

WaterWords

News from the Waterworks Museum - Hereford

INDEX to Nos 0 – 46 Covering the years 1997 – 2014

Compiled by Jeremy Milln

Notes

- ξ Waterworks Museum's newsletter, *WaterWords*, has been produced since Autumn 1997, generally three times a year. Individual issues are dated on the front cover and rather discretely numbered on the back page. Special issues are given the number of the main issue immediately preceeding, but with the the addition of an alphabetical letter.
- ξ The *Journal of the Herefordshire Waterworks Museum Trust*, produced between July 1975 when Vol 1, No 1 appeared, and the Autumn of 1997, is subject of a separate index.
- ξ Citations are by issue number, here expressed in bold face. The page number is cited after the issue number, following a comma. The first issue of the Newsletter is numbered '0', not '1'.
- ξ The index is general and lists names, places and subjects together alphabetically
- ξ Advertisements and notices are not generally indexed.
- ξ Responsibilities (past & present) of Museum volunteers are given in brackets after name entries
- ξ The table at the end of the index gives a concordance of issue numbers and dates

Alphabetical Index

- Abergavenny U3A History Group: Chairman leads discussion **34**, 6; visits **35**, 8
- Aberystwyth: foundry at made Museum's overshot waterwheel **6a**, 2
- Ablutions Display: tap repaired **35**, 5
- Abramsky, Dame Jenny: HLF Chair visits Waterworks Museum **31**, 1 & 6
- Accessibility: Museum gets award from Mayor of Hereford **00**, 1; ADAPT-enabled improvements appreciated **07**, 5; goes for highest rating under national scheme **25**, 1
- Accident: contractor's vehicle hits Tangye House **06**, 1
- Accreditation: application submitted **25**, 3; awarded to Museum with commendation **27**, 1; MLA grant for data logging equipment towards Museum status **34**, 6; application to renew submitted **45**, 4
- ADAPT Trust (Access for Disabled People to Arts Premises Today): grant from Railtrack plc fund towards dropped kerbs and paving **05**, 4; accessibility work completed **06**, 4; Museum now wheelchair accessible thanked by Frank Warr MBE **07**, 5
- Administrator: Don Saunders retires & Joan Hughes appointed **09**, 4
- Admission: opening every Tuesday **28**, 1 & 6; charges increase in 2009 **28**, 6; **30**, 8; charges increase in 2014 **44**, 1
- Age Concern H&W: seeks reminiscences of Rivers Wye & Lugg **15**, 7
- Aircraft: John Mephram engineer **30**, 3
- AJP Engineering Ltd of Hereford: repairs the 'bell' from the Hayward-Tyler engine **42**, 2
- Alcazar* engine: steam donkey from Tenbury unveiled by John Greenhill **10**, 8
- Alcon units: engine & pump from Homelands Farm **41**, 6
- Allen, William Henry Ltd, Bedford: Focus on diesel engine of 1932 from Alton Court, Ross-on-Wye **00**, 2; **8**, 6; vertical diesel electric motorised and safety barriers fabricated **10**, 3; diesel engine redisplayed in original liery **11**, 3; engine inaugurated by Mayor, Cllr Williams **12**, 1; diesel engine white-lined for safety **13**, 3; Peter Allen works on WH Allen high-speed steam engine **28**, 3 & 5; **31**, 5; display improved **34**, 5; at Alton Court **39**, 2; 80th anniversary **40a**, 1; diesel engine at Ross **41**, 5; Allen engine start-up **42**, 5; Focus on 1917 WH Allen single-cylinder high speed steam engine **43**, 2 & 4; restoration of 1917 engine wins Allen Heritage Award **45**, 8; **46**, 1 & 6
- Allen, Dr Chris: reports for ISSSES **30**, 5; Tangye unit from Claymills **37**, 1
- Allen, David: presents Allen Heritage Award to Museum **46**, 1 & 6
- Allen, Paul: reported to Trustees about Leominster Tangye House **05**, 2
- Allen, Peter: joins engineering team **11**, 3; works on compressor donkey engine **11**, 4; repaints Tangye static steam engine **13**, 3; collects donated pumps from Margaret Price of Mansell Lacy **14**, 7; takes apart Lister D-type petrol engine **15**, 5; rebuilds the 2½ hp Tangye engine **16**, 5; **17**, 5; volunteer viewpoint **17**, 3; semi-diesel Tangye donkey engine restored **20**, 6; Focus on...

Tangye donkey engine **21**, 2; rebuilds Ruston-Hornsby petrol engine **24**, 6; restores hot-tube gas engine **27**, 7 and **32**, 4; new trolley for Ruston-Hornsby engine **30**, 5; paints hot-tube gas engine **31**, 5; works on WH Allen steam engine **28**, 3; **31**, 5; works on and installs 3-engine & pumps **35**, 5; **37**, 4; tests injector for Lister CS engine **38**, 5; helps retore Wilson oil engine **42**, 5 & **43**, 5; at Allen engine start-up **42**, 5; with French 5hp petrol engine at Hereford & Dist Preservation Soc event (photo) **45**, 6

Almeley Social Club: visits Museum **23**, 8

Altham, Steve: volunteers **38**, 3

Alton Court Waterworks (Ross-on-Wye): Focus on...National Gas engine, Allen diesel and workshop **00**, 2; collections contribute to archive **17**, 2; pumping station **39**, 2 & 8; Focus on...Alton Court Pumping Station from notes by Henry Blake **40a**, 2

Amanco (Associated Mfrs Co): David Lea of H&DPS brings his engine to event at Museum **14**, 12;

Ancient Monument: scheduled status of building explained by Paul Stamper **08**, 3; constrains New Build to augured piling **19**, 1

Andrew, Katherine (Head of Heritage Services, HC): attends HMF meeting at Museum **13**, 4; appointed Principal Heritage Officer **13**, 8; supports Water-on-Tap Project & Open Day **30**, 1 & 3; co-ordinates Heritage Open Day **33**, 3; **35**, 3

Andrews, Gill: caters for Winter Social **19**, 5; **31**, 3; **34**, 3; **37**, 3; magnificent spread for Winter Social **44**, 3

Andrews, Cllr Les: consorts Deputy Mayor for Millennium celebration **07**, 1; consorts Mayor Sue Andrews at Gala **09**, 1

Andrews, Cllr Sue: as Deputy Mayor arrives for Millennium celebration **6a**, 1; **07**, 1; Mayor of Hereford unveils plaques & pumps at Gala **09**, 1

Anglesea Water Supply: WH Austin contributes drawings etc from to Museum archives **17**, 2

Anniversaries: 25 years from Museum founding to celebrate **02**, 6; Stephen Southall welcomes to Silver Anniversary Celebration **3a**, 1; **04**, 1; 30 years from Museum founding and 100 years from opening of Elan Valley reservoirs **18**, 4; John Townsend writes on how it began 30 years ago **19**, 2; 150 years since beam-engine and piped water in Hereford, 100 years since Bay 7 and Worth-Mackenzie engine **21**, 1; 150 years of drinking water for Hereford **22**, 1; 150th year of water for Hereford **24**, 3; centenary for Worth-Mackenzie steam engine **24**, 8; double silver wedding **30**, 3; 35th year of the Museum **31**, 3; centenary of National Gas Engine and 80th anniversaries for Allen and Tangye diesels **40a**, 1; 40th year of the Museum **45**, 1; 40th Anniversary Gala **46**, 1 & 4

