317 776	260	52
G. Harrison	47 1521	67 1721	109 641	166 1621	212 131	317 641	362	1 12
T. Leaver	47 1731	68 171	109 851	167 71	212 341	317 851	280	56
R. Norris	47 1631	68 71	109 751	166 1731	212 241	317 751	355	1 11
P. Peel	47 551	67 751	108 1431	166 651	211 921	316 1431	697	2 19
W. Rothwell								
E. Roberts	47 656	67 856	108 1536	166 756	211 1026	316 1536	607	2 1
J. T. Ramsbottom	47 691	67 891	108 1571	166 791	211 1061	316 1571	850	2 50
S. Smith	47 1661	68 101	109 781	166 1761	212 271	317 781	330	1 6
E. Shaw	47 1521	67 1721	109 641	166 1621	212 131	317 641	266	53
W. Sharratt	47 381	67 581	108 1261	166 481	211 751	316 1261	570	1 52
J. Standring	47 1351	67 1551	109 471	166 1451	211 1721	317 471	660	2 12
J. Shaw & E. Mason	47 1531	67 1731	109 651	166 1631	212 141	317 741	256	51
R. Worthington	48 526	68 726	109 1406	167 626	212 896	317 1406	860	2 52

Bournemouth H. S. held a committee meeting on March 20th, Mr. Sandford being elected on the committee. The following are the Training and Race Stages for the Old Birds, and Distances. Any member not being satisfied with their distances must write to the sec on or before April 17th, or will not be entertained. It was also agreed that our Young Bird Races be from the West, as follows.—J. HAYES, hon. sec.

OLD BIRDS.

Name	Cheltenham	Newport (Salop)	Preston	Axminster	Exeter	Holsworthy
R. H. Brown	82 330	147 430	220 630	49 595	69 605	108 625
S. J. Brown	82 1419	147 1519	220 1719	52 495	73 505	111 525
E. Dean	82 704	147 804	220 1004	51 838	72 848	110 868
J. Elford	82 1622	147 1722	221 162	51 1705	72 1715	110 1735
W. Evans	83 33	148 133	222 333	51 606	72 670	110 690
B. Elliott	81 1188	146 1288	219 1488	51 233	72 243	110 263
R. Green	81 858	146 958	219 1158	51 550	72 560	110 580
J. Hayes	82 671	147 771	220 971	51 660	72 670	110 690
E. Jackson	82 1650	147 1750	221 190	51 1320	72 1330	110 1350
B. Jessopp	81 1006	146 1106	219 1306	51 495	72 505	110 525
L. Lott	82 638	147 738	220 938	51 687	72 697	110 717
B. Maidment	82 847	147 947	220 1147	51 977	72 987	110 1007
T. Norris	82 1017	147 1117	220 1317	51 1705	72 1715	110 1735
W. Phillips	82 594	147 694	220 894	51 783	72 793	110 813
W. J. Simons	83 220	148 320	222 520	50 893	70 903	109 1013
G. Short	81 1100	146 1200	219 1400	51 453	72 463	110 483
H. Sandford	82 889	147 989	220 1189	51 1004	72 1014	110 1034

YOUNG BIRDS.

Great Budworth H. S.—A meeting was held in the club house, on March 30th. It was decided that the O B races be Worcester, Swindon, Ventnor, Cherbourg; the Y.B. races Worcester, Cheltenham, and Swindon, the three first in each race to be an average velocity race, while Cherbourg race was a special prize race. It was decided to join Northwich in the Cherbourg race if allowed to do so, and if proper arrangements could be made. The hearty thanks of the club were accorded to Mr. W. C. Moore, for a promise of a pair of squakers for the Cherbourg race, also to Mr. Wright, the worthy president, for a Copper Kettle, for second Cherbourg, and the same for first velocity Y.B. It is confidently expected that prizes of good value will be offered for the continental race. It was decided that the *Homing News* should be the official organ of the society, and that the results of all races should be published in that journal.—J. NIXON, hon. sec.

North London H. S. held a meeting at the new club house, the Prince of Wales, Cambridge Gardens, Kilburn, on March 16th, Mr. Smith in the chair. The following officers were elected:—committee, Messrs. Smith, Baulch, Hill and Wolfe; president, Mr. W. G. Smith; secretary and treasurer, Mr. W. Maitland. The following dates and races were fixed:—birds of any age—June 2nd, Chard; June 9th, Exeter; June 16th, Tavistock; young birds—August 11th, Andover; August 18th, Wilton; August 25th, Templecombe.—W. MAITLAND, hon. sec., 5 Rupert road, West Kilburn.

Ipswich H. S.—The following race stages have been fixed—Old Birds—Doncaster, 143 miles, June 23rd; Northallerton, 197, June 30th; Newcastle, 236, July 7th. Young Birds—Fleet, 107 miles, August 4th; Whitechurch, 127, August 11th; Wilton, 150, August 18th.—C. E. OSBORNE, hon. sec.

Bolton Central H. S.—At the committee meeting held March 20th at the club house, Ashburner street, letters were read from the borough members (H. Shepherd-Cross, Esq., and Col. the Hon. F. C. Bridgeman), also one from T. Banner, Esq., sending the club their best wishes and patronage. Mr. Alf. Darbyshire, Farnworth, and Mr. E. Houghton, Bolton, promised medals to be competed for in the old bird races.—G. WHITTAKER, hon. sec.

Manchester Flying Club.—At a committee meeting held at the club house on Tuesday night last, present, Messrs. Eastwood (in the chair), Wardle, Marsden, Ashcroft, Houghton, Abbey, Garlick, and Yates. Messrs. Jopson, of 30 Saddler-street, Middleton, and Heald, of the Phoenix Foundry, Chorley, were elected members. Mr. M. Shaw, of Waverham Beach, Northwich, was proposed for election at the next meeting. Several applications for membership were declined, as their lofts were situated out of the radius. The following rules for the guidance of the competitors in the Grand National were drafted by the committee, assisted by Mr. H. J. Longton.

THE GRAND NATIONAL—RULES FOR THE GUIDANCE OF COMPETITORS:—

- 1.—The race to be flown weather permitting on July 23rd.
- 2.—The Manchester Flying Club to have the entire management of the race, and in all cases the decision of a majority of the committee to be final and binding on all competitors.
- 3.—The committee of the Manchester F. C. to have the absolute power to refuse any entry or entries, or to return entry fees actually received, should they deem fit to do so.
- 4.—The entry fee to be 5/- per bird.
- 5.—One entry fee of 5/- at the least must be paid not later than June 5th by every intending competitor, who may make additional entries until July 7th, when they will finally close. No entries received unless accompanied by the full amount payable.
- 6.—The race to be flown on the system of velocity proper, until the end of the second day. An actual time allowance after the rate of 2½ minutes per mile to commence at 4 a.m. on the third day and continue until the race closes, eight hours per day to be deducted for darkness.
- 7.—The bird making the highest velocity to be declared the winner.
- 8.—Competitors to announce the arrival of their birds by telegram. The time stated on the telegram as being the time handed in, to be taken as the time of the bird's arrival (deducting the time allowance for reaching the telegraph office). All telegrams announcing the arrival of the birds to be addressed "Flying Club, Manchester." The only wording required in a telegram will be the number stamped on the bird's wing and the name of the competitor.
- 9.—After handing in telegrams, competitors must write on a post card only, as nothing else will be acknowledged, to Flying Club, 151 Rochdale road, Manchester, stating the time the telegrams were handed in, and also giving the racing number or numbers of the birds telegraphed. The verification signed by the competitor must reach the Club House Box by post or otherwise before 8 p.m. the day following the despatch of the telegram or the competitor will be disqualified.
- Note.—If a telegram is despatched after the post office is closed, the verification must be sent by first available post.
- 10.—Any competitor wrongly verifying the time the telegram was handed in whereby he may gain an advantage will be disqualified. N.B.—To avoid mistakes it is absolutely necessary when telegraphing that competitors should get the time that is coded on their telegrams from the postmaster; it is also very important that great care should be taken to see that the messages are correctly timed by the postmaster before being despatched, as they cannot afterwards be rectified.
- 11.—Competitors to telegraph from the nearest available post office, to which they must either walk, run, ride, or drive. Telegrams handed in at railway offices not to be recognised.
- 12.—Every competitor to send in writing to the hon. sec., the distance his loft is from the nearest available post office by the nearest

available route. Any competitor overstating the distance to be disqualified.

13.—The time allowance for reaching the telegraph office to be as follows, viz.—First half-mile, three minutes; second half-mile, two minutes, afterwards at the rate of three minutes per mile.

14.—The race to close on the Saturday following the day of toss.

15.—All birds to be the absolute property of the competitor in whose name they are entered. Any infraction of this rule will annul all right to prizes.

16.—All birds to be shown alive to the hon. sec. or whosoever he may appoint as his deputy, for verification, who reserves to himself the right of tossing them.

17.—All birds to be entirely at the owner's risk from the time they leave their hands.

18.—A diploma to be given to every bird reported home up to and including the Saturday following the day of toss. The division of the money prizes will be arranged later.

These rules are subject to revision should occasion arise, and further details will be supplied to competitors.

Geo. Yates, hon. sec.

Kennington H. S.—At a special meeting held March 28th, it was decided that the entrance fees charged on all races should go to the club funds, and after expenses are paid, &c., the remainder to be equally divided into prizes. This question the members have shown a great deal of interest in, the result being a crowded room, over 40 members being present to give their vote. Members please note that subscriptions are now due and should be paid at once.—H. E. Reilly, sec.

West London F. C. flew a race from St. Albans, 17 miles, on Easter Monday; 30 birds were liberated by the secretary in the presence of the stationmaster (to whom the members tender their best thanks), at 12.5 p.m., weather fine and clear, wind east. Result:—1 and special E. Mole, 615; 2 T. Hewitt, 551; 3 and pool R. C. Williams, 504; 4 W. Saint, 504; 5 E. Ridler, 503; 6 E. Mayhew, 488. Members will please take notice that at the next meeting to be held on the 13th inst., a proposal will be made for the alteration of rule 10, so all members are requested to attend.—Wm. Miles, hon. sec.

County of Middlesex H. S. held their usual meeting on Easter Monday for the purpose of marking old birds, when there was a very fair attendance, and a good number of birds marked. The last marking night for old birds will be the last Friday in April. Members are reminded the four months' subscriptions are now due, and that no birds will be placed in the pannels for the races until all monies due from the members to the society are paid. At the usual weekly meeting held on March 30th, Mr. E. W. Temple was unanimously elected a member of this society.—T. B. Jones, assistant sec.

Wilts F. C.—A committee meeting was held at headquarters, on March 31st, the president in the chair, also present Messrs. T. Hopkins, E. Perry, G. W. White, E. Swain. Minutes of previous meeting were read and confirmed. The Manchester club price for measuring distances were submitted and approved of, the secretary being instructed to get positions of members' lofts, and forward on to Mr. George Yates. It was thought advisable to alter the young bird races; after discussion, it was decided to have two races for young birds, viz., Epsom, August 15th; Maidstone, August 22nd. A conductor will be sent to Ostend, and Mr. N. Barker will liberate for the Brussels race (see advertisement in another column). Necessary alterations were made to rules and race cards, which will be forwarded to members as soon as possible. Rule 11 will read "except for the Brussels race

when birds must be entered 16 clear days before day of race." Mr. Barrett, Sevenhampton, was duly elected a member of the club. Members who have changed their residence must forward the position of their loft, &c., at once.—E. Swain, hon. sec.

Prescot Homing Club.—A general meeting was held at the clubhouse on March 28th. Present—Messrs. S. Gibson, N. Mercer, W. Hunt, J. Bray, W. Lyon, A. Hall, J. Cawley, C. Beesley, M. Brannen, J. E. Woodward, R. Stott, J. Hobbins. The minutes of the previous meeting were passed as read. Mr. N. Mercer proposed and Mr. J. Cawley seconded, that we close the weekly payment of 6d. on May 30th, and afterwards pay a nominal sum per bird for each training stage and race point. Mr. N. Mercer proposed and Mr. J. Bray seconded, that we have three training stages for old birds and two for young birds, namely, Old birds, Hartford, Whitmore, and Stafford; Young birds, Hartford and Whitmore. Fees for training stages and race points—proposed by Mr. T. Scott and seconded by Mr. W. Lyon—Hartford (per bird) training, 1d.; Whitmore, training, 1d.; Stafford, training, 1d.; Tamworth, race, 2d.; Blotchley, race, 3d.; London, race, 4d. The following new members were proposed—Messrs. J. Howard, J. Lunt, H. Rogers, J. Orford. Next general meeting, April 11th, 8 p.m. prompt.—W. Hunt, h. sec.

