

RESULTS OF THE AUTOMOBILE CLUB 1,000 MILE TOUR, APRIL-MAY, 1900; HILL-CLIMBING TRIALS.

DEDUCED MECHANICAL EFFICIENCY.

Number. Class.	Name.	Total weight, including passengers.	Horse- power of Engine stated by maker.	Transmission Gear.	TADDINGTON HILL.		SHAP FELL (1).		SHAP FELL (2).		DUNMAIL RAISE.		BIRKHILL.		Approximate Mechanical Efficiency of Vehicle.
					Average speed in miles per hour on rise of 651 ft. in 13,320 ft.	Average actual HP. at driving road wheels.	Average speed in miles per hour on rise of 840 ft. in 38,300 ft.	Average actual HP. at driving road wheels.	Average speed in miles per hour on rise of 500 ft. in 7,338 ft.	Average actual HP. at driving road wheels.	Average speed in miles per hour on rise of 450 ft. in 9,040 ft.	Average actual HP. at driving road wheels.	Average speed in miles per hour on rise of 460 ft. in 10,560 ft.	Average actual HP. at driving road wheels.	
A.	1 Benz Ideal. Messrs. Hewetson's	13 1	3	Belt, chain	5:39	1:56	—	—	—	—	5:01	1:47	6:0 <i>d</i>	1:57	per cent. 51
"	2 Benz Ideal. Messrs. Hewetson's	13 0	3	Belt, tooth, chain	7:18	2:06	11:5	2:07	4:8	1:76	6:64	1:92	6:6 <i>d</i>	1:65	61.5
"	5 Locomobile Steam Carriage	9 1	2 <i>k</i>	Chain	9:76	1:86	6:0	—	6:64	1:61	9:79	1:89	10:9	1:98	61 <i>k</i>
"	16 Gladiator Voiturette	8 0	3:25	Chain, tooth	8:17	1:24	—	—	—	—	7:67 <i>e</i>	1:185	7:5 <i>d</i>	0:995	32.6
"	27 New Orleans Car. Messrs. Burford & Van Toll.	8 2	3	Belt, tooth	6:3	1:125	—	—	4:42	0:88	6:22 <i>d</i>	0:985	7:7	1:28	35.7
"	28 New Orleans Car. Messrs. Burford & Van Toll.	8 2	3	"	6:05	1:10	—	—	—	—	4:74	0:80	—	—	31.6
"	33 Decauville Car. The Motor Car Co.	8 3	3:5	"	6:7	1:20	—	—	—	—	5:13	0:84	—	—	34.0
"	34 Decauville Car. The Motor Car Co.	8 2	3:5	"	6:3	1:10	—	—	—	—	6:84	1:21	8:6 <i>e</i>	1:23	39.4
"	41 International Victoria	11 0 <i>a</i>	3	Belt, chain	5:29	1:26	—	—	—	—	5:55	1:35	—	—	43.5
"	44 International Victoria	10 2 <i>a</i>	3	"	6:17	1:43	—	—	—	—	6:04 <i>e</i>	1:33	4:1	—	46
"	51 Star Voiturette	11 2 <i>a</i>	3:5	"	9:15	2:30	—	—	—	—	—	—	8:0	1:76	54.4
"	52 Roots & Venables Car (Kerosene oil)	11 2 <i>a</i>	2:87	Chain	5:8	1:205	—	—	—	—	—	—	—	—	50
B.	14 De Dion Voiturette. Mr. R. Fuller	9 2	3	Tooth	—	—	13:5	1:612	7:24	1:79	9:79	1:94	10:9	2:04	61.5
"	15 De Dion Voiturette. The Motor Power Co.	9 2	3	"	10:08	1:975	14:5	1:735	7:58	1:885	—	—	8:0 <i>e</i>	1:41	58.3