Annual General Meeting (AGM): 1999 report solid achievement **05**, 1; 2010 report **36**, 1; date changed **46**, 3

Anson Engine Museum: Derek Duffett visits **37**, 6

Appleby Bros, Greenwich: supplied 120hp beam engine for Goulburn Waterworks, NSW **15**, 1

Archimedes screw: installed in pond outside Bay VI **08**, 3; made by Fine Furniture & funded by Clore **09**, 3; tried out by members of DCWW Board **11**, 6; Newcomen Society bulletin admires value to youngsters **29**, 6

Architects: Johnson, Blight & Dees draw up plans for rebuilding Leominster Tangye House **05**, 2; Rod Robinson meets Nick Reading of EH **07**, 6; Robinson gives presentation **08**, 1; Andrew Waddington in charge New Build project **09**, 7; RRA Architects design New Build **18**, 1; Lett & Sweetland of Worcester take over **19**, 1; conservation practitioners visit Museum **23**, 1; Robert Lett redesigns new building **23**, 5

Archives: work on facilities thanks to WMRMC grant **01**, 1; anecdotes from **08**, 5; room created for **10**, 6; update on cataloguing from Sue Hubbard **16**, 3; scope, organisation and purpose **17**, 2; Sue Hubbard progresses catalogue **19**, 5; about the archives **20**, 7; room dedicated to Bob Benson **23**, 3; catalogue and images going on line **29**, 6; records at Waterworks Museum **36**, 2; receives enquiries **37**, 8; Fred Snelgrove reports on activities **45**, 4

Arrow Security, Leominster: instal system following break-ins **03**, 4

Arrowsmith, John: of Herefordshire Soc of Model Engineers helps with Worcs Construction Training Group event for children **12**, 6

Artists: Wye Valley Art Group visit Museum **12**, 4; Ursula Prossor sketches Museum **21**, 7; Hereford Painting Group visit **29**, 8

Asbestos: application of April 2012 Regulations **43**, 4

Asquith, Peter: donates Lea meter **38**, 4

Association for Independent Museums (AIM): Noel Meeke speaks about Museum at conference **06**, 3; *Bulletin* features Museum **11**, 6

Association for Industrial Archaeology: awards first for *Waterwords* newsletter **14**, 1; awards £200 publications prize for *WaterWords* **24**, 1; **29**, 1; recognises Museum in *IA News* **29**, 6

Association for the Promotion of Herefordshire (APH): excellent provision for Museum **19**, 5

At risk register: Museum building placed by EH **05**, 6; in response, Rod Robinson reports on fabric **06**, 4; Robinson report precipitates meeting with Nick Reading of EH **07**, 6

Attfield, Clarence: donates water closets **06**, 6; Victorian loos in Museum store **09**, 7

Attfield, Cllr Ursula: as Mayor inaugurates wind pump on Gala Day **14**, 1

Austin, Bryan: donates WH Austin memorabilia for Bay Seven **04**, 3

Austin Motor Co: Owners Club rally during Water Weekend (photo) **14**, 12; 1928 Saloon conveys Mayor on Gala Day **29**, 1;

Hereford Austin 7 Club visit **43**, 1; Hereford Club run by Howard **44**, 3

Austin, William H: obituary of former Water Board chief engineer **04**, 3; WMCC film memorabilia **11**, 10; contributes Herefordshire Water Board collection to museum archive **17**, 2; as Chief Engineer remembered at 30 year anniversary **18**, 4

Automatic pumps: fire fighting sets **41**, 2

Avoncroft Museum of Buildings: advises on reconstruction of Leominster Tangye House **05**, 2

Awards: Museum gets access award from Mayor of Hereford **00**, 1; Awards for All grant for Millennium oral history project on pre-piped supplies **05**, 5; Awards for All grant for six wall panels on water supply history **06**, 4; **6a**, 2; Fulford Foundation awards £40,000 **07**, 3; *WaterWords* wins AIA publications prizes **24**, 1; **29**, 1; and **30**, 6; Museum wins Nationwide Community Award **30**, 6; becomes a quality assured visitor attraction **31**, 1; Going Places (tourism) **39**, 1; Diamond Jubilee (excellence) **40**, 6; for restoration of 1917 W H Allen steam engine **45**, 8; Allen Heritage Award presented **46**, 1 & 6

Backhouse, Roger: praises Museum in *Model Engineer* **24**, 8

Baldwin, Dennis & Sons (boiler manufacturers): Byworth steam boiler **33**, 2; **34**, 2 & 5

Bamford, Henry & Sons Ltd, Uttoxeter: engine restored **24**, 6; petrol/paraffin/TVO engine of 1931 sold by Williams & Co, Hay-on-Wye displayed (photos) **29b**, 2; **29d**, 2; engine of 1931 powers Joseph Evans pumps **30**, 5; EG3 engine donation made & collected **33**, 5-6; driving pump **37**, 4

Balsdean pump: electric pumping station of 1935 offered **23**, 7; display takes shape **35**, 4; progress report **36**, 5; display opened by Mayor **38**, 1; Alec Dawe maintains motor starter **43**, 5

Barbecue: Chairman's for Volunteers **29**, 3; **35**, 3; **38**, 3; **40**, 3; **43**, 3; with his extended family (photo) **46**, 8

Barnes, Tom: as vice-chair of water board visited Hereford waterworks with Stephen Southall **01**, 3

Barnwood Industrial Archaeology and Transport Society: group visit to Museum **20**, 8

Barry, S Wales: c.1890 dynamo from **03**, 3;

Bartonsham Farm: Keith Jones delivers milk by horse & cart **32**, 3;

Battery set: liquid alkaline for Pelapone engine **28**, 4

Beam engines: Cornish engine by Harvey & Co offered by Welsh Maritime Museum, Cardiff **02**, 1; site preparations made for receipt of Harvey engine **02**, 3; **03**, 1; features in Silver Anniversary celebration **3a**, 2; Focus on...installation: **04**, 2; Simpson **08**, 2; lubricating the parallel motion **12**, 3; Appleby Bros engine at Goulburn, NSW **15**, 1

Beaver Scouts (Holmer): visit on Fun Day **44**, 7

Bell, Chris: of Ludlow repairs brickwork with Mike Griffiths **16**, 6 & 7

Bellis & Morcom: steam engine lubrication **43**, 2

Bellville, Major & Richard: donate Blakes' compound ram from Tedstone Delamere **04**, 6; **13a**, 2; **14**, 5

Benefactors: gratitude expressed at Silver Anniversary **3a**, 2; Don Saunders thanks for donations and grants **04**, 4

Benson, Robert (hon life member & trustee): with Hazel Wagner (photo) **02**, 3; writes Focus on... Hartley & Sugden boiler **03**, 2; transfers MWB documents to Kew Bridge Museum **04**, 5; writes Focus on... Tangye House **05**, 2; reports on offer of single-cylinder steam engine offered by Tenbury Wells Spa Museum **06**, 3; astonished by Attfield WCs **06**, 6; writes Focus on...Tangye engine & pumps **07**, 2; with Lister loco (photo) **07**, 7; volunteer viewpoint **08**, 5; with Shropshire Steam Engine Society **09**, 8; writes on narrow-gauge railways **11**, 2; guides pupils of The Minster College, Leominster **11**, 9; steps down as a Museum director **11**, 10; recovering in hospital **13**, 8; writes Focus on...fire fighting **14**, 2; writes about Ross water supply in 1839 **14**, 10; retires as Trustee **15**, 3; indexes Museum archives **16**, 3; Focus on Archives **17**, 2; awarded life membership at AGM **21**, 3; archive room dedicated **23**, 3; documentation work built upon **28**, 6; obituary **40**, 8; little use made of archive room **45**, 4