Bacup Dis. H. S. held a general meeting on March 27th, for the purpose of fixing the race stages for old and young birds, and for the election of officers as follows:—President, Mr. George Hargreaves; vice-president, Mr. B. Foulds; treasurer, Mr. U. Howorth; committee:—Messrs. W. Wilkinson, W. Duckworth, T. Charnley, J. H. Greenwood; secretary, S. Barker. The race stages are: Old Birds—Chippendale, June 9th; Bournemouth, June 16th; Jersey June 30th. Young Birds—Worcester, July 28th; Cheltenham, August 4th. The Grand National was mentioned, but it was decided to wait until further notice.—S. Barker, sec.

Kingswood (Bristol) H. S.—The members held a meeting on March 27th. Rules were revised and placed in hands of printer. A rule was added to the effect that no member must challenge another member during the racing season for any stake, under a penalty for the first offence of 2/6; for the second 5/-, and for the third be expelled and forfeit all interest. Three hundred rings have been issued. The club races are as follows:—June (old birds), Leeds; August (young birds), Birmingham and Derby.—S. Fleming, sec.

North East Lan. Fed. had the annual spring meeting on March 31st, at the Royal Hotel, Burnley. The following clubs being fully represented: Nelson, Barrowford, Briercliffe, Burnley West End, Burnley Royal, Brierfield, and Burnley. The following officers were elected to serve for 1894:—President, Councillor A. Carrington; chairman of committee, Mr. Wm. Atkinson; secretary and treasurer, Mr. Jabez Brown. The following races were fixed, dates appeared previously:—Old Birds—Bath, Bournemouth, Jersey. Young birds, bearing 1894 rings, Worcester. Each club will be allowed to nominate persons to act as liberator, and same nomination to be forwarded to me on or before March 9th.—J. Brown, sec., 32 Cooper street, Nelson.

Croydon H. S.—A meeting was held on March 20th, when a good number of members were present. Since my last report the following gentlemen have been elected members: Messrs. Pescud and Helling, of Croydon, and Mr. Turner, of Mitcham. The latest date for stamping old birds is April 24th. Members are reminded that their subscriptions are now due. New members are requested to let the secretary have their running distance as early as possible.—A. Barringer, hon. sec.

Altrincham H. S.—At a meeting held on Monday last, it was decided that the list of members be closed on April 2nd.—J. THORP, h.s.

Lancashire Central Federation.—This newly-formed Federation held its first meeting on April 2nd, at the Robin Hood, Ashburner street, Bolton, Mr. Crompton presiding. The clubs represented were:—Bolton, Eagley and District, Westhoughton, and Tyldesley. Mr. Smith was elected president, Mr. Crompton, vice-president, Mr. Whittaker, hon. sec., and Mr. Chadwick, hon. treasurer. It was also decided to have tosses from the following stages:—May 26th, Worcester; June 2nd, Swindon; June 9th, Ventnor; June 23rd, Cherbourg, for old birds; and July 14th, Crewe; July 21st, Stafford; July 28th, Worcester; and August 4th, Gloucester, for birds hatched 1894. The meeting was adjourned for further business to April 9th, at 8 o'clock, at the same place. Any club in the district wishing to join the Federation can do so by giving the secretary notice, from whom all information can be obtained.—G. WHITTAKER, hon. sec.

SHORTLY before going to press, we received a circular convening a meeting of fanciers for the evening of Tuesday next, at 7 o'clock, at the Horse and Jockey Hotel, High Bullen, Wednesbury, for the purpose of forming another flying club open to fanciers residing in the Midland Counties. The Hon. Mrs. Colville, Messrs. Fred Matthews, J. Cock, A. P. Taft, W. Gorsuch, H. J. W. Jones, J. Brown, E. Phillips, W. Allen, and many other fanciers have already consented to join the proposed club, and judging by the support accorded, there appears to be no room for doubt that the movement will be a great success. We note that it is in contemplation to ask Mr. Logan to become the first president.

To be called upon to disagree with those who should be of your own household is not an agreeable task at the best. The events of the past eighteen months have brought this fact home to our mind in a manner painful beyond expression. To be compelled, as has been our lot, to part company with some whom we had come to count as friends and helpmates, in the cause which has for its object the advancement of every movement tending to the welfare of our hobby, the progress of which we have marked with feelings of pride and satisfaction, was a wrench far greater than many will imagine. Unfortunately no alternative that we could accept as honorable presented itself. Our intervention in the interests of peace was resented, with the result, that despite the advice of many whose wishes should not have been unheeded, wise counsels were thrown to the winds, and the inevitable result has come to pass. What might have been a peacefully flourishing society is now in the throes of dissolution, the end of which no one can foresee. We have no desire to add fuel to the fire, the full reasons for the outbreak of which may or may not become public property. Indeed, we should not have returned to this portion of the subject at the present time, had it not been that during the past few days, letters expressive of entire concurrence with our action have reached us from fanciers far and near, extending even to Belgium. It is the knowledge that we have behind us a predominating weight of the best of public opinion, ready to spring to our assistance in case of need, which has sustained us largely in our battle for the upholding of those principles which we hold to be vital to the future well-being of our sport. To all our friends who have borne tribute to the worth of our efforts, we make reply that so long as health and strength permit, our constant endeavour shall be to continue with all the energy at our command the task we have set ourselves, in conjunction with brother fanciers whose name is legion, to accomplish.

HOMERS.

FAST RACERS.

A FEW Youngsters for sale, lowest price 30/- pair. I took 16 prizes 1892 Manchester F. C., including 4th prize Bournemouth, 1st Cherbourg, 1st Avranches, 5th, 9th, 10th, and 12th Nantes. Season 1893, Manchester F. C., 11 prizes, including 1st and 2nd Worcester, 1st Swindon, 1st Bournemouth, 5th Cherbourg, 4th Avranches, and 1st prize young birds Cheltenham, District A. In Farnworth and County F. C., the following: 1st prize and special gold medal Bournemouth, also special prize silver medal Cherbourg, 1st prize young birds Cheltenham, and special silver cup—T. R. Ashcroft, Saddler, Mossley, nr. Manchester.

T. BANNER, Birkdale, offers the following youngsters, all rung, ready about 10th inst. A pair from Patriarch and 449 Patriarch flown Cherbourg, and is sire of Birkdale Pioneer, flown Nantes, crossed channel four times. 449 flown Bournemouth, sire a grandson of Patriarch, flown Avranches; dam, prize winner from Nantes. Also a pair from 13 and 12 13 another grandson of Patriarch, flown Avranches; 12 flown Bournemouth, also the disastrous Liverpool Dublin race when every bird was lost but two. A pair from Emperor and 464. Emperor a grandson of Patriarch, flown Avranches; 464 an exceptionally fast bird, flown Bournemouth, won 8th prize Worcester. All 20/- a pair, also three pairs same strains, 10/- per pair.

OWING to not flying my birds with Preston and District Homing Society any longer, I shall have for disposal a few couple of young birds, same strain flown Cherbourg, Sottevast, St. Malo, Granville, Avranches, Rennes, and Nantes, in Preston and District Homing Socy. Strains: J. O. Allen, Cammaerts, Gileon, Saleman, and Pilling. Price 15/- couple.—John Mercer, 3 Westby street, Lytham.

THROUGH ill health and about to remove again, all my pedigree homers for sale. Strains, son, grand sons, grand daughters of Mr. Ince's celebrated stock pair 7 and 8, Mons. E. Pietinckx' 17 and 18 on 1890 list, Barker, Grooter, Mayshondt, and Mons. Meus, breeder of the famous Mausta Mealy; stamp reply.—Protheroe, Hart's Hill House, near Brierley Hill, Staffs.

H. MARSHALL, Park Place, Worksop (late Marshall & Forrest), having bought out his partner, will sell a few reliable stock birds at reasonable prices; also second round of Squeakers just ready for rings. Birds are flown with the Sheffield and Dis. H. S. List free.

STRONG healthy Squeakers, first round. The stock birds comprise pure Logan, N. Barker, Colville, Gits, Unsworth, Oliver, Stanhope, Wegge and Van Bever blood, Moore Heap, Bancroft, and Janssens, of Brussels Price 6/6 and 10/- pair, pedigree.—J. Fitchett, 58 Henry st., Derby.

RACERS.—A few pairs of fine Squeakers from Mr. Tanqueray's and M. Vekeman's strains crossed, 10/- per pair. Pair of good continental stock birds, 10/-, will breed 150 mile youngsters. Odd cock, 5/- All guaranteed healthy and cheap to clear.—J. Woodhouse, secretary London Flying Club, 21 Effingham road, Lye, Kent.

ALL Youngsters bred during present season for sale. Same strain as won 2nd and 15th Lymington, and 27th St. Malo, Midland Flying Club, 1892, see *Homing News*, 3/- to 5/- pair. Stamped envelope for reply.—Mason, The Oaks, Bushbury, near Wolverhampton.

CRICKLEWOOD LOFT.—Winner of two cups, also 30 1st, 2nd, and 3rd prizes up to 300 miles, offers Squeakers now ready, from 7/6 per pair.—L. G. Coles, 16 The Village, Child's Hill, London, N.W.

HOMERS.

IMPORTANT SALE.

ENTIRE loft of Monsieur Pepinster, Brussels. 28 birds, numerous prize winners published in *Le Martinet*. Proof as to quality, he timed his first bird in the Grand National race from Dax, 40 birds ahead of N. Barker's first bird. His three National birds are included in sale, and the cream of loft. Strains:—Delmotte, and best Brussels fanciers. List one stamp. Numbers sold:—1 2 3 9 12 13 16 17 24 25 26.—Sassé, 131 De Beauvoir rd., London, N.

1ST Doncaster, 1st Berwick, 1st Arbroath, 1893.—I have a few squeakers now ready, bred from winners of above races; 10/- and 15/- per pair. Also one '93 Cock flown Lincoln, 15/- Lists 3/- each.—J. M. Salmon, Sewardstone, Essex.

JAMES CORDINER has a few pair of Squeakers for sale, from 7/- to 12/- per pair. They are rung with Bon Accord club ring. If lost in training under 100 miles replaced. Strains: Kaye's, Grooter, Ince, Delmotte.—30 Bank street, Aberdeen.

GRAND pair stock birds, black cheq. cock from my Newcastle hen, also winner in show pen, blue cheq. hen from typical workers, sacrifice 5/-, worth double, splendid breeders.—Bennett, 6 Grove Park road, South Tottenham, London.

H. HUNTABLE, member North Elswick Homing Society, has several odd Hens and Cocks for sale, some race marked, good breeders, half value. Must clear, 3/- each.—31 Sidney Grove, Newcastle.

LONG-DISTANCE Homers: Not having time to fly my birds, will sell all squeakers bred this season 5/- pair; Moore's strain.—H. Moston, Heald Brow, Lymm, Cheshire.

I HAVE several of last season's birds for disposal at low figures to clear them out. They have all flown from Exeter.—J. L. Burgess, Maizeyhampton, Fairford.

CHANNEL Heroes up to date. Several pairs Squeakers now ready from my continental prize winners. Price on application.—George Pearson, Veterinary Surgeon, Brierley Hill.

STRONG Squeakers, bred from Homers flown Plymouth, 118 miles, as youngsters, 5/- pair; approval for cash.—Maurice Holley, Jan. Calne, Wilts.

THREE fine Squeakers, Sir Jacob, Slays, Bovyn, Servais (mealy and red cheq.), price 30/- For full pedigree send stamp.—Broom, Milton, Northampton.

I HAVE eight pairs of Squeakers ready, parents flown Dover, and taken six first prizes, 6/- pair, Hartley's strain.—E. Quibell, The Grove, Newark.

HANDSOME pair homers, flown 160 miles, nesting, parents winners 280, accept immediately 4/—“Homer,” 77 Marmont rd., Peckham.