"	24 Marshall Carriage	15 1	5:0	Belt, chain	—	—	11:5	2:20	4:42	1:81	—	—	—	—	41
"	31 Renault Car. The Motor Car Co.	9 0	3:5 <i>c</i>	Tooth	9:45	1:76	—	—	—	—	9:33	1:75	9:6	1:70	58
"	32 Renault Car. The Motor Car Co.	9 0	3:5 <i>c</i>	"	7:56	1:41	—	—	—	—	7:33	1:37	—	—	46.3
"	40 Wolseley Voiturette	15 2	3 <i>l</i>	Belt, tooth, chain	10:08	3:21	13:0	2:52	6:37	2:59	7:9	2:55	8:6	2:62	89.5 <i>l</i>
"	49 Marshall Carriage	14 3	5	Belt, chain	4:94	1:49	10:5	1:94	4:54	1:75	6:04	1:85	6:3	1:83	35.5
C.	8 Daimler Phaeton. Motor Manufacturing Co.	25 2	6	Tooth, chain	5:29	2:785	10:5	3:37	5:14	3:47	5:86	3:13	6:5	3:26	53.5
"	9 Daimler Phaeton. Motor Manufacturing Co.	25 3	6	"	5:49	3:09	10:5	3:75	4:42	2:84	5:13	2:93	6:3 <i>e</i>	3:20	52.8
"	23 Whitney Steam Car. Messrs. Brown Bros.	12 2 <i>a</i>	3:8 <i>b</i>	"	4:56	—	—	—	—	—	7:67	—	8:9	2:36	62
"	26 Peugeot Carriage. Mr. Friswell	19 3	8	Tooth, chain	9:45	3:83	—	—	—	—	9:79	4:03	10:9	4:23	50.5
"	35 Daimler Car. The Daimler Co.	21 2	6	"	6:3	2:94	13:5	3:98	6:37	3:72	7:9	3:70	6:8	3:03	55.7
"	36 Daimler Car. The Daimler Co.	26 1	6	"	6:55	3:58	13:5	4:70	4:42	3:05	6:64 <i>e</i>	3:72	6:6	3:43	61.6
"	37 Daimler Parisian. The Daimler Co.	22 0	6	"	9:15	4:12	16	4:27	—	—	8:92	4:06	8:0	3:45	66.2
"	46 Georges Richard Car	21 0	7	Belt, tooth, chain	—	—	—	—	—	—	7:67	3:41	7:5	3:09 <i>e</i>	46.5
"	47 Georges Richard Car	21 0	7	"	6:43	2:78	—	—	—	—	5:86 <i>f</i>	1:86	5:0 <i>g</i>	1:98	31.6
D.	22 Lanchester Car. Mr. Millership	16 0 <i>a</i>	8	Worm	8:62	3:01	11:5	2:54	4:98	2:22	6:84	2:41	7:7	2:57	31.9
E (a).	12 De Dion Tricycle. Motor Manufacturing Co.	3 0 <i>a</i>	2:25	Tooth	—	—	—	—	—	—	7:9	0:495	12:6	0:747	27.6
"	20 Simms' Motor Wheel	4 2 <i>a</i>	2:75	"	9:45	0:87	—	—	—	—	—	—	—	—	31.6
"	39 Century Tandem Tricycle	5 2 <i>a</i>	3	Chain	—	—	—	—	—	—	2:1 <i>d</i>	—	10:9 <i>d</i>	1:08	36.2
E (b).	3 Ariel Quadricycle. Mr. J. Stocks	6 2	3:15	Tooth	15:13 <i>h</i>	2:03	20:5	1:67	6:64 <i>e h</i>	0:98	11:41 <i>d</i>	1:42	13:3 <i>e</i>	1:51	48.3
"	4 Ariel Tricycle with Whippet Trailer	5 2	2:25	"	14:4	1:62	20:5	1:41	6:64 <i>d j</i>	—	8:22 <i>d j</i>	—	12:6 <i>d j</i>	—	67.5
A.	A 25 Benz Ideal. Mrs. Bazalgette	12 2	3	Belt, chain	6:7	1:81	—	—	—	—	4:66	1:25	—	—	51
B.	A 24 Mors Voiturette. Mr. Phillips	13 2	4	Tooth, chain	8:39	2:33	—	—	—	—	7:67	2:15	7:5	1:98	53.7