Berry, Prof David & Dr Liz: attend winter social **34**, 3

Best, Tony: visits Museum with engineers (photo) **11**, 1

Bicycle: racks installed **30**, 5

Birch, Les (Trustee 2004-12): joins engineering team **11**, 3; works on back-lit display panels **11**, 4; observes results of test pits for New Build **14**, 8; volunteer viewpoint & elected as trustee **15**, 3; client rep for New Build **15**, 7; **20**, 4; locates cables on site of Rotherwas house **20**, 7; at signing of lease on DCWW land to enlarge Museum site **21**, 1; elected a Museum Director **24**, 6; attends Kew Bridge Museum seminar on future of steam-based heritage sites **37**, 5; shows Penarth Group round Museum **38**, 5; withdraws from Council of Management **39**, 3

Birmingham & Midland Motor Omnibus Trust (BMMOT): Paul Gray & Malcolm Keeley on fact-finding visit (photo) **13**, 6

Birmingham University: Dr Mark Jolly reports on crack in crankshaft of Tangye engine **37**, 5

Bishop family: children play aboard Lister loco **11**, 8; Jake & Chloe visit on Fun Day **44**, 7

Bishop, Kevin: as planning officer, Herefordshire Council meets to decide external cladding for New Build **20**, 5

Black & Veatch Ltd: contractor for new Broomy Hill treatment works **16**, 2

Black Country Live Steamers: visit Museum with scaled replica traction engines **46**, 7

Black Country Museum: has Hindley donkey engine like that from Tenbury **09a**, 2

Blackstone & Co (Stamford) Ltd: David Pullen displays paraffin engine at H&DPS event at Museum **14**, 12; EPV5 diesel from Rotherwas offered to Museum **18**, 3; transported to Museum **24**, 1; restoration progress **24**, 4-5; **25**, 4; 5-cylinder engine made in 1939 from Rotherwas **26**, 2; **26a**, 2; restoration complete **27**, 2 & 5; Mayor starts up **27**, 5; Tim Breen replaces starting pipe **31**, 4; oil engine at Stamford Museum **32**, 7; open-crank engine donation **41**, 1 & 5

Blake, Alderman Thomas: Ross-on-Wye water supply **02**, 1; **41**, 1 & 5

Blake, Andrew: of Wye Valley AONB visits Museum **27**, 8

Blake, Geoffrey: Alton Court **39**, 2 & 8

Blake, Geoffrey (grandson of Henry): finds hand-written account of Alton Waterworks by Henry Blake **40a**, 2; attends Centenary **41**, 5

Blake, Henry T (nephew of Thos, grandfather of Geoffrey): Alton Court **39**, 2; Focus on...Alton Court Pumping Station **40a**, 2

Blake, John Ltd: duplex hydraulic ram from Tedstone Delamere donated by Major Belville **04**, 6; **05**, 3; **09**, 3; rescue of base plate **10**, 6; help with ram from Charles Doble of Green & Carter Ltd **14**, 5; renovated by John Southwell **16**, 4; plans for new display **17**, 4; compound ram moved to new plinth in courtyard **21**, 7; made direct and compound rams at Accrington from 1854 **29**, 2

Blakeborough: valves etc info for New Zealand **36**, 3

Bob-weight governor: interactive operated by Lucy Evans **20**, 7

Bodleian: comparison with **37**, 1

Boilers: Cornish-type **08**, 2; passed inspection **10**, 1; routine maintenance **11**, 3; seams tested and passed annual inspection **45**, 5 (see also Baldwin, Byworth, Lancashire, Hartley & Sugden)

Bonar Polythene Films Ltd: offered Leominster Tangye House **05**, 2

Bond, Mike (Chairman, H&DPS): brings members and standing engines to Museum for event **14**, 12; enjoys showing engines at Museum **29**, 3; visits **37**, 5

Booy, Martin: Kingstone School Humanities Head has Year 8 measure levels in Museum well **24**, 7

Bourdin, Claude: taught Fourneyron and coined word 'turbine' **20**, 2

Bower, John: FlowServe Ltd transports Balsdean pump **38**, 6

Bradbury, Bob (Ledbury Heritage Centre): attends HMF meeting at Museum **13**, 4

Bradbury, Karen: meets with Hereford Attractions Forum on behalf of Cider Museum **02**, 4

Bradley Louis: assists hot-air engine restoration **29**, 4; working on Harland pump **30**, 3; dismantles Worthington-Simpson steam pump **32**, 5

Bradnor Hill (NT): Kington pumping station now supplies to golf course **12**, 2

Brake, Nigel (Penybryn Engineering, Hengoed): responsible for beam engine reconstruction (photo) **03**, 1; **04**, 2; refurbishing the wind pump tower, turbine and gear box **12**, 3; **14**, 4

Branch-line Society: group visit to Museum **12**, 4

Brandram-Jones, George: visits Museum with friends on his 6th birthday **11**, 9

Bratton, Nigel: new volunteer engineer **27**, 3;

Brecon, Lord: remembered opening the Museum on 6th April 1975 **01**, 3; **19**, 2

Brede Steam Engine Trust: donates Harland pump from Rottingdean **27**, 3; Balsdean pump **30**, 4; and **38**, 1

Breen, Tim: joins the volunteer team (photo) **13**, 7; overhauls Hayward-Tyler hot-air engine **15**, 4; encourages hot-air engine to start **16**, 5; participates in quiz at Winter social **19**, 5; displaying wooden water pipes from Saltmarsh **19**, 6; dismantling sand washer **19**, 8; improves presentation of outside static artefacts **20**, 6; displays stray artefacts **21**, 7; refits Blackstone engine flywheel **24**, 5; elected to Council of Management **24**, 6; volunteer viewpoint **25**, 3; restores Blackstone diesel engine **27**, 2; instructs Mayor **27**, 4; restoring ½hp hot-air engine **28**, 4; **29**, 4; replaces starting pipe on the Blackstone **31**, 4; dismantles Worthington-Simpson steam pump **32**, 5 & rebuilds same **33**, 5; attends to Hayward-Tyler hot-air engines **35**, 2; rebuilds Tangye closing pump **35**, 5; removes flywheel from Allen engine **38**, 5; rebuilds Hayward-Tyler steam pump **39**, 4; installs storage racks **40**, 5; at Allen engine start-up **42**, 5, **43**, 4; with Jesse Norman MP (photo) **46**, 3

Brewer, Mike: clears blocked drain (photo) **05**, 4

Brickwork: repaired by Mike Griffiths and Chris Bell **16**, 6; repointing by Fred Snelgrove **41**, 4

Bridge Sollars: wind pump from **11**, 4 & 8; **28a**, 2

Bridgend British Motor Cycle: Club members visit Museum (photo) **46**, 4

Brikci, Paula (MLA Standards & Stewardship Officer): discusses accreditation with Mary Rhodes **21**, 8

Bristow's lorry: hired to bring coal from railway to Waterworks after 1939 **11**, 2