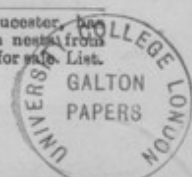
FEW grand youngsters from prize winners ready.—H. Albiston, Boston Park, Rotherham.

TWO dark chequered Cocks flown Cambridge to London, at 14 weeks old; N. Barker's strain. Price 6/- each to clear.—Thompson, 23 Peckham Rye, London.

N. BARKER'S address is 52 Rue de Fienness, Careghem, Brussels. Still a few Barbi birds left.

T. H. GRAY has a few pairs of strong Squeakers ready; 7/6 to 15/- pair.—Moreton-in-Marsh.

W. EVANS, Steam Mills, Gloucester, has several pairs Squeakers in nest from Banff, Arbroath, Newcastle birds for sale. List.



HOMERS.

KINGSWINFORD LOFT.

SQUEAKERS for Sale bred from notable birds. Latest 1893 successes—1st Ventnor, 2nd Rennes, 1st and 3rd La Rochelle, 1st and 4th Ambergate, 2nd Sheffield, 3rd and 5th Ripon. Apply—D. C. Hillman, Kingwinford Mills, Dudley.

RACERS.—All squeakers bred by me this year for sale. Price 5/- each. Lists on application.—E. Challinor, Solr. Look, Staffs.

NOTICE.—Mr. J. Hayes, Charminster road, Bournemouth, has Racing Squeakers for sale, 5/- each, same strain won last year 25 prizes; list one stamp.

E. DELLA ROCCA, 26 Barnwell road, Brixton, has few more Squeakers ready, 10/- pair; 93 Blue Cheq. Cock, flown Semley, bears race marks, 7/6.

MONEY GIFTS.—Before ordering Squeakers, send 4d. stamp for my list champion strains and gratuities—Mumford, Stony Stratford.

SQUEAKERS from my celebrated long-distance racers for sale; own brothers and sisters flown Banff, 433 miles; 10/- pair.—Richard Williams, Ely, near Cardiff.

HOMING Squeakers, one pair blue cheq'd, good workers, Grooter's, Barker, 4/- pair, rung.—Ward, 10 Graces road, Camberwell.

HOUSLOW LOFT.—Squeakers: A. W. Ray, winner of 1st and 2nd Penzance, 1st and 2nd Scilly Isles, two years in succession, in L. C. S., has second nest of youngsters to dispose of. Price 10/6 per pair.

SQUEAKERS.—Parents flew Cherbourg last season. Sent 16 young to Winchester, 132 miles, all home, six doing Ventnor afterwards. 7/6 to 10/- per bird. List free.—T. J. Archer, Radburne, Derby.

BIRKDALE LOFT.—Squeakers now ready for delivery, 10/- and 20/- each, Manchester F.C. rings.—W. Marchant, Birkdale, Southport.

CRACK RACERS.—Have several pairs of my noted pedigree Squeakers for sale of the finest English and Belgian strains, parents flown up to 550 miles, price 5/- and 7/6 pair; no better obtainable.—John Spencer, Market Place, Ashbourne.

MRS. B. HARTLEY, Cottontree, Colne, has still ten birds left, one Bournemouth Cock, 10/-; three Worcester birds, 7/- each; untrained birds, 4/- each.

STOCK BIRDS.—Can spare a few odd Cocks of the finest English and Belgian strains, flown up to 550 miles; price 5/- and 7/6 each; no better obtainable.—John Spencer, Market Place, Ashbourne.

J. RICH will have Squeakers ready in a few days. Ten first prizes won 1893 by birds bred at this loft, and cup for average old bird races; from 5/- each. Particulars—4 Tryphena Place, Bow Common, London, E.

EVERY bird for sale, no offers refused to effect a clearance. These birds have won prizes in all the following races to my own loft: Bristol, Bridgwater, 1st Lechlade, 1st Hungerford, 1st and 2nd Andover, 2nd and 3rd Didcot, Southampton, Ventnor, Cherbourg. Inspection invited.—P. Warren, Brierley Hill.

BRIERFIELD Loft.—Ten Cocks, pedigree working Homers on sale, must be sold; four flew France 1893. Lofts must come down this month or next. Write for catalogue.—Thos. Pratt, Wholesale Druggist, Brierfield, Lanc.

THE FORESTGATE LOFT.—F. Ball, having bred more squeakers than he requires, can spare about six pairs. Detailed catalogues 2d., money returned to purchasers.—26 Tavistock road, Forest Gate, E.

HOMERS.

ANDREW'S Homers.—Selected Belgians, 3/-, 3/6 pair; stock birds, race marked 2/- each; Belgian Squeakers, 3/-, 3/6 pair; pedigree birds, 2/6, 3/6, 5/- each, squeakers or adults; record short flyers 2/6 pair, 6/- half-dozen; any age required. Lightest, neatest, and most perfect basket made, to hold 6 birds, 3/-; 9, 3/6; 12, 4/-; 15, 4/6; 20, 5/-; 25, 6/-; 30, 7/6; 50, 10/-; 70, 14/-; 100, 17/- If you want to win races, use the Real Nature of Pigeons, 6d., 1/-, 1/6, 2/6 box. Perfect Health Gravel, 6d., 1/-, 1/6, 3/6, 7/6 bag; list free. How to rear, train, and manage, with each order.—Andrews, Naturalist, Newton Heath.

CANNOT be beaten for imported Homers. Consignment weekly from principal lofts in Belgium, no other dealers supplied from same lofts. Challenge the world. 4/- pair, Cocks 2/- each, three 5/-, approval. Squeakers, rung, 5/- pair, equal others double price. Satisfactory testimonials from all parts. List free, read for yourself. Training Baskets cheap.—Green, Mill lane, Blackburn.

IMPORTED direct from Belgium. Grand stock birds 2/6, 3/6, and 5/- each; every bird race marked; pedigree squeakers, 5/-, equal others double price. Approval.—Ross Quinion, Hounslow, Middlesex.

REMOVAL.—Dealers' offers wanted for quantity good birds from private breeder. Exchange entertained.—Armstrong, 12 Smith street, Stepney.

THE BEST BELGIAN RACERS.

MONS. CHAS. DUERINCK, St. Gilles les Termonde, Belgium, offers guaranteed breeders that have flown 450 miles, bearing race mark in different societies at 10/- per pair. Guaranteed squeakers, rings 1894, at 8/- per pair, £2 per dozen. Carriage paid to London. Satisfaction given or replacement gratis.

RACERS OF GREAT SPEED.

SALE of young Homing pigeons, bred from the best Belgian champions, exclusively reserved for English fanciers, at reasonable prices.—Details address Mons. Henri Degraeve, Stuyvekenkerke, Flandre Occidentale, Belgium.

FIRST-CLASS Racing Homers, flown Creil 135, Paris 180, Orleans 230, Tours 305 miles, at 6/6 pair, bearing their race marks, honestly worth 20/- pair.—Apply Henry De Neve, hon. sec., Bruges, Belgium.

SALE OR EXCHANGE COLUMN.

Charges 1d. for three words prepaid.

9 PAIRS Grand Long-distance Homers, Logan and Allen; all have flown Worcester; must clear out this week, price 7/- pair, or Exchange. Wiseman, 162 Alexandra-road, Manchester.

EXCHANGE White Dragon Cock for Homer Hen, good strain, or sell 5/-—Allen, 28 Chandos-road, Stratford, Essex.

WANTED six unquestionably good honest imported or pedigreed Homer Cocks, in exchange for a grand young full pedigreed curly Retriever Bitch, by Barkwith Ivanhoe; now ready for breaking. Reply—Bryden, Buxton, Derbyshire.

CLEARING out at half-price, my last year, Squeakers 7/6 pair, 1893 birds 5/6, stock birds from 7/6. Every bird my own breeding, same strain as those birds flown Cherbourg and Jersey; open for exchange, no live stock.—A. Cox, 3 Wellgate, Rotherham.

SELL handsome hen, bred by T. H. Hall, Esq., 1892, from his best blood, flown Bournemouth, or exchange for a pure T. H. Hall cock, trained preferred.—W. T. Botwood, Maple House, Ipswich.

HASAKERS' HOMERS.—Two Cocks and one Hen from this noted Antwerp loft. Cheap or exchange.—P. Percival, Brent Knoll, Somerset.

VARIOUS.

EGGS for Hatching, from the following pens of prize bred birds mated to breed birds which cannot be beaten for laying, &c. No. 1.—Black Minorcas, strains: Gibbons, Pitts, and my pick of best birds out of Mr. Jos. Healey's yard (which contained the best of blood), when that fancier sold out and left Sutton last November. No. 2.—Buff Leghorns, Messrs. Lister, Kay, Cook, and Ringwood birds. No. 3.—White Leghorns, Hunter, Cook, and Ringwood birds. No. 4.—Silver Wyandottes, Abbots, Heaths, and Ringwood birds. Guaranteed, 2/6 per dozen, packed.—Apply G. M. Wood, Sutton-on-Sea, Lincolnshire.

FOR Sale 4 good Muling Cock Goldfinches, price 3/6 each.—Sharpe, 1 Smales-st., York.

BIRDS LOST AND FOUND.

The charge for the insertion of Short notices of Birds Lost and Found, is 2d. a bird. Detailed notices and Letters of Thanks, 1d. for every FOUR WORDS.—Letters must be addressed to Manager, "Homing News" Co., Oldham.

LOST, 2/6 reward, March 18th, 1894, Cheq Cock, rung G. W. P. 6, 1892. Apply—S. C. Duval, Jun., 5 Jubilee street, Belgrave St., Leicester.

LOST, 5/- reward, March 22nd, dark cheq Cock, rung No. 16 (803)—T. Asplen, 150 Fletcher st., Bolton.

LOST, 2/6 reward, blue cheq Hen, rung 18 F 93, 31.—Ellis, Devonshire st., Higher Broughton, Manch'r.

LOST, 5/- reward, red cheq Cock, stamped W. Wright, Pawnbroker, 33 Vauxhall rd., Liverpool.

LOST, 2/6 reward, March 24th, black Cock, with white feathers on rump.—Wm. Morgan, 15 Edmiston road, Forest Lane, Forest Gate, E.

LOST, 3/- reward, black cheq Cock, pearl eyes, stamped W. H. Holborn, Witherssea Homing Soc., Witherssea, Hull.

LOST, 5/- reward, blue cheq Cock, stamped Winchester, Ventnor, I.O.W., also numbers.—Charlton, 45 Park lane, Aston.

ESCAPED, on Good Friday, black cheq Cock, white rump, probably stamped Jun., on A, slight marks of green dye on rump; expenses will be paid.—W. G. Smith, 25 Cornwall road, London, W.

CAUGHT, blue cheq, rung I. F. C. 1894, 116.—H. A. Hill, 1 Surrey street, Croydon.

CAUGHT, red cheq Cock, ring W 93 L 1716.—T. H. Crook, Railway Terrace, Wesham, Kirkham.

CAUGHT, homer rung 1891 55.—John Guest, 26 New Wombwell, Barnsley.

CAUGHT, blue cheq pied, stamped Vtridge.—H. Mayell, 29 Selsdon road, Croydon.

CAUGHT, homer rung W L 22.—A. M. Darbyshire, Farworth, near Bolton.

CAUGHT, blue cheq, stamped Samuel Dutton. Apply Albert Cook, Bull's Yard, Tean, Stoke-on-Trent.

CAUGHT, red cheq, rung 1894 1.—J. Hill, Broadwell, Stow-on-the-Wold.

CAUGHT, blue cheq pied, shot under wing, no stamp.—A. Beer, 225 Stapleton road, Bristol.

FLYING out, dark cheq, rung 93 P H 8 1893.—T. Banner, Birkdale, Southport.

R. HEARTFIELD, 40 and 42 Pittlake, West Croydon, thanks honest person for detaining black cheq Hen lost at Wilton, Aug. 5th; home March 20th.

EXCHANGE COLUMN.

Intended solely for fanciers desirous of effecting *bona-fide* Exchanges of Stock, and NOT for Sales. Special charge, 1d. for 4 words. Forms for Exchange advertisements free, on receipt of stamp.

EXCHANGE, either old or young Flying Homers, flown Bournemouth, 250 miles, for anything useful, poultry, books, cushion tyre preferred.—James Hoyle, Underbank, Facit, Rochdale.