C.	A 2 6 HP. Panhard. Mr. Butler	21 3	6	Tooth, chain	5:69	2:54	10:5	2:86	4:8	2:74	6:22	2:81	5:7	2:43	44.6
"	A 3 6 HP. Panhard. Mr. Browne	20 3	6	"	8:17	3:49	13:0	3:20	5:68	2:90	7:9	3:06	8:6	3:49	54
"	A 7 6 HP. Daimler. Mr. Harmsworth	18 2 <i>a</i>	6	"	—	—	—	—	—	—	4:66	—	6:6 <i>e</i>	2:62	43.6
"	A 10 8 HP. Napier. Mr. Kennard	26 0	8	"	13:74	7:39	19:0	5:71	—	—	13:69	7:24	11:5	5:86	82
"	A 12 6 HP. Daimler. Mr. Edmunds	20 2	6	"	6:43	2:89	—	—	—	—	7:08	3:1	—	—	49.8
"	A 21 6 HP. Daimler. Mr. Pitman	24 2 <i>a</i>	6	"	—	—	11:0	3:67	4:42	3:81	6:22	3:33	4:8	—	60.3
"	A 23 6 HP. Daimler. Mr. Cordingley	23 3 <i>a</i>	6:25	"	6:3	—	—	—	—	—	—	—	—	—	—
"	A 26 6 HP. Daimler. Mr. Gregson	25 3	6	"	5:8	3:26	—	—	—	—	6:84	3:9	4:1 <i>e</i>	—	59.7
"	A 30 6 HP. Daimler. Mr. Siddeley	20 2	6	"	8:39	2:54	13:0	3:37	4:82	2:61	6:92	2:95	7:0	2:84	47.6
"	A 31 6 HP. Daimler. Mr. Johnson	24 2	6	"	8:17	3:9	11:5	3:35	5:68	3:43	7:9	3:32	8:2	3:93	59.7
D.	A 4 8 HP. Panhard. Mr. Mark Mayhew	20 1 <i>a</i>	8	"	10:08	4:28	12:0	—	5:48	—	—	—	—	—	53.5
"	A 11 12 HP. Daimler. Hon. J. Scott Montagu	23 3 <i>a</i>	12	Tooth, chain	11:19	5:46	—	—	—	—	5:26 <i>f</i>	—	10:4	4:64	42
"	A 17 12 HP. Panhard. Hon. C. S. Rolls	26 1	12	"	17:77	9:55	27:5	8:78	17:71	10:9	20:54	11:81	16:0	8:21	82
"	A 22 12 HP. Daimler. Mr. J. A. Holder	30 1	12	"	14:4	8:94	—	—	7:24	6:4	10:27	6:44	10:9	6:46	57.6
"	A 29 7 HP. Peugeot. Mr. Mark Mayhew	19 2 <i>a</i>	7	"	7:74	3:13	15:5	3:8	7:97	4:1	9:79	3:99	10:0	3:82	53.7
E (a).	A 16 Ariel Tricycle. Mr. A. J. Wilson	3 2 <i>a</i>	2:25	Tooth	18:91	1:35	18:5	0:815	—	—	5:13	—	6:8 <i>j</i>	—	48.3
"	A 20 Empress Tricycle. Mr. H. Ashby	3 2 <i>b</i>	2:75	"	—	—	20:0	0:88	15:94	1:46	17:06	1:25	7:5	—	43.2
E (b).	A 28 Enfield Quadricycle. Mr. E. M. Iliffe	6 2 <i>b</i>	2:25	"	9:15 <i>e</i>	1:11	—	—	—	—	9:33 <i>e</i>	1:13	12:0 <i>e h</i>	1:83	60.5

a Weight based on maker's statement.
b Estimated.

c The de Dion water-cooled engine used in this car is generally stated to give 3 HP., and this figure has been taken in calculating the efficiency.

k Brake HP. of engine taken as 3.1.

d Both passengers off temporarily.
e One passenger off temporarily.

l Brake HP. of engine here understated. See remarks, p. 618.

Air resistance is not included in these calculations. See p. 622.

f Two passengers off temporarily.
g All off temporarily.

h Pedalling.
j Had to push.