British Association for the Advancement of Science (BAAS): features Museum's SET97 project *How did that get there?* **01**, 4; Museum's SET98 project *Why bother to measure it?* **02**, 4; Museum's SET99 project to be *How does water work?* **02**, 6

British Broadcasting Corporation (BBC): Radio Hereford & Worcester's Nathan Turvey, Lizzie Lane and Dave Howard feature Waterworks Museum **14**, 7; Blue Peter filmed Joan Hughes' son cleaning boiler flues **15**, 8; Midlands Today TV films hydraulic ram **19**, 5; Radio Hereford & Worcester's Jill Misson features Museum **32**, 7

Bromyard Heritage Centre (BHC): represented by Jane Collins attending HMF meeting at Museum **13**, 4

Bromyard Local History Society (BLHS) represented by Dick Davies attending HMF meeting at Museum **13**, 4; members visit Museum **39**, 6

Brooker, Dr Michael: visits Museum with Lord Burns and DCWW Board **11**, 6

Broomy Hill Residents' Association: given behind-the-scene tour **09**, 7; thanked for helpfulness during New Build **21a**, 1; approbation from for Rotherwas Engine House **26**, 1; **26a**, 1; holds AGM at Museum **30**, 5; **36**, 1; ask for hedge to mitigate stark appearance of Heritage Water Park fence **44**, 6

Broomy Hill waterworks: treatment plant: **16**, 2; building begins following 1854 Improvement Act **23**, 2; Fire Brigade helped out during floods or electrical failure **24**, 2; 150 years since waterworks completed **24**, 3

Browett Cindley Ltd: B23B petrol engine brought by Ian Crum to Hereford & District Preservation Society event **20**, 8

Brown, David Ltd: speed increaser for 1932 WH Alen diesel at Alton **00**, 2

Brown, Warren: conveys Mayoral party to Gala Day in 1928 Austin 12 saloon **29**, 1 & 7

Bryanston, Dorset: Williamson Bros double-vortex water turbine from donated by Crown Estate **01**, 2; Gilkes sawmill turbine from repaired at museum **07**, 3; Gilkes 7hp vortex turbine from now at Museum **28a**, 2

Buchanan, Prof Angus: AIA President awards publication prizes for *WaterWords* **24**, 1; **30**, 5

Buckley Barracks, Wilts: Pelapone diesel engine from **28**, 2; Tangye 1955 twin pump sets donated to Museum by MoD **29b**, 2; Tangye-badged fire pump sets from **41**, 2

Burdin, Claude: in 1822 coined the term 'turbine' **15**, 2

Burghill Psychiatric Hospital (Hereford): used Cardew voltmeter donated to Museum **15**, 7

Burns, Lord Terence: visits Museum with Michael Brooker and DCWW Board **11**, 6; speaks of Museum at opening of Broomy Hill treatment plant **16**, 2

Burton, David: led team restoring Hayward-Tyler hot-air engine in Buckinghamshire **29**, 4; **29a**, 1

Byworth MX 1500 Boiler: steam **32**, 5 & **33**, 1-2 & 4 ; new installation by VAS Engineering **34**, 1-2 & 5; Newton Tucker helps Philippa Southall **34**, 8; after one year **36**, 4; steam pipe for replaced **41**, 4

Cairncross, Stuart: of Rotary Equipment Ltd supplies seals for Grundfoss pump **09**, 5

Caldecote Hall , Nuneaton: donated Easton Anderson & Goolden water pumps **10**, 3; **14**, 5; **17**, 4; donated Fourneyron-type turbine **28a**, 2; **30**, 2

Campbell Gas Engine Co (Halifax): problems with ignition in hot-tube engine of 1895 **00**, 4; gas engine resited in Bay 2 **03**, 1; restored **27**, 7; measured for new gas reservoir tank **29**, 5; rare engine donated by DCWW displayed (photo) **29b**, 2; preparing to repaint **31**, 5; work continues **32**, 4; tended by Graham Prosser **43**, 5; Focus on... the Campbell gas engine **45**, 2; Norman Rees fits gas supply for engine **46**, 3

Campbell-Jones, Adam: volunteers in maintenance group **40**, 3

Cardew voltmeter: from Burghill Psychiatric Hospital donated by Mrs PM Claes and refurbished by David Timson **15**, 7

Cardiff Model Engineers: Society group visit (photo) **07**, 8

Carnegie (UK) Trust: supports Museum website development **09**, 4; funds IT equipment and website **10**, 5; supplied by DOM (photo) **11**, 7; Chief Executive John Naylor OBE compliments Museum **12**, 6; grant-aids ICT equipment and training **14**, 7

Car park: plans for improvement **07a**, 1; seeded, thanks to local farmers **24**, 1

Carter, Terry: with Eyles donates Bamford engine **33**, 6

Cat: rescued from boiler house & returned to owner Anne-Marie Townson by Mary Rhodes **14**, 7

Catcher Media: makes DVDs for Water-on-Tap and Hot-air engine displays **30**, 6; **33**, 6; **35**, 1 & 6;

Cave, Bill: as contracts manager for Speller-Metcalf meets re external cladding **20**, 5; discusses drainage **21**, 5; at hand-over (photo) **21a**, 2

CCTV: to allow safe inspection of Tangye engine bearing lubrication **19**, 8; to bring images of the hydraulic ram to ground level **25**, 7

Centrifugal pumps: submersible **09**, 2 & 4; **10**, 5; pulsometer spindle **11**, 3; Mather & Platt single stage displayed **21**, 7; Mather & Platt supplied to Rotherwas munitions works **24**, 1; smallest FlowServe **25**, 2; Harland Co electric from Balsdean **35**, 4

Chairs: appeal for funds at £35 each for the Museum **14**, 9

Chairman (Noel Meeke): Summer barbecue **29**, 3; **32**, 3; **35**, 3; **40**, 3; gives talks **40**, 3; *au revoir* **43**, 3; quiz at Winter Social **44**,