EXCHANGE, grand himalayan Doe, bred from winners, for pedigree Homing Squeakers, or training basket to hold 12 birds.—J. Hazlewood, 68 Causeway, Banbury.

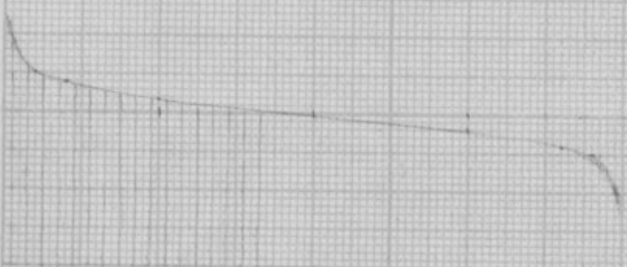
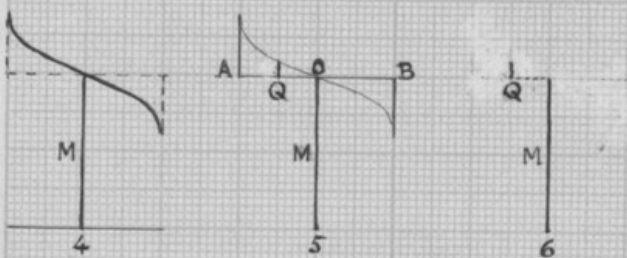
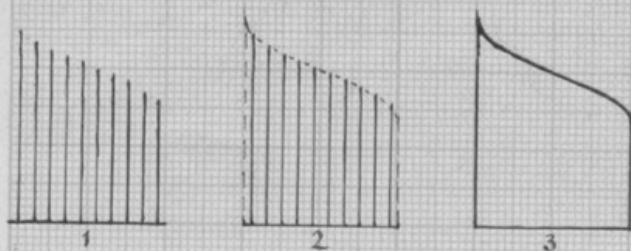
EXCHANGE, fawn and white Terrier Bitch, well broken, clever courier, good on guard, for good laying Fowls, or anything useful.—George Gale, Ridgeway, Astwood Bank.

JOHN EMSLIE, president Bon Accord H. P. C., has four pairs Working Homers, will exchange for anything useful; pedigree one stamp.—66 Menzies road, Aberdeen.

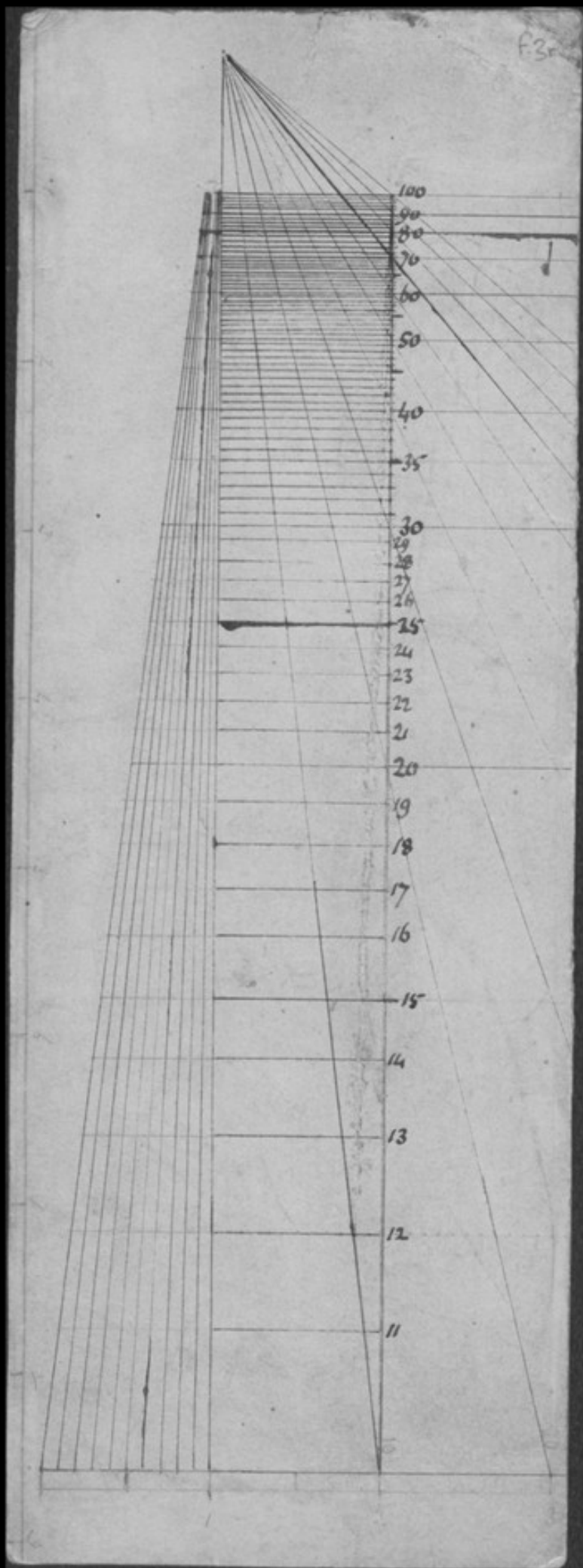
WHAT offers in exchange for four pairs Homing Squeakers, rung 1894, bred from prize winners' stamp for reply.—Badoock, The Bratton Loft, Minehead, Somerset.



f.1

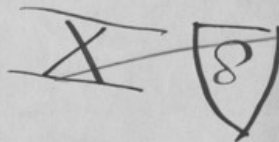


f.3r



Scale
= X





84

7 Mar 1944
Give template



-5	X
-4	✓
-3	✓
-2	✓
-1	✓
0	✓
+1	✓
+2	✓
+3	✓
+4	✓
+5	✓

Wade

Means of Ten Equal Classes in an Array of Normal Deviations

(being summed values of the Binomial 2^{13} , between each tenth pair of Centiles).

Deviations	Binomial expansion of $2^{13} = 8192$	Ten Rectangles, whose total area = 8192 Width of each = 819.2 Height of each = the mean of all the included deviations.				
	Left of centre	-I	-II	-III	-IV	-V
-6.5	1	1.0				
-5.5	13	13.0				
-4.5	78	78.0				
-3.5	286	286.0				
-2.5	715	441.2	273.8			
-1.5	1287		545.4	741.6		
-0.5	1716			77.6	819.2	819.2
Width of rectangle		819.2	819.2	819.2	819.2	819.2
Height of rectangle		-3.091	-1.833	-1.418	-1.000	-1.000
	Right of centre	+I	+II	+III	+IV	+V
+0.5	1716			77.6	819.2	819.2
+1.5	1287		545.4	741.6		
+2.5	715	441.2	273.8			
+3.5	286	286.0				
+4.5	78	78.0				
+5.5	13	13.0				
+6.5	1	1.0				
Width of rectangle		819.2	819.2	819.2	819.2	819.2
Height of rectangle		+3.091	+1.833	+1.418	+1.000	+1.000
Corresponding values, when the height of $\pm III$ is taken as unity.		-2.180	-1.293	-1.000	-0.705	-0.705
		+2.180	+1.293	+1.000	+0.705	+0.705
		The last terms as reversed by interpolation			-0.523	-0.178
					+0.523	+0.178

	\pm
I	2.15
II	0.42
III	0.00
IV	0.45
V	0.18

$$\begin{aligned}
 278 \times 2.5 &= 6950 \\
 545 \times 1.5 &= 817.5 \\
 819.2 / 1512.5 &= 1.833 \quad 819.2 / 1154.8 = 1.39 \\
 819.2 & \\
 69530 & \\
 65536 & \\
 \hline
 37940 & \\
 38762 & \\
 \hline
 51720 &
 \end{aligned}$$

1130

38.8

819.2

519.2

33260

52760

492

	1	2	3	4	5	6	7	8	9	0	Total
1	32	39	36	37	41	74	46	33	40	30	416
2	51	42	42	62	60	36	37	50	37	54	474
3	40	41	45	45	61	40	37	39	40	41	429
4	41	53	37	39	36	45	36	39	36	39	401

0.75

123	122	123	144	162	150	120	122	117	120	1311 $\times \frac{1}{2} =$
41	41	49	40	41	50	40	41	39	43	

Mean
4.37

std. dev. 4.50

$$\frac{0+1+9+17}{4} = 4.5$$

$$\frac{10+40}{2} = 4.5$$

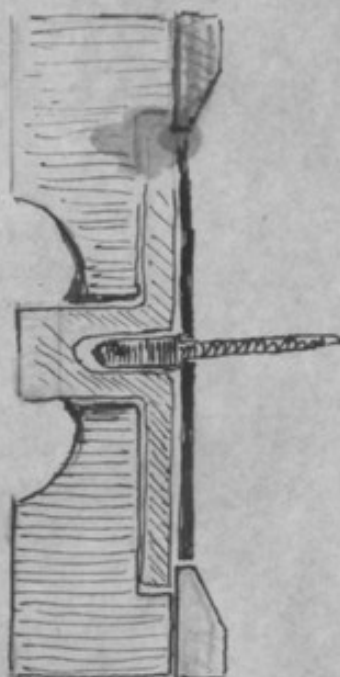
$$\frac{50}{2} = 4.5$$

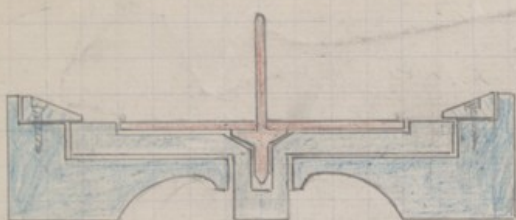
$$\frac{50}{2} = 4.5$$

٩٧٧

	remainder	add
1	3	
2	1	
3	5	
4	—	—
5		3
6		3
7		1
8		2
9	1	
10	—	—

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \end{pmatrix}$$





Cases that are either unknown or that are difficult of consideration.

a random factor is one that is almost wholly
determined by unknown antecedents. The ^{resulting} effects that must
be ascribed to known antecedents, being unimpossible
or practically impossible.

Values of homogeneous origin are called "random", when their distributions do not arise in any appreciable degree from causes that are known and can be taken into account, but from ~~various~~ the various combinations of a multitude of petty influences that are individually insignificant and ~~in other respects are wholly~~ ^{in other respects are wholly} unimportant.

[illegible][illegible]

Sum Rec L^h L^m Nov 20 1904

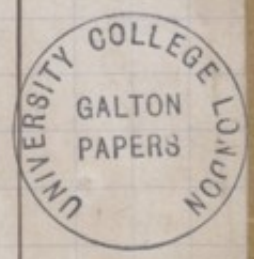
- A indistinguishable
 B distinguishable through difference of force only
 C. total losses (if an adjustment to the whole)

make u'

			0.60
200	.56	1.7	0.50
250	.67	1.5	0.48
300	.71	1.4	0.44
350	.77	1.3	0.42
400	.80	1.3	0.40
450	.83	1.3	0.39
500	.85	1.2	0.39
550	.87	1.2	0.38
600	.88	1.2	
650			
700	.89		
750			
800			0.37
850	.91	1.2	
900		1.1	
950		1.1	
1000			
1050			
1100			
1150			
1200			
1250			0.36
1300	.90	1.1	



distance	values that multiplied into u make u'	
add 10 throughout	Isoscope	Opera small end forward
	<i>increase enlarges at short distance</i>	<i>reduce, always least at small distances</i>
150	.50 2.0	0.60
200	.56 1.7	0.50
250	.67 1.5	0.48
300	.71 1.4	0.44
350	.77 1.3	0.42
400	.80 1.3	0.40
450	.83 1.3	0.39
500	.85 1.2	0.39
550	.87 1.2	0.38
600	.88 1.2	
650		
700	.89	
750		
800		0.37
850	.91 1.2	
900	1.1	
950	1.1	
1000		
1050		
1100		
1150		
1200		
1250		0.36
1300	.90 1.1	



Sum of ages by year	Name of Patriarch	age at birth of Successor	Name of Successor	1 st Column - Patriarch died at age of	Sum of ages by year
130	Adam	130	Seth	930	130 - 1060
235	Seth	105	Enosh	912	205 - 1172
205	Enosh	90	Kenan	905	205 - 1260
290	Kenan	70	Mahalalel	910	300 - 1270
360	Mahalalel	65	Jared	895	405 - 1310
425	Jared	162	Enoch	962	507 - 1517
587	Enoch	65	Methusaleh	365	622 - 1017
650	Methusaleh	187	Lamech	969	809 - 1208
1039	Lamech	182	Noah	777	
1021	Noah	500	Shem &c		

at 600 the flood came
B.C. 2316 B.C.