- Chappell, Cllr Chris: Mayor opens Rotherwas Engine House **27**, 1 & 4
- Charity Commission: obligations on Museum to comply with requirements re vulnerable people **25**, 3
- Charles' Law: & Stirling Engines **37**, 2
- Chatfield, Sue: recruited as education volunteer **20**, 3
- Cheltenham Vintage Motorcycle Society: visits Museum **01**, 1
- Chepstow & District Steampunk Soc: visits for Stirling Engine rally **44**, 4
- Chester Trefoil Group: visit Museum (photo) **45**, 6
- Children's activities: grant for Water Weekend over spring bank holiday **05**, 4; Water Weekend **07**, 3; **09**, 6; **11**, 8; fun for children of all ages **25a**, 1; Freddie Frog Trail **31**, 7; pond-dipping & drawing **35**, 7; fun-drawing & junk-modelling **37**, 6; **42**, 6; general **39**, 1 & 5; pond dipping & Teddy Bear picnic **40**, 6; Piglet playtime **42**, 6; Pond-dipping & Teddy bears picnic **43**, 6; **46**, 1
- Chimney: Rod Robinson reports on condition and remediation **06**, 4; Robinson and Heaton inspect from crane (photo) **14**, 8; stack draught controller revealed (photo) **14**, 9; ivy cut and dies **15**, 1; view of base of main stack at start of New Build **20**, 5
- Chizazi, Clare: visits from Teule Hospital, Tanzania **32**, 3
- Cholera: waterborne disease **10**, 2
- Christmas: volunteers prepare for **33**, 8
- Churcher, Isabel (Curatorial Adviser): new head of Hereford's museum service **00**, 1; as Heritage Services Manager chairs Herefordshire Museums Forum **02**, 4; chairs Forum spring meeting at Museum **04**, 5; is succeeded by Ian Standing **05**, 3
- Cider Museum: Estelle Jakeman and Karen Bradbury meet at Museum with Hereford Attractions Forum **02**, 4; meeting with director, Margaret Thompson **16**, 8
- Cigarette: Four Aces packet dates brickwork at end of steam economiser to 1932-40 **15**, 1
- Claes, Mrs PM: donation of Cardew voltmeter from Burghill Hospital **15**, 7
- Clark family: visit from Texas USA **36**, 8
- Clark, Robert: built Alton Court Pumping Station at Ross-on-Wye **39**, 2; **40a**, 2
- Claymills Pumping Engines Trust (Burton): group visit from **25**, 6; transfers Tangye unit to Museum **37**, 1 & 4; **38**, 2; visit **43**, 8
- Clifford (Hay-on-Wye): Stephen Southall farming at **38**, 8
- Cliveden Estate (NT): Hayward-Tyler hot-air engine from Taplow Lodge **23**, 7; **25**, 5; **29b**, 2; **35**, 2
- Clore Foundation: Museum applies for grant for SET2000 education project **05**, 4; funds Science Week for Key Stage 4 pupils **06**, 4; funds Vitruvian compartment wheels **07**, 5; funds Archimedes Screw project **09**, 3;
- Coal: supplied to Waterworks **09**, 3
- Coleg Morgannwg: visits **35**, 8; plumbing group visits Museum **40**, 4
- Collections: Atfield has Victorian loo **09**, 7; dispersing artefacts back-stock **14**, 9; relocating standing engines ahead of New Build **15**, 6; team work to document and get on website **25**, 7; policy re Pelapone engine **28**, 2; credit to Sue Hubbard and Fred Snelgrove **28**, 6
- Colley, Michael: presents BBC TV Midlands Today & mentions Museum **19**, 5
- Collier, Lindsay: appreciates number of engines working **35**, 8
- Collins Engineering (Pontrilas) Ltd: Philip Collins offers Blackstone diesel engine from Rotherwas **17**, 7; **18**, 3; donates and transports the engine **24**, 1; **26**, 1; **26a**, 1; **27**, 2 & 5; appreciates *Blackstone goes to War* book **29**, 6
- Collins, Jane (Bromyard Heritage Centre): attends HMF meeting at Museum **13**, 4
- Compartment wheel (AKA tympanum): created on Vitruvian model by Tim Hawkins of Fine Furniture Ltd **6a**, 2; **07**, 5; popular with children **09**, 6;
- Competition: name the new café and win a book token **14**, 9
- Compressor: main journal on Tangye failed and overhauled **01**, 3; new compressor for National Gas engine **04**, 5; Peter Allen rebuilds Tangye **16**, 5; needs funding support to restore **21**, 2
- Compton, Chris & Candia: thanked for Winter social **19**, 5; receive album on 35th anniversary of the Museum **31**, 3; host winter social **34**, 3; **37**, 3; work hard to make Winter social a success **42**, 3
- Compton, G W: brings Case tractor to Hereford & District Preservation Society event **20**, 8
- Computer: printer & scanner for sale **15**, 8
- Constitution: of Museum is amended **16**, 3
- Construction: Worcs training group arranges event for children **12**, 6

Cooke-Yarborough generator: Stirling Engine Society members examine **44**, 8

Corliss: steam engine **43**, 2

Cornish, Brian & Hazel: research on Coventry-Climax fire pump **04**, 5; research on Herefs Fire Brigade **24**, 2; support Rotherwas Munitions Factory *Blackstone goes to War* book **28**, 6; **29**, 6; WWII Tangye Pumps **38**, 2

Cornish: -type boilers **08**, 2; steam pumps at Alton Court **39**, 2

Cossons, Sir Neil (Chairman, EH): must look after industrial heritage **07**, 6; New Build opening on 25 June 2006 anticipated **21**, 1; opens new Museum building **21a**, 1; **23**, 1 & 6

Cotswold Engineering Ltd, Stratford-on-Avon: make steam engine diorama model **13**, 5

Council of Management: Bob Benson, Doreen & Ray Morgan, Andrea & Richard Ridout and Ellen Saunders retire as Trustees **15**, 3; Trustees welcome Sue Hubbard's appointment **17**, 1

Council on the Public Understanding of Science (COPUS): co-funds Science, Engineering & Technology (SET) Week **01**, 4; **08**, 4; grant aids *Water in the Wye* project **10**, 5; co-funds Science Week **11**, 7; withdraws funding for schools' science **13**, 6

Coventry Climax Ltd: Brian Cornish writes about fire pump **04**, 5; John Mepham restoring 1940s fire pump **11**, 4; fire pump refurbished **13**, 3; fire tender to go to Rotherwas engine house **23**, 7; with WW2 display **26**, 2; **26a**, 2; set up in Tangye house **37**, 4; pump at Museum **38**, 2; Adrian Eyre installs power head **43**, 5

Cox, Ashton: new volunteer **43**, 3; with J Evans pump **43**, 5; sets up old water wheel for Heritage Water Park **46**, 5

Cragside, Northumberland (NT): has Gilkes turbine similar to Museum's double vortex **01**, 2; **10**, 5; **28a**, 2

Cranston, J: designed Tenbury Spa in 'Chinese Gothic' **9a**, 1

Crawshay, Rhona: Focus on... silver whistle and the Cyfarthfa ironworks of Merthyr Tydfil **46**, 2

Crickhowell U3A: visits **35**, 8

Crofts Engineers Ltd, Bradford: gear box for Pelapone engine **28**, 2

Crompton-Parkinson Ltd: 85hp electric motor of 1954 cleaned and repainted **03**, 1; motor repositioned in Bay six **04**, 3; drove 1955 Pulsometer pump at Broomy Hill **09**, 4; **22**, 1; **23**, 2; system of 1952 displayed for Heritage Day (photo) **29c**, 2

Crooked Well: site of turbine at Kington **12**, 2

Crossley gas engine: Alton Court pumping station, Ross-on-Wye **39**, 2; **40a**, 2

Crossley triple ram pumps: Alton Court **39**, 2

Crossroads Care: visit **38**, 4

Crown Estate: donated double-vortex turbine from Bryanston **01**, 2

Crum, Ian: of Hereford & District Preservation Society brings Browett B23B petrol engine **20**, 8

Cryptosporidium: waterborne disease **10**, 2; water treatment **16**, 2

Curatorial Adviser: Isabel Churcher advised Museum re archiving & HLF **02**, 4; Ian Standing most helpful re grant applications **06**, 4

Curtis, Richard (vice-Chair): Welsh Water rep at Museum **28**, 6; **39**, 3; becomes Museum Vice-Chairman and Company Secretary **44**, 3; writes about 'Governance' of the Museum **45**, 4

Cyfarthfa, Merthyr Tydfil: Crawshay family, ironworks, Castle and a silver whistle found at the Museum **46**, 2

Daimler car: conveys Mayor to Gala **32**, 6 & **35**, 6

Daniels, Sylvia (Mayor): guest of honour with consort Geoffrey Daniels at Gala **32**, 1 & 6

Darnley, Earl & Countess (Lord Lieutenant of Herefs): visits **40**, 1; presents award **40**, 6