	date of birth A.M. 1000	age at death	date at death
Adam	0	930	930
Seth	130	912	1042
Enosh	235	905	1140
Kenan	325	910	1235
Mahalalel	395	895	1290
Jared	460	962	1422
Enoch	622	365	987
Methusaleh	687	969	1656
Lamech	874	777	1651
Noah	1056		

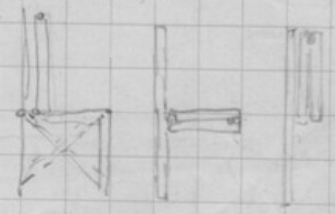




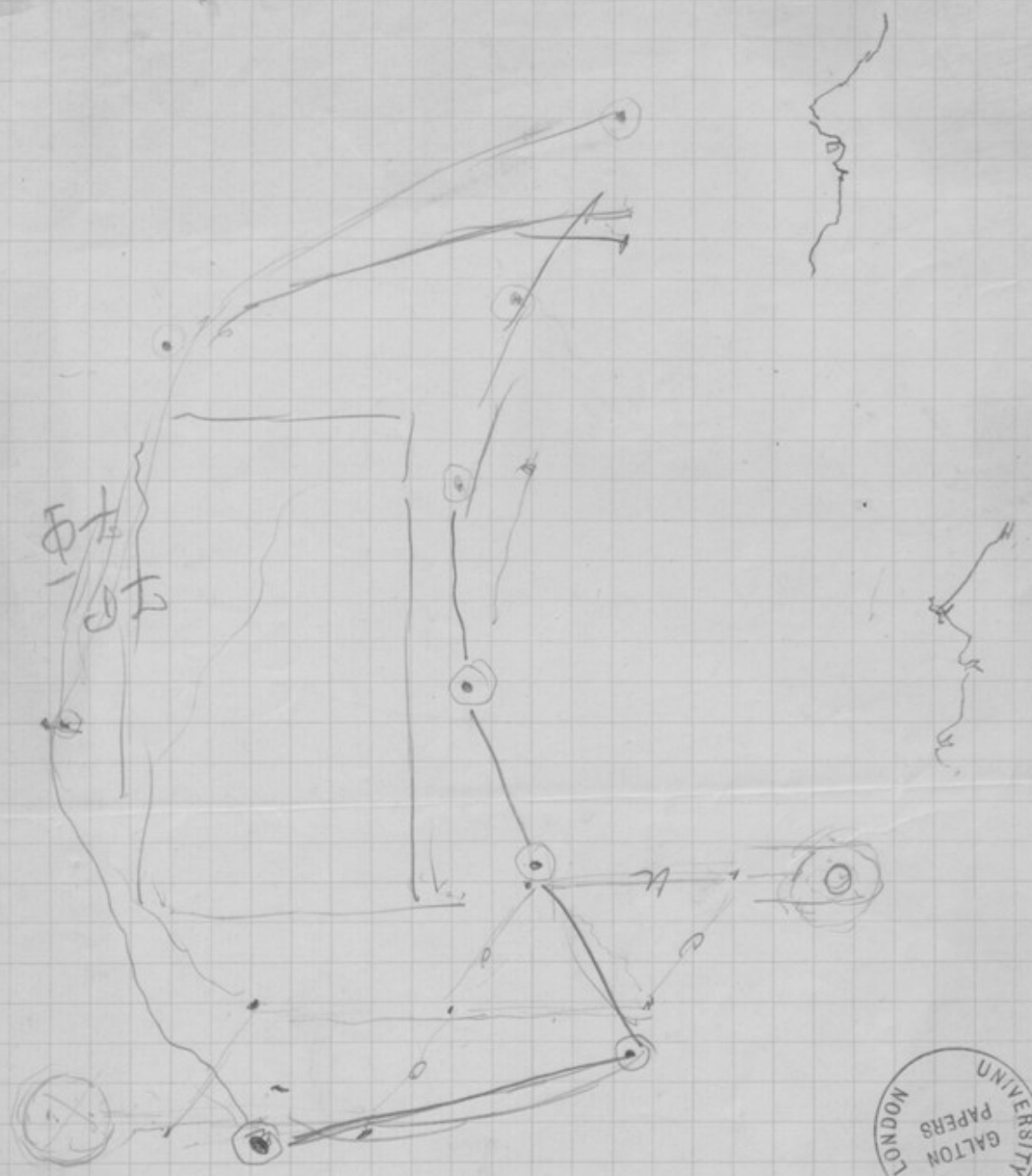
1 1/2 feet chain 2 feet chain 10 feet high 20 wide
6 feet 4 chain 5 * 10
9 feet 6 chain

12 feet high 3 pairs of chains 6 chain
as a width 12 feet
60 in a width 20 feet 60 chain
as a depth 4 feet 2 no chain

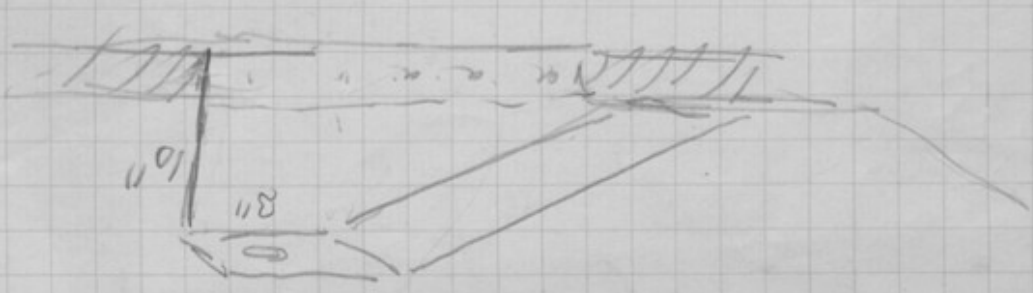
4 feet high 2 feet wide bottom (dider) part 2 feet h.
4 folds = 8 wide ^{width} 2 chain from C face 1 foot ^{chain} 4 feet high 2 feet wide

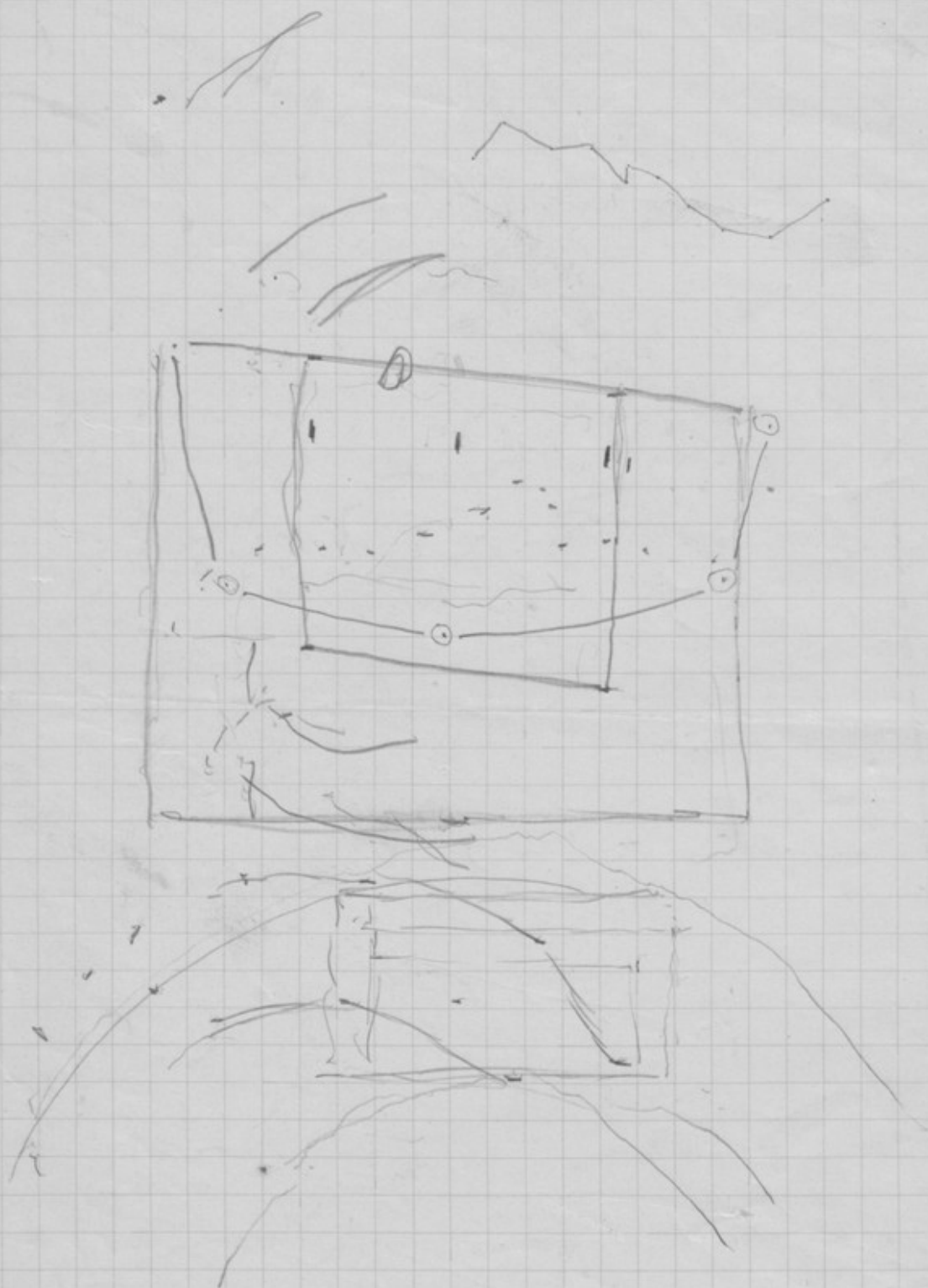


$$\begin{array}{r} 12 \\ 8 \\ \hline 20 \end{array}$$



5/1
1/10





(1) 1
(2) 13
(3) 78
(4) 286
378
819.2

378
441.2

441.2 to be taken out of (5)

(5) 715.

273.8 residue of (5)

819.2

545.4 to be taken out of (6)

(6) 1287.0

741.6 residue of (6)

819.2

77.6 to be taken out of (7)

(7) 1716.0

1638.4 residue of (7)

819.2

I = 11 + (2) + (3) + (4) + 441.2 out of (5)

II 273.8 out of (5) + 545.4 out of (6)

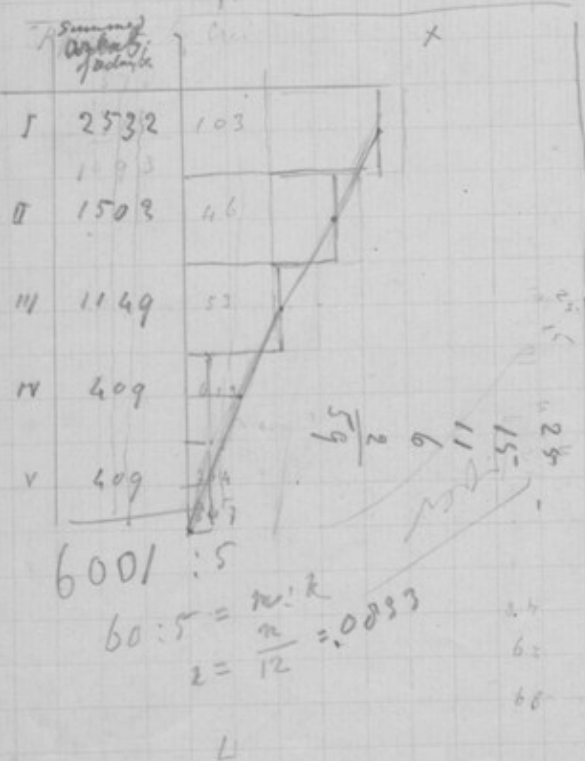
III 741.6 out of (6) + 77.6 out of (7)

IV 819.2 out of (7)

V 819.2 out of (7)