Data-logging equipment: MLA grant for, towards Museum Accreditation **34**, 6

Davies, Andrew (Chief Scientist, DCWW): thanked for help with Science Week 2000 **06**, 5

Davies, Brian: volunteers, working on Tangye engine **34**, 3; Volunteer Viewpoint **42**, 3; creates display **43**, 5; working on Hill Co diesel generating set donation **45**, 5; with Jesse Norman MP (photo) **46**, 3

Davies, Dick (Bromyard Local History Society): attends HMF meeting at Museum **13**, 4

Davies, John (plumber): installed kitchen in new building **23**, 4

Davies, Russell Services Ltd: crane lifts Wilson oil engine into place for Massington display **46**, 5

Davies, Sarah, Ian, Flora & Ruby: visit Museum **45**, 6

Dawe, Alec: tackling R Wye quiz with Anne Dawe **24**, 7; strims grounds **35**, 5; redecorating **36**, 5; lime repointing **38**, 5; maintaining Balsdean pump **43**, 5; preparing 1930s reciprocating pump in Water Park **46**, 5

Dawson, Frank Engineering Co (Hereford): machined new connecting rods and bearing ends for Hayward-Tyler engine **15**, 4

Dean Forest Railway: Steve Hancox volunteers at **43**, 3

Dehumidifier: Fred Snelgrove refurbishes the Westair **17**, 5

Dennis Bros Ltd: supplied motor fire-engines in Herefs **14**, 2

Denton, Norma: leads Forest of Dean Ladies' Circle group visit to Museum **12**, 4; writes in appreciation **12**, 8

Depledge, John (trustee and Deputy Chief Engineer): new volunteer engineer **42**, 3; plans Water Park **42**, 5; Volunteer Viewpoint **44**, 3; dismantles vacuum pump on triple-expansion engine **44**, 5; tests pump for Heritage Water Park **44**, 6; co-opted as a trustee **45**, 4; works on capstan pump with Pearson **46**, 5

Desalination: 'Focus on..', by Fred Meeke **31**, 2

Development Project: see 'New build'

Devon Traction Engine Club: visits **10**, 1

Diamond Jubilee Award: **40**, 6

Diesels: W.H. Allen Ltd of 1932 from Alton Court, Ross **00**, 2; Tangye single-cylinder of 1932 from Milton Springs **07**, 2; Allen from Alton **08**, 6; Allen redisplayed in original livery **11**, 3; Lister CS donation **38**, 4; Blackstone restoration **24**, 4; **25**, 4; **27**, 2; Pelapone engine **28**, 2; Allen & Tangye engines **41**, 5; farm generator **42**, 5; Lister CS reliable and popular **44**, 2; Hill Co generating set donation **45**, 5

Diesel Tech Ltd: overhaul fuel system on Blackstone engine **27**, 2

Diorama: steam engine & boiler explanatory model in Bay 3 made by Cotswold Eng Ltd **13**, 5; **13a**, 1

Dipping pond: creation for schools visits **29**, 5

Disability: access award for Museum **00**, 1; ADAPT make grant for dropping kerbs etc **05**, 4; ADAPT work completed **06**, 4; HMF runs Disability Discrimination Act seminar at Museum **13**, 7; access provision at Museum **29**, 6

Display(s): see 'exhibition & display'

Dobbie-McInnes Ltd, Glasgow: successful maker of mechanical horsepower indicators **13**, 2

Doble, Charles: offers Green & Carter Ltd help with Blake ram restoration **14**, 5

Dodd, Tim: as Estates Manager for DCWW signs lease for land to enlarge Museum site **21**, 1

DOM Computer Services: Owen Meredith supplies equipment **11**, 7; advise IT for new website **27**, 1; help create new website **29**, 1

Donations: William Austin memorabilia from his son Bryan **04**, 3; from Southall Trust and WMRMC towards beam engine installation **04**, 4; steam pumps from Tenbury Wells and Hergest Camp **06**, 3; Victorian WCs from Clarence Atfield **06**, 6; reciprocating borehole pump from Margaret Price **14**, 7; pillar drill and washbasin from Tom Henderson **15**, 7; Cardew voltmeter from Mrs Claes **15**, 7; Pelapone diesel and Tangye pumps from MoD, Glenfield & Kennedy pump from Museum of E Anglian Life and Campbell hot-tube gas engine from DCWW **29b**, 2; Lea water meter **38**, 4; Wilson and Blackstone oil engines and Lea flow recorder **41**, 1; Tangye fire pump sets from Buckley Barracks **41**, 2; Alcon pump units from Homelands Farm **41**, 6; digital projector from Herefs Council **41**, 6

Donkey engine: Hindley's 'Alcazar' from Tenbury **09a**, 2

Donovan, Richard: Chairman of Herefordshire Soc of Model Engineers **10**, 6; conveys the Mayor to/from the Museum in his vintage Rolls **24**, 3

Dosing Room: flat-roofed structure of 1882 at E end of Museum unsatisfactory as visitor entrance **07**, 6; houses Museum loos being re-roofed in lead **16**, 6; pump prepared for interactive display **19**, 6

Double-vortex water turbine: recovered from Bryanston, Dorset **01**, 2

Dowling, Steve: visits Museum as Chairman of Worcester Branch of the IME **46**, 3

Dowson gas plant: Alton Court pumping station, Ross-on-Wye **39**, 2; **40a**, 2

Drake, John (Trustee): organises group visits **03**, 3; completes First Aid course **05**, 4; finds anecdotes in archives **8**, 5; records archive with Bob Benson **17**, 2; obituary **37**, 8

Dressing-up clothes: instant hit over Jubilee weekend **11**, 8; sought **38**, 3

Drinking water: Inspectorate, re waterborne diseases **10**, 2; 150 years for Hereford **22**, 1

Duffett Derek (Trustee): Broomy Hill resident becomes volunteer **10**, 4; re-setting steps for H&S **11**, 5; with Meredith and IT equipment (photo) **11**, 7; did artefact description boards and diorama circuits (photos) **13**, 5; writes up H&S presentation by Fred Parkin **14**, 11; takes apart Lister D-type petrol engine **15**, 5; volunteer viewpoint **16**, 3; hosing waterwheel buckets **17**, 3; explains pumps in well area **20**, 8; makes water-level display model of water tower **23**, 3; attends Winter Social **24**, 7; works on dipping pond **29**, 5; installs bicycle racks **30**, 5; receives AIA award for *WaterWords* **30**, 6; hosts Mayor's tour **32**, 6; works on Water-on-Tap displays **33**, 6; attends Mayoral opening of Water-on-Tap at Gala **35**, 6; Focus on... Stirling Engines **37**, 2; muses on Newcomen Society Conference **37**, 6; gives tour to Mayor **43**, 4; gives tour to Allen Award party **46**, 6

Dunkley, Peter: recruited as volunteer engineering steward **20**, 3

Dunn, Steve: of Resources for Learning visits Museum for DCWW with Holmes **12**, 6;

Dŵr Cymru Welsh Water (DCWW): generous to the Museum **00**, 1; active in conservation work **00**, 4; donated Joseph Evans

pumps and National Gas Engine from Alton, Ross **02**, 1; grant from Helen Matthews towards admin costs **02**, 4; allows gas supply through old water main **02**, 6; assists with beam engine installation **04**, 2; provides use of Broomy Hill Education Centre **04**, 4; grant of £5000 towards running costs **05**, 4; co-operates fully following vehicle damage to Tangye House **06**, 1; Andrew Davies, Chief Scientist, thanked for help with Science Week 2000 **06**, 5; donates & installs Pleuger submersible pumps **08**, 3; **9**, 4; Colin Hughes takes over from Roger Mills as DCWW trustee representative **08**, 4; helps with admin and publicity cost **10**, 5; Lord Burns & Board visit Museum **11**, 6; thanked for storing Tangye House static engines at Rotherwas **12**, 3; appoint education consultants Resources for Learning to assess provision at Museum **12**, 6; launches *Living & Learning with Water* (2003) **14**, 6; opens new treatment plant at Broomy Hill **16**, 2; supportive of New Build proposals **18**, 2; Johnson and Heir meet Museum concerned re underground structures ahead of New Build **20**, 5; signs lease on land to enlarge Museum site **21**, 1; in 1974 instals Pleuger pumps and in 1990 Actiflo treatment system **23**, 2; leases land to allow Rotherwas Engine House to be built **24**, 1; Mark Johnson, representing, resigns as Museum Trustee **24**, 6; educational co-operation **25**, 7; assist with revenue costs **27**, 3; Brian Nelson retires as trustee representative and Richard Curtis takes over **28**, 6; Efficiency Group meet at Museum **29**, 7; donation of 1890s Campbell hot-tube gas engine **29b**, 2; fund Water-on-Tap Project **30**, 1 & 6; **34**, 6; graduates visit Museum **34**, 6; supports Water-on-Tap Project **35**, 1 & 6; supports education provision **37**, 1; organises group visit **38**, 1; representation at Museum **39**, 3; four managers attend Centenary Day **41**, 5; makes film about history of **44**, 8

Dynamo: Barry dynamo to be made to work **03**, 1 & 3; Wilson Hartnell 1895 model from S Glamorgan demonstrated **09**, 3; producing power **11**, 3; Alan Shaw researches and IEE donates towards conservation **11**, 7

Eagle Foundry, Aberystwyth: made 1907 waterwheel **06**, 2

Easton, Anderson & Goolden (EA&G) Ltd: turbine and triple pumps from Caldecote Hall: **10**, 3; West Mids Regional Museums Council grant for restoration **11**, 7; renovation carried out on pump **12**, 3; research suggests 1860-80 date for turbine **13**, 3; installation of turbine & pump set **13a**, 2; Charles Doble of Green & Carter Ltd offers help with Easton Turbine **14**, 5; turbine sump etc completed **15**, 5; turbine pumps **16**, 5; new soft-starter and water supply for **17**, 4; Lafford & Marshall put finishing touches to **19**, 6; Focus on... turbine restoration and display **20**, 2; in c.1890 made Fourneyron-type turbine from Caldecote **28a**, 2; **30**, 2

Easton, Josiah: firm made hydraulic rams at Erith, Kent 1820-1909 **29**, 2

Economiser: brickwork at end of steam economiser yields Four Aces cigarette packet dated to 1932-40 **15**, 1; brickwork removed at base of chimney for New Build **20**, 5

Education Centre: planned for New Build **18**, 2

Education matters: Year 10 pupils take part in Science Week **01**, 4; Year 9 pupils take part in Science week **04**, 4; developing an education policy **05**, 1; open days for primary school teachers and Science Week **06**, 5; Clore, HC, HFMA, MGM2000 & WMRMC thanked for grants towards education provision **06**, 2; schools visits etc **08**, 5; **09**, 5; **10**, 7; **11**, 9; **12**, 6; **13**, 6; **14**, 6; **15**, 5; **17**, 3; **19**, 3; **24**, 7; **25**, 7; **27**, 7; **28**, 7; **29**, 5; **30**, 7; **31**, 7; **32**, 7; **33**, 7; **34**, 7; **36**, 6-7; **37**, 7; **38**, 7; **39**, 7; **40**, 7; **41**, 7; **42**, 7; **43**, 7; **44**, 7; **45**, 7; **46**, 7 (& see Mary Rhodes & Sharon Phillips and school visits)

Edwards, Cllr Philip (Mayor of Hereford): attends Gala **43**, 1 & 4

Edwards, Rear Admiral J Phillip & Mrs Gwen: visit Museum with engineers (photo) **11**, 1; writes in appreciation and admiration of Museum **12**, 8

Elan Valley Reservoirs: tap into supply? **11**, 9; centenary of opening ceremony **18**, 4

Electricity: Wilson Hartnell dynamo generator of 1895 demonstrated **09**, 3; dynamo producing power **11**, 3; first use in 1914 in pump house **10**, 4; Hill Co diesel generating set donated **45**, 5

Electric pumps: in 1911 installed at base of water tower with another of 1914 in well area and in 1955 a Crompton-Parkinson **22**, 1; Mather & Platt at Broomy Hill **23**, 2

Elliot Colliery Winding House: Friends of and officers of Caerphilly Council visit **25**, 6

Ellis, Graham: conveys Mayor & Mayoress to Gala in Mercedes: **43**, 1 & 4

Ely Waterworks: used Harvey & Co beam engine of 1851 offered to Museum **02**, 1

Emergency procedures: HMF runs disaster planning seminar at Museum **13**, 7; stop buttons fitted **19**, 6; manual written for Museum Accreditation **20**, 1; 'To Do' book of instructions completed **45**, 3

Engineering Employers' Federation: helped with boiler-fuel costs **11**, 7

Engineering: project and routine progress reports **12**, 3; **15**, 4; **16**, 4; update **19**, 6; winter maintenance priorities **28**, 4; **29**, 4-5; **31**, 4; Tangye Engine crankshaft **36**, 4; round up **36**, 5; **37**, 4; **38**, 5 & **40**, 5; update **46**, 5

Engines (oil): Tangye single-cylinder horizontal diesel of 1932 from Milton Springs **07**, 2; H&DPS bring standing engines to Museum for event **14**, 12; Rotherwas Blackstone Project **18**, 3; David Ferguson donates two Lister D engines **19**, 7; Tangye semi-diesel **21**, 2; Ruston-Hornsby single cylinder petrol **24**, 6; Blackstone EPV5 diesel **24**, 4-5; **25**, 4; Pelapone diesel **28**, 2; Bamford petrol/paraffin/TVO (pohto) **29d**, 2; Stirling **37**, 2; Suction gas **32**, 2; Hot-air **35**, 2; single-cylinder Ruston Hornsby PB and Bamford EG3 **35**, 5; **37**, 4; Lister CS diesel donation **38**, 4; Crossley gas, Fielding & Platt oil, Allen of Bedford and National Gas engines at Alton Court **39**, 2; **41**, 1; Lister 'D' for farm supply **40**, 2; Fielding at Massington **40**, 4; Allen diesel **40**, 5; Thorneycroft marine **40**, 5; Wilson and Blackstone engine donations **41**, 1; Centenary Day **41**, 5

Engines (steam): Triple-expansion engine by Worth-Mackenzie **02**, 2; Focus on...Beam installation **04**, 2; steam engines from Tenbury and Hergest donated **06**, 3; Thorneycroft marine **08**, 3; 'Alcazar' donkey from Tenbury **09a**, 2; Worth-Mackenzie 1895 and 1906 triple-expansion at Broomy Hill **23**, 2; WH Allen steam **28**, 3; Hindley restored **32**, 8; Worth-Mackenzie

engine tested **35**, 5; history & development **43**, 2; scaled replica traction engines visit Museum **46**, 7