* affix by Cullen

contents of the rectangles	base	height	
I	1.0	6.5	6.5
II	13.0	5.5	71.5
III	78.0	4.5	351.0
IV	286.0	3.5	1001.0
V	441.2	2.5	1102.5
			<u>2532.5</u>
II	273.8	2.5	685.0
	545.4	1.5	817.5
			<u>1502.5</u>
III	741.6	1.5	1111.5
	77.6	0.5	38.5
			<u>1149.5</u>
IV	819.2	0.5	409.6
V	819.2	0.5	409.6



7.18	+ 2.18	4%	+ 4%	6
6.29	+ 1.29	8%	+ 3%	8
6.00	+ 1.00	7%	+ 2%	7
5.52	+ 0.52	6%	+ 1%	6
5.18	+ 0.18	5%	+ 1%	5
4.82	- 0.18	4%	- 1%	4
4.48	- 0.52	3%	- 1%	3
4.00	- 1.00	2%	- 2%	2
3.71	- 1.29	1%	- 3%	1
2.82	- 2.18	1%	- 4%	0

Random variable, whose difference range from 0 to 9

I

1	1	$\times 6.5 =$	6.5	
13	13	$\times 5.5 =$	71.5	
78	78	$\times 4.5 =$	351.0	
286	286	$\times 3.5 =$	901.0	
715	451.2	$\times 2.5 =$	1128.0	$2863.8 \times 2.5 = 659.5$
1287		$\times 1.5 =$	2458.0	$555.4 \times 1.5 = 833.1$
1716		$\times 0.5 =$	819.2	1492.6
1716	819.2			$721.6 \times 1.5 = 1082.4$
				$87.6 \times 0.5 = 43.8$
				1126.2

$\times 2.5$	$\times 3.5$	$\times 4.5$	$\times 5.5$	
819.2	758	312	65	171.6
225.6	143	39	6.5	87.6
1128.0	901	351	71.5	846

$819.2 / 2458.0 (3.000 \text{ I})$	$\times 1.5$	$\times 2.5$
2457.6	555.4	527.6
4000	277.7	131.9
	833.1	659.5
		721.6
		360.8
		1082.4

$819.2 / 1492.6 (1.824 \text{ II})$

819.2
673.40
65336
20040
16384
36560

$819.2 / 1082.4 (1.321 \text{ II})$

819.2
26320
2457.6
17440
16334
10660

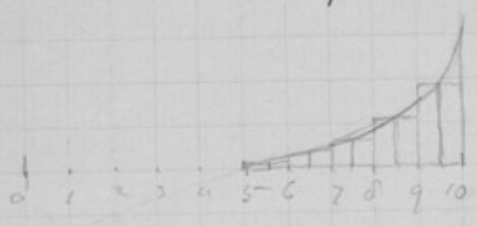
1	
13	
78	
286	
378.0	
819.2	
441.215	
715.0	
273.8	remainder
819.2	
545.4	

545.4 left later divided 1227

1287.0
741.6

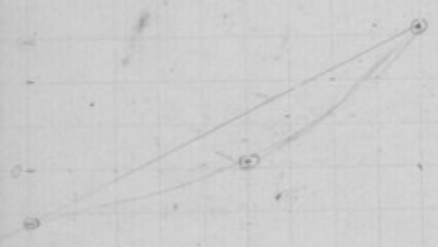


Normal curve of distribution Net: Taker p. 205

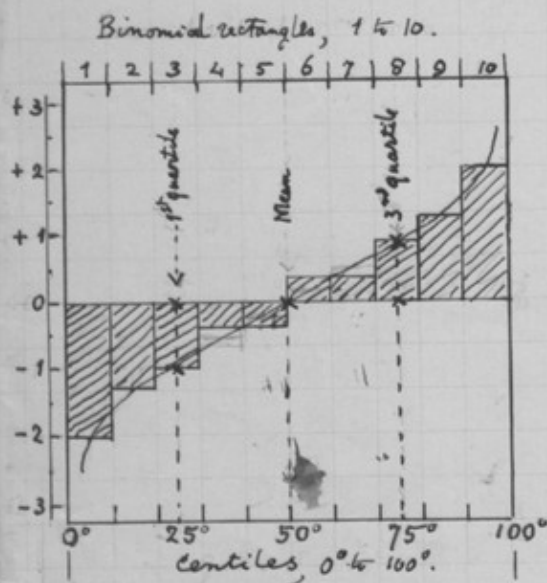


In the polygon above
mean ordinate for each polygon is as a first
approx = the half way value

As a sufficiently close approximation to the curve of distribution, take the polygon drawn through the tops of the successive ordinates at each tenth division of the abscissa from 0° to 100° . The area of each of these bounding the first & last ^{extreme} with the ~~area~~ that of the ordinate half way between them, that half way between 10° & 20° with ~~ordinate~~ being 15° ; between 20° & 30° , 25° ; and so on. The areas of the first & last ~~sections~~ ^{quadrants} 0° to 10° & 90° to 100° require special consideration because, ^{the length of} their outer boundaries (with the normal curve) are infinitely large. It is negative, so the other side. Consider the latter of these more closely. The bounding curve to which the ordinate are drawn is of such a character that the rate of its magnitude increases in a much higher ratio than their magnitude, then solves. ^{not just, it is} Here if we take an infinitely small chance that an infinitely ^{large} value should occur, but it is a very small chance indeed that an value beyond one of ~~infinity~~ ^{infinity} even a large one should do so. The extreme tails of the curve are of the statistical weight. The ordinate for 90° is 3.45, that for 95° is 3.80, that for 99° is 4.59



Block			Scale Blocks					
ordinate of	length of base		I	"	"	"	"	"
-6.5	1.0	1.0	1.0					6.65
-5.5	13.0	14.0	13.0					
-4.5	78.0	92.0	78.0					
-3.5	286.0	378.0	286.0					
-2.5	715.0	1093.0	441.2	273.8				
-1.5	1287.0	2380.0		545.4	741.6			
-0.5	1716.0	4096.0			77.6	819.2	819.2	
ordinate of base	1716.0		819.2	819.2	819.2	819.2	819.2	
+1.5	1287.0							
+2.5	715.0							
+3.5	286.0							
+4.5	78.0							
+5.5	13.0							
+6.5	1.0		819.2	819.2	819.2	819.2	819.2	819.2



Areas between each 10th centile
from the binomial polygon $2^{10} = 8192$

Areas included between each successive 10th centile
or derived from the binomial

Optical distribution of Normal Distribution
by the areas between each 10th centile



abscissa \hookrightarrow each block, length = 819.2
 10 blocks with whole scheme, 5 in the half-scheme.
 Blocks are distinguished by Roman figures I, II, etc.

0	1716
	not in scheme
117	1716.0
112	1287.0
113	715.0
114	286.0
115	78.0
116	13.0
117	1.0

for I First block. grade (1) 1716. cases
 $\frac{819.2}{896.8}$ of grade (1) in I
 896.8 remaining of grade (1)

for II Second block

$\frac{819.2}{77.6}$ of grade (1) in II
 77.6 remaining of grade (1) for III
 grade (2) 1287.0 N^o of cases
 $\frac{1364.6}{819.2}$ Sum
 $\frac{545.4}{741.6}$ remaining of grade (2) for IV
 $819.2 - 77.6 =$ 741.6 of grade (2) for III
 $\frac{819.2}{545.4}$ of grade (2) for IV
 $\frac{273.8}{273.8}$ of higher numbers for V



14096.0
 $\frac{1}{2} = 2048.0$
 for quartile

1716.0
 $\frac{819.2}{896.8}$ of (1) for I
 $\frac{819.0}{77.6}$ of (1) for II
 $\frac{741.2}{1287.0}$ of (1) for III
 $\frac{546.8}{0}$ remaining of (2)

~~1716~~ 1716.0 cases (1)
 $\frac{819}{819.2}$ of (1) for I
 $\frac{896.8}{819.2}$ of (1) for I
 $\frac{77.6}{1287.0}$ of (1) for II
 $\frac{741.6}{1287.0}$ of (2) for III
 $\frac{545.4}{819.2}$ of (2) for IV
 $\frac{273.8}{273.8}$ of higher numbers for V

Block mean ^{gross} height
 I 819.2 (10000) - 1/2

4096
8192

being the rectangles, ^{to the sum of the areas included} equal in area ~~to that~~, between each 10th Centile,
of the polygon derived from the binomial expansion of 2^{13} ,
being ten rectangles ^{when separated and} equal to the sum of the values between
each 10th Centile, in the ~~whole~~ ^{sum} of the binomial expansion of 2^{13}
Ten Rectangles - whose ^{respective} areas are equal to the summed values
of the ~~terms~~ ^{horizontal} in the binomial expansion of 2^{13} , that are included
between ~~the~~ ^{the} successive tenth Centiles.

65
312
758
1924
13236
390
1144
78

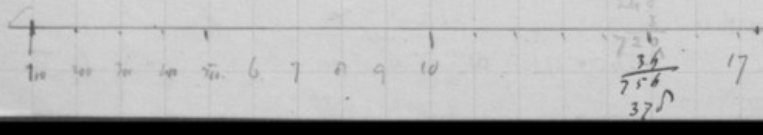
$$\begin{array}{r} 467 \\ 93 \\ \hline 374 \times 2 = 748 \end{array}$$

374 with names of officers } all the
374 without } established
380 large world } to correct
380 small
380 total of letters

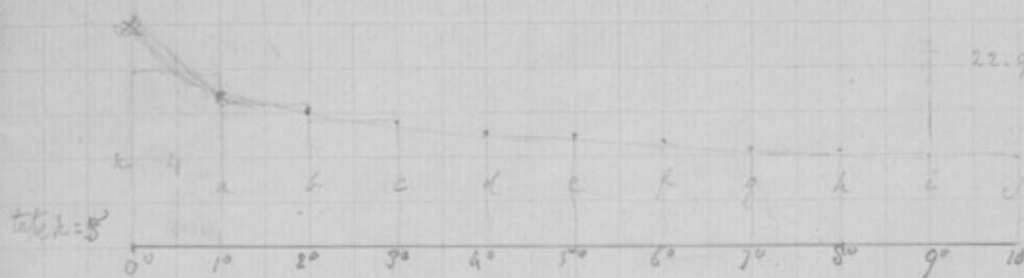
The $748^2 = 559504$

$$\begin{array}{r} 734^2 \\ = 3.1^2 \end{array}$$

$$\begin{array}{r} 380 \\ 380 \\ \hline 760 \end{array}$$



From Table 8 p. 205 Nat. Laker



22.90 look at ordinate after 10

To avoid decimals
take Mean = 5
= Quantile = 10
Prob. Error

Taking Mean = 5
Mean + diff, regarding height

Number of trials	entry
(1)	2.6
(2)	3.4
(3)	4.0
(4)	4.4
(5)	4.8
(6)	5.2
(7)	5.6
(8)	6.0
(9)	6.6
(10)	7.4

$$I = \frac{1}{2} \frac{1.90}{7.00} = \frac{3.50}{22.90} = 2.440 = \text{mean height of I}$$

$$II = \frac{1.15}{1.58} = \frac{1.58}{1.92} = \frac{1.550}{\text{mean height of II}}$$

$$III = \frac{0.72}{0.38} = \frac{0.38}{1.16} = \frac{1.005}{\text{mean height of III}}$$

$$IV = \frac{0.187}{0.19} = \frac{0.19}{1.68} = \frac{0.572}{\text{mean height of IV}}$$

$$V = \frac{0.187}{0.19} = \frac{0.19}{1.68} = \frac{0.572}{\text{mean height of V}}$$

$$VI = \frac{0.187}{0.19} = \frac{0.19}{1.68} = \frac{0.572}{\text{mean height of VI}}$$

$$VII = \frac{0.187}{0.19} = \frac{0.19}{1.68} = \frac{0.572}{\text{mean height of VII}}$$

$$1.7 : 6.7 :: 2 : 100$$

$$670 : 1 = 2.54$$

$$= 1.27 : 50$$

	Calc. as above	by binomial 2^{13}
I	2.44	2.18
II	1.85	1.29
III	1.00	1.00
IV	0.57	0.52
V	0.19	0.15

entry	entry
2.4	2.4
1.6	1.6
1.0	1.0
0.6	0.6
0.2	0.2
0.2	0.2

mean d. be 40
if R = 1 } (correlation with human stature)

In the one supposition nothing is known except that the 5 balls are a fair average $\frac{1}{5}$ of
 in the other when a ball removed ^{from the above is} of unknown colour the remaining 4 are $\frac{1}{4}$ of a fair

	0	1	2	3	4	5
Remainder 9	0	1	5	10	10	5
10	1	5	10	10	5	1
Remove 19 balls	0	5	10	10	5	1
then remain	0	5	10	10	5	1
	0	5	10	10	5	1

49 which are
 improved 19 - 1/5 are 38

? meaning 1 on an average: these are 22 families ^{are the no of girls remaining} in each family to be added by $\frac{5}{2} - 1 = \frac{3}{2}$
 If so, how about families of 0 or 1 girl?

if 1 girl be taken out of each family of 5 the remaining 4 ^{children} have left these their fair proportion of girls
 similar as 5 boys. But some families have no girls, others have only 1 girl ^{these are the families}

known in girls each family, but no of children in each family in a class say 2 in 2 of families
 makes up a sum that compensates that property



In families of 5 children

Distribution of boys & girls	In families of 5 children						
	5	4	3	2	1	0	
No. of cases of each r	0	1	2	3	4	5	32
No. of pairs of children in each class of family $n, n-1$	0	0	2	6	12	20	
$r, n, n-1$	0	0	20	60	60	20	160 pairs
Number of girls g	0	5	20	30	20	5	80
No. of brothers & sister b	0	4	3	2	1	0	
$g \times b$	0	20	60	60	20	0	160 pairs

Mean height of ten test-tubes representing the mean values of
 Groups of a normal array, within any one of which a single random
 value is equally likely to fall, the probable error of the series being very
 nearly ± 1.0 (more nearly ± 0.05)

Order of Group beginning with the smallest	A			B. Correlation var = $\frac{1}{2}PA$			
	Mean 0 = 0	Mean 0 = 4	Mean 0 = 40.0	Mean = 0	Mean = 4.0	Mean = 40.0	
1	- 2.4	1.6		- 1.2	2.8		1
2	- 1.6	2.4		- 0.8	3.2		2
3	- 1.0	3.0		- 0.5	3.5		3
4	- 0.6	3.4		- 0.3	3.7		4
5	- 0.2	3.8		- 0.1	3.9		5
6	+ 0.2	4.2		+ 0.1	4.1		6
7	+ 0.6	4.6		+ 0.3	4.3		7
8	+ 1.0	5.0		+ 0.5	4.5		8
9	+ 1.6	5.6		+ 0.8	4.8		9
10	+ 2.4	6.4		+ 1.2	5.2		10

Composed (1) & (2)

	0	1	2	3	4	5	6	7	8	9
4										
5										
6										
7										
8										
9										
10										
11										



Q_1 at 6.70 1.10 } 2.65
 $M = Q_2$ at 7.80 1.55 }
 Q_3 at 9.35 $\frac{1}{2} = 1.25$ as against a true 1.41

$\frac{1}{2} = 1.41$
 True Mean = $\begin{cases} 3.8 \\ 4.2 \\ 3.9 \\ 4.1 \end{cases}$ + Obs at 7.8 as against a true 8.2
 $\frac{4}{16.0} = 4.0$ correlation between 50 & 60
 for each series = 3.0 for 20 to 60

Tracks 1 and 2

both have mean of 5 and both mean sums = 4.2 and 4.7 respectively
A simply added

1	5.3 5.6 3.5 9.1	1.4 1.6 3.7 5.3	1.0 1.6 5.2 6.8	0.4 6.4 3.7 7.1	7.9 4.6 4.8 9.4	3.2 3.0 3.9 6.2	8.4 5.0 3.7 7.7	1.6 1.6 4.1 5.7	2.7 3.0 4.3 7.3	3.8 3.0 4.5 7.5
2	4.7 3.4 4.3 7.7	4.7 3.4 4.3 7.7	2.6 2.4 4.1 6.1	9.4 5.6 3.7 9.3	4.2 3.4 3.2 6.6	8.8 5.0 4.5 9.5	2.4 2.4 3.7 6.1	3.9 3.0 4.1 7.8	4.4 3.4 3.7 7.1	1.8 1.6 4.8 6.1
3	3.1 3.0 2.8 5.8	7.1 4.6 2.8 7.4	5.2 5.2 3.7 9.3	0.5 6.4 3.9 10.3	0.6 6.4 4.1 10.5	9.7 5.6 4.3 9.9	6.6 4.2 4.1 9.3	2.5 2.4 3.9 6.3	6.3 4.2 3.5 7.7	8.1 5.0 2.8 7.8
4	0.4 6.4 3.7 10.1	1.2 2.4 4.5 6.9	8.4 6.4 3.7 10.1	7.9 4.6 4.8 9.4	3.3 3.0 3.5 6.5	7.7 4.6 4.3 8.9	0.0 6.4 5.2 11.6	2.3 2.4 3.5 5.9	2.4 2.4 3.7 6.1	1.5 1.6 3.9 5.5
5	2.5 2.4 3.9 6.3	5.3 5.6 3.5 9.1	6.5 4.2 3.9 8.1	1.7 1.6 4.3 5.9	5.8 3.8 4.5 8.3	7.0 4.6 4.5 9.1	8.0 5.0 4.5 9.5	6.7 5.0 4.3 9.3	7.5 4.6 3.9 8.5	4.3 3.4 3.5 6.9
6	3.7 3.0 4.3 7.3	3.0 5.0 5.2 10.2	1.6 1.6 4.1 5.7	2.1 2.4 2.8 5.2	1.6 1.6 4.1 5.7	9.0 5.6 5.2 10.8	6.3 4.2 3.5 7.7	2.5 2.4 3.9 6.3	7.7 4.6 4.3 8.9	0.8 6.4 4.5 11.6
7	0.7 6.4 4.3 10.7	2.8 2.4 4.5 6.9	2.8 2.4 4.5 6.9	2.7 2.4 4.3 6.7	9.6 5.6 4.1 9.7	6.3 4.2 3.5 7.7	7.0 1.6 5.2 6.8	5.6 3.8 4.1 7.9	2.2 5.0 3.2 8.2	0.6 6.4 4.1 10.5
8	5.7 3.8 4.3 8.1	0.1 6.4 2.8 9.2	9.4 5.6 3.7 9.3	7.7 4.6 4.3 8.9	3.9 1.6 4.8 7.8	9.0 5.0 5.2 10.2	2.1 2.4 2.8 5.2	4.1 2.4 2.8 6.2	6.0 4.2 5.2 9.4	6.8 4.2 4.5 8.7
9	4.6 3.4 4.1 7.5	3.6 3.0 4.1 7.1	6.3 4.2 3.5 7.7	8.9 5.0 4.8 9.8	9.5 5.6 3.9 9.5	9.0 5.6 5.2 10.8	8.4 5.0 3.7 8.7	5.7 3.8 4.3 8.1	9.0 6.4 5.2 11.6	5.2 3.8 3.2 7.0
10	2.4 2.4 3.7 6.1	3.4 5.0 3.7 6.7	0.2 6.4 3.2 9.6	1.9 1.6 4.8 6.4	0.6 6.4 4.1 10.5	8.1 5.0 2.8 7.8	5.7 3.8 4.3 8.1	2.1 1.6 2.8 4.4	5.5 3.8 3.9 7.7	2.2 2.4 4.5 8.9

A contents simply added

	1	2	3	4	5	6	7	8	9	10
1				
2	
3						
4							..			
5						...				
6			...							
7							
8		
9							
10					



Area of each of the 14 bins
Ten Blocks: total area = 819.2; width of each 819.2.
Height of each Block = the Means of the Deviations of each element of the 14 rectangles as follows within their limits divided by 819.2

Deviation	Area of each of the 14 bins	-I	-II	-III	-IV	-V
-6	1	1.0				
-5	1.2	13.0				
-4	7.2	78.0				
-3	8.6	286.0				
-2	71.5	441.2	273.8			
-1	128.7		545.4	741.6		
	21.6			77.6	819.2	819.2
0					819.2	819.2
1						819.2
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						

over

The mean values of ten Equal Classes
in an array of approximately Normal Deviation



6.5	1	6.5	-
5.5	13	71.5	-
4.5	78	351.0	✓
3.5	286	1004.0	✓
2.5	441.2	1103.0	✓
		<u>2532.0</u>	

31
3:091

2.5	273.8	682.5
1.5	545.4	2.0
		<u>617.5</u>
		0.9
		<u>1502.9</u>

110.3

103

1.5	741.6	11115
0.5	77.6	<u>38.8</u>
		1151.2
		14

4/273.8	
684.5	
817.5	
0.9	
<u>1502.9</u>	

11115	11128
9	
<u>38.8</u>	
1151.2	

~~77.6~~
~~1.5~~
~~388.0~~
~~77.6~~
~~1164.0~~
3

8192	25320	(3.091)
		<u>24576</u>
		74400
		<u>73728</u>
		6720

after
2.180

8192	15029	(1.833)
		<u>8192</u>
		68370
		<u>65536</u>
		27340
		<u>24576</u>
		2764

after
1.293

8192	11512	(1.418)
		<u>8192</u>
		33200
		<u>32768</u>
		14320
		<u>8192</u>
		6128

100

$$1.418 : 1000 :: a : x$$

$$x = \frac{1000}{1.418} \times a$$

$$= .7052186 \times 9$$

$$705 \times 309.1 = 2.178 \text{ say } 2.18$$

I .705
II .705
III 1.000
IV 1.29
V 2.18

7
4

3.091
<u>7052</u>
6182
15455
<u>21637</u>
21797732

1833
<u>7052</u>
3666
9165
<u>12831</u>
12926316

(Extracts)

Parents					Children				
	Arch	Loops		Whorls		Arch	Loops		Whorls
Reg'd Mother	Max. Cent	Small	med & large	Sp. Wh. & Co. & unclassified	Reg'd Mother	Max. Cent	Small	med & large	Sp. Wh. & Co. & unclassified
398	-	-	1	3	398	-	-	2	4
407	-	-	2	2	407	-	-	-	2
763	-	1	1	2	763	-	1	1	6
249	-	1	2	1	249	1	2	7	1
108	1	-	1	2	108	3	2	2	5
353	-	-	-	4	353	-	1	6	5
732	-	-	-	4	732	-	-	-	2
659 A	-	-	1	1	659 A	2	1	1	-
682	-	1	1	3	682	-	-	9	3
	1	3	9	22		6	7	28	28
Carroll row	20	23	65	32		62	49	104	68
Total	21	26	74	54	Total	68	56	132	96
divide small loops 13			13			28		28	
3 fold division	3/4		87	54		96		160	96
	Arches		Loops	Whorls		Arches		Loops	Whorls
doubling the parental figures we have →						68		174	108
									350

no. of cases	Parents			No.	Children			Simplification as in preceding	percent frequencies				Differences and excesses above mean ratio.		
	Order + looks up to 7 inches Looks 8 inches and upward Works all knots, includes K.														
	a	l	w		a	l	w		Sum	a	l	w	a	l	w
1	0	0	4	1	0	0	2	2	-	-	-	-			
4	0	1	3	2	9	13	13	35	26	37	37	100	-4	-3	+7
5	0	2	2	3	4	15	13	32	12	47	41	100	-18	+7	+11
5	0	3	1	4	2	13	13	28	7	47	47	101	-23	+7	+17
3	0	4	0	5	3	11	8	22	14	50	36	100	-16	+10	+6
					18	52	49	119							
0	1	0	3	6	0	0	0	0	-	-	-	-			
3	1	1	2	7	7	12	13	32	22	38	40	100	-8	-2	+10
2	1	2	1	8	3	10	3	16	19	62	19	100	-11	+22	-11
3	1	3	0	9	11	3	2	16	69	19	12	100	+39	+21	-18
					21	25	18	64							
4	2	0	2	10	16	12	11	39	41	31	28	100	+11	-9	-2
4	2	1	1	11	16	20	4	40	40	50	10	100	+10	+10	-20
3	2	2	0	12	2	8	10	20	10	40	50	100	-20	0	+20
					34	40	25	99							
1	3	0	1	13	5	7	4	16	31	44	25	100	+1	+4	-5
3	3	1	0	14	22	6	2	30	73	20	7	100	+43	-20	-23
					27	13	6	46							
0	4	0	0	15	0	0	0	0	-	-	-	-			
41	15 combinations			100	130	98		328	30	40	30				
Complex															

Complex



	Parents			Children			Grand Totals
	a	l	w	a	l	w	
Archie O	0	0	4	0	0	2	
	0	1	3	9	13	13	
	0	2	2	4	15	13	
	0	3	1	2	13	13	
	0	4	0	3	11	8	
	Totals			18	52	49	119
	per cents			15	44	41	
Whorly O	0	4	0	3	11	8	
	1	3	0	11	3	2	
	2	2	0	2	8	10	
	3	1	0	22	6	2	
	4	0	0	0	0	0	
	Totals			38	28	22	88
	per cents			43	32	25	
Lorfen O	0	0	4	0	0	2	
	1	0	3	0	0	0	
	2	0	2	16	12	11	
	3	0	1	5	7	4	
	4	0	0	0	0	0	
	Totals			21	19	17	57
	per cents			37	33	30	
Remond -low	1	1	2	7	12	13	
	1	2	1	3	10	3	
	2	1	1	16	20	4	
				26	42	20	88
	1	0	3	0	0	0	
	3	0	1	5	7	4	
				5	7	4	16
	Totals			31	49	24	104
	per cents			30	47	23	
	per cents			32	42	26	



5 for 4
a number of 68
but excluding 8

Reg'd Wife	Parents a l w	Children a l w
73	1 3 -	7 1 2
88	3 - 1	5 7 4
96	3 1 -	6 4 -
104	2 2 -	- 2 2
108	1 1 2	6 2 4
116	2 1 1	7 9 2
128	- 2 2	2 2 -
137	2 1 1	- 5 1
180	- 2 2	- 4 10
214	- 2 2	- 5 1
222	- 3 1	2 1 3
223	- 4 -	2 4 -
224	- 3 1	- 2 2
249	1 2 1	3 8 1
255	2 - 2	6 4 -
283	1 3 -	2 - -
284	1 3 -	2 2 -
285	- 4 -	- 1 3
341	- 2 2	2 4 -
346	2 - 2	2 3 3
353	- - 4	1 6 5
371	- 3 1	- 4 2
377	3 1 -	4 - -
390	2 2 -	2 5 5
398	- 1 3	- 2 4
407	- 2 2	- - 2
410	- 1 3	6 7 7
571	2 1 1	1 1 -
566	2 - 2	1 - 6
605	- 1 3	- - 2
636	2 - 2	7 5 2
650	2 1 1	8 5 1
682	1 1 2	- 9 3
690	- 1 3	3 4 -
	35 54 47	87 118 77

Reg'd Wife	Parents a l w	Children a l w
696	2 2 -	- 1 3
709	1 2 1	- 2 2
708	3 1 -	12 2 2
732	- - 4	- - 2
746	- 3 1	- 2 6
748	- 3 1	- 4 -
763	1 1 2	1 1 6
	7 12 9	13 12 21
	35 54 47	87 118 77
	42 66 56	100 130 98
		42 66 56
		142 196 154
		29 40 31

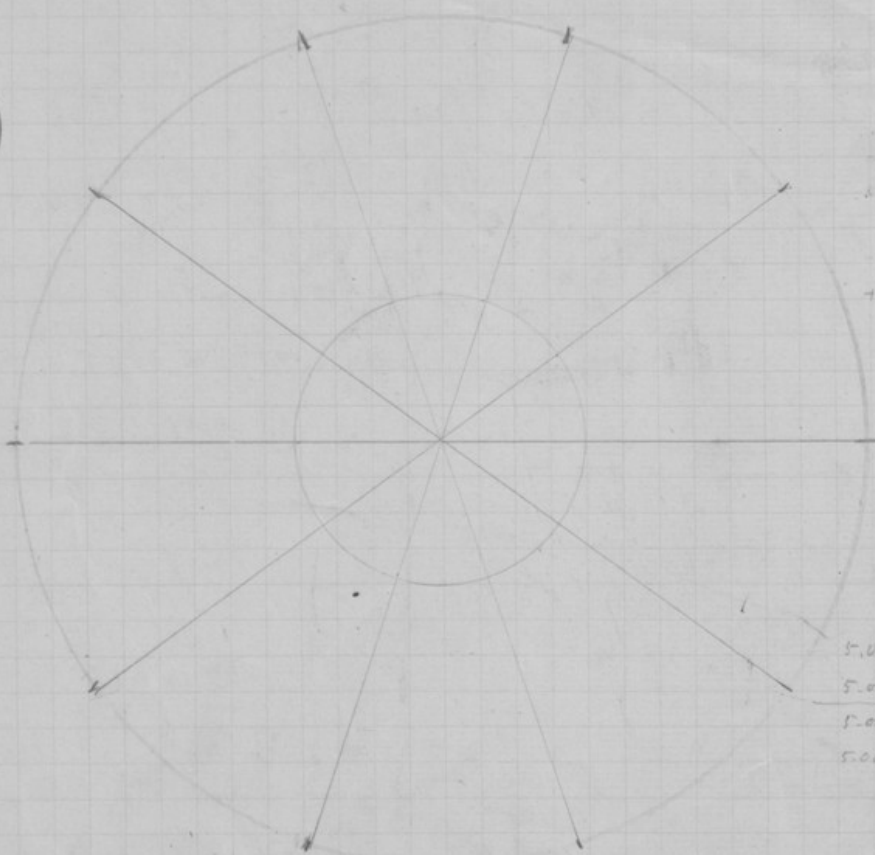
Total parents

$$164 + 328 = 492$$

Totals of each kind
percent



Reg ⁿ			mean	diff ⁿ	Reg ⁿ			mean	diff ⁿ
353	9	9	8.25		390	2	0	2.75	
315	8	7			380	4	5		
	17	33				6	5		
347	5	9	2.25		384	8	7	0.42	
348	8	9			385	0	0		
349	3	5			386	5	5		
350	4	7			387	3	3		
351	7	6			388	8	5		
352	4	5			389	7	7		
	31	72	6.00			31	38	27	
371	3	7	4.25		377	0	1	1.25	
244	3	4			374	0	4		
	6	11				0	5		
			2.08					0.25	
368	6	4	6.33		375	0	0	1.00	
369	9	8			376	2	2		
370	7	4				2	4		
	22	38							
377	0	1	1.25		398	8	5	7.50	
374	0	4			399	9	8		
	0	5				17	30		
								0.67	
375	0	0	1.00		395	3	8	6.83	
376	2	2			396	8	5		
	2	4			397	9	8		
						20	41	21	
					407	8	4	6.50	
					289	9	5		
						17	26		
								1.50	
					424	8	8	8.00	



Mean taken as 5

Mean + deviation
(regarding to size)

Mean + deviation (regarding to age)

387	2.820	
393	3.707	
477	4.000	revised
345	4.195	4.477
256	4.145	4.822
345	5.765	5.178
477	5.703	5.523
293	6.000	
293	6.293	
387	7.180	

$$\frac{1}{4} 0.705 = 0.178$$

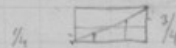
$$\frac{3}{4} = 0.523$$

$$5.000 - 0.523 = 4.477$$

$$5.000 - 0.178 = 4.822$$

$$5.000 + 0.178 = 5.178$$

$$5.000 + 0.523 = 5.523$$



- 1 Preface - Travel of the eye
- 2 Angular measurement - Central
- 3 Scrutiny - H. of picture
- 4 Travel of the eye, (can. the colored crayons) - Perspective deformation
- 5 continued - Estimation of likeness - types - Beauty maps
- 6 Winter profiles
- 7 Steps by steps outlines
- 8 About sketches
- 9 Continued from 7
- 10 Portraits in Motion
- 11 Composite portraits
- 12 Continued
- 13 Continued - Analytical

Revised Index
(New order)
Preface
Scrutiny
Travel of the eye
Perspective deformation
Angular measurement
Nature of resemblance
Sketches, analytical portraits
Vision, individual perception - association - good & bad - picture in wall
Words, Pictures - picture in wall - beauty maps
Measurement of the likeness of resemblance by intellectual, by instrument
Composite portraits
Types for reference, sketches of distinguished men
Winter profiles
Winter profiles, manuscript expressed

Preface 1
Angular measurement 2-3
Travel of the eye 4
Scrutiny - Analysis 4-5
Travel of the eye 5
Perspective deformation 6
Estimation of types & beauty maps 7



3rd attempt

1.30r

3rd attempt — Composites to be rated by the sum of their components

0	1	2	3	4	5	6	7	8	9	6	7	8	9
sp	1-3	4-9	10-19	20-29	above								
wh	1-2	3-5	6-9	10-14	15-20	21-27	28-36	add 1 or 2 for each composite, total at 21 cases					

4th attempt

Arday	1	2	3	4	5	6	7	8	9	6	7	8	9
605					1	2							
636		2						1		2			
682			1						2				
690				1						1			
696			1		2				2	1	1		
702				2						1	1		
732			2	2								2	2
746				1	2				1		1	1	2
748			1	3					2			1	1
763									1				
255		1	1			1	1		4	5	8	8	6
283			2	1					7	5	16	23	12
284	1		1	1								7	11
285					1	1	1		11	10	24	31	18
341				2			2						12
346		1	1				2						18
353						1	1	2	11	10	24	31	36
371				3	1								28
377	2	1		1									20
	7	5	16	23	12	7	11	4	9	3			

4th attempt

0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7
73	1		1	2											
88			3			1									
90		1	2	1											
104	1	1		1		1									
108			1	1			1								
116		1	1			1									
128					1	1	1								
139			2		1		1								
178			1	1		2									
180				2			1								
204				2			1								
222				2		2									
223				3	1										
224				2		1	1								
249			1	2		1									
255	1		1				1	1							
283			2	1	1										
284	1		2	1											
285					3	1									
341				2			1	1							
346			2				2								
353						1	1	2							
371				3		1									
377	2	1		1											
390		1	1	1		1									
	6	5	20	28	8	14	9	10							

4th attempt

Arday
flat
mad
capped

Loth	Whod
1-3	1-2
4-9	3-5
10-19	6-9
20-25	10-14
above	15-25
Σ	above it
Σ	above it
Σ	above it

add 1 or 2 for
flat or capped

add 1 or 2 for
flat or capped

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flat or capped

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flat or capped

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flat or capped

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flat or capped

add 1 or 2 for
flat or capped

	0	1	2	3	4	5	6	7	8	9		0	1	2	3	4	5	6	7	8	9
73	1		1	1	1						390		1	1	1	1					
88			3			1					398				1				1	1	1
90		1	2	1							407				1	1	1			1	
104	2			1		1					416				1		1			2	
108		1		1				1	1		511	1		1	1	1					
116	1		1	1		1					566	1	1						1	1	
128					1			1	2		605			1			2		1		
139			2		1		1				626		2				1	1			
178			1	1	1	1					682			2					1	1	
180				1	1	1	1				690				1		1	1		1	
204				1			2				696			2	1	1					
223				1	1		2				708	1			1	1					
242				2	2						732									2	2
224				1		1	2				746			1				1	1	1	2
249			1	3				1			748	2	1	2					1	1	
											713		1		1						
255		1	1					1	1			4	5	8	8	6	5	3	6	11	6
283			2	1			1					7	5	16	23	12	7	11	4	9	3
224	1		1	1	1																
285					1	1	11					11	10	24	31	18	12	14	10	20	9
341				2					2												
346		1	1						2							12			18		
353								1	1	2		11	10	24	31	36			28	20	9
371				3	1																
377	2	1			1																
	7	5	16	23	12	7	11	4	9	3											

4th attempt4th attempt

	0	1	2	3	4	5	6	7	
73	1		2	2					
88			3						
90		1	2	1					
104	1	1		1		1			
108			1	1			1	1	
116		1	1		1	1			
128					1	1		11	
139			2		1		1		
178			1	1		2			
180				2			1	1	
204				2			1	1	
222				2		2			
223				3	1				
224				2		1	1		
249			1	2		1			
255	1		1				1	1	
283			2	1	1				
284	1		2	1					
285					3	1			
341				2			1	1	
346			2				2		
353						1	1	2	
371				3		1			
377	2	1		1					
390		1	1	1		1			
	6	5	20	22	8	14	9	10	

Arday
flat
and
caves

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Loops

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100