English Heritage (EH): places Museum building on 'at risk' register **05**, 6; Rod Robinson reports on condition and repair for **06**, 4; Judith Leigh watches the rain come in and Nick Reading arrives **07**, 6; Paul Stamper favours 'modern' for new build **8**, 3; offers substantial grant to Museum **11**, 6; enthusiastic about development **12**, 1; oversees re-roofing & repair to Museum building **16**, 1, 6 & 7; approves New Build Project **18**, 1-2; agrees funding protocols **19**, 1; Nick Reading arranges meeting with HLF **19**, 4; backed steel & glass for extension **21a**, 3; historic buildings architect visits with group **23**, 1; chairman opens new Museum building **23**, 1; thanked for grant towards repair of main building & chimney **29c**, 1

Ericsson, John: Swedish pioneer **35**, 2;

Euro Heritage: Museum on European Route of Industrial Heritage **25**, 1

Evans, Bert: encourages archiving to gain Museum Registration status **17**, 2

Evans, Gemma & Lucy: sisters operate new interactive displays **20**, 7

Evans, Huw: Council schools adviser visits **36**, 8

Evans, Joseph Ltd, Wolverhampton: in 1887 made double-acting reciprocating pumps from Alton, Ross-on-Wye **00**, 2; **02**, 1; steam donkey pump installed in 1883 to supply filtered water to new tower on Broomy Hill **08**, 2; reciprocating pump of 1938 donated for display in Bay 5 **12**, 3; open crank pump of 1937 from Kinwarton as interactive **20**, 6; high-pressure horizontal steam pump filled 1883 water tower **23**, 2; restored pump set used on Anglesea loaned by Dorothy Pullen **28**, 3; **29b**, 2; **29d**, 1-2; **30**, 5; steam driven pumps at Alton Court **39**, 2; **40a**, 2; pump set up in Heritage Water park **43**, 5

Events: calendar for 2000 **04**, 5; for 2008 **28**, 7

Everington, David & Margaret: visit Museum with engineers (photo) **11**, 1

Eves, Phil: arranges Worcs Construction Training Group event for children **12**, 6

Exhaust manifold: contract placed with AJP Hydraulics **27**, 7

Exhibition & display: Stephen Southall unveils History of Water display **07**, 7; Bay 2 rearranged **10**, 5; back-lit displays **11**, 3 & 7; Penknife Design explain approach to re-display **12**, 5; Mary Rhodes looks forward to display space promised of new development **15**, 5; Time-line display **19**, 3; Story of Water in Herefs **24**, 8; WWII re Rotherwas Munitions factory **27**, 6

Eyles, Roger: with Carter donates Bamford engine **33**, 6

Eyre, Adrian: new volunteer engineer **25**, 3; rebuilds Gilbert, Gilkes & Gordon turbine governor **31**, 5; safety fencing **34**, 5; narrates Water-on-Tap display **35**, 6; fencing and re-setting slabs **36**, 5; assists transport of Tangye unit from Claymills **37**, 1 & 4; prepares hydrostat for display **38**, 5; appt Company Secretary **39**, 3; works on pump drive gearbox **40**, 5; installs Climax power head **43**, 5

Faggots: supplied to waterworks **09**, 3;

Farming: fire brigade supplied water for in dry summers **24**, 2; Michael Lewis at Whitwick Manor **38**, 3

Farm water supplies: Focus on... **40**, 2

Farr, Alderman A E: succeeded in 1960s as Chair of water board by Stephen Southall **01**, 3

Faulkner, Joseph: water works stoker and engine-man c.1866-88 **17**, 8

Faulkner, Tony: researching great-grandfather Joseph Faulkner **17**, 8; **28**, 7

Fees and charges: revised entrance rates **07**, 7; increase from 2002 to £3 for adults **09**, 7; membership fee still £5 after 28 years **11**, 8; scales for Museum entrance **20**, 7; membership increase in 2009 **30**, 8; museum entrance charges rise **44**, 1

Ferguson, David: donates two Lister D engines **19**, 7

Fielding & Platt oil engines: for Alton Court pumping station at Ross-on-Wye **39**, 2; **40a**, 2; removed from Ledbury years ago **44**, 6

Film (cinematographic): about attractions in the Region for WMCC **11**, 10; about history of Dŵr Cymru Welsh Water **44**, 8

Fine Furniture Ltd, of Bartestree: Tim Hawkins creates compartment wheel **6a**, 1; **07**, 5; made Archimedes screw exhibit **09**, 3;

Fire Brigade: focus on...fire-fighting in Herefs **14**, 2; Coventry Climax fire tender **23**, 7; water supply at times of crisis by **24**, 2; WWII Tangye pump units for **38**, 2; Messrs Dennis engines **38**, 2; automatic pump sets **41**, 2

Fire engine: tried by George Brandram-Jones & friends **11**, 9 hauled by pupils of Hallow Primary School (photo) **12**, 8

Fire pumps: Brian Cornish writes about the Coventry-Climax **04**, 5

FlowServe Ltd: smallest centrifugal pump **25**, 2; lift Harland pump at Balsdean **30**, 4; Director (Fred Meeke) writes on sea-water desalination **31**, 2

Flying Gate Cycling Club: visits Museum **33**, 8

Folbigg Fabrications Ltd, Hereford: new steam pipe & flanges **04**, 3; repairs Tangye exhaust following vehicle accident damage **06**, 1; **07**, 1; set up submersible pumps donated by DCWW **09**, 3; instal safety barriers to Allen diesel engine **10**, 3; welds winch to wind turbine tower **14**, 4

Foot & Mouth: Museum weathers disease restrictions **09**, 8

Ford Anglia Car Club: visits Museum **42**, 6

Ford Engines: V8 for Tangye pump **37**, 4

Forest of Dean Heritage Centre: featured at AIM conference **06**, 3

Forest of Dean Ladies' Circle of Moose International: group visit with Norma Denton **12**, 4; Denton writes in appreciation **12**, 8

Forest of Dean Local History Society: September 1999 group visit (photo) **05**, 6

Forge & bellows: by P. Morris & Son of Hereford found in back-stock (photo) **14**, 9

Foster, Katie (Chair, HLF cttee for W Mids): inaugurates water-level display at opening of New Building **23**, 6; addresses HLF anniversary at Museum **33**, 1

Four Aces Cigarettes: packet dated 1932-40 found in brickwork repair of steam economiser **15**, 1

Fourneyron-type turbines: Easton, Anderson & Goolden upward-flow turbine is an example **14**, 5; developed in 1826 by Benoît Fourneyron **20**, 1; Museum's example from Caldecote Hall **28a**, 2; Focus on... **30**, 2

Fownhope Cub Scouts: visit **38**, 4

Foxley, John MBE: of Brede Steam Engine Society, re Harland pump from Balsdean **30**, 4: and **38**, 1 & 6

Francis, James: turbine plinth in Bay 2 **03**, 4; Focus on...1937 turbine from Kington **12**, 2; turbine motorised to rotate at slow speed **13**, 3; improved inward flow reaction turbine **15**, 2; in 1849 perfected reaction turbine **20**, 2; Francis-type reaction turbine made by Gilkes from Kington **28a**, 1

Franklin, Carl (of WMRMC): meets with HMF at Museum **13**, 4

Freddie Frog: leaflets supported by FHMA **06**, 4; can be followed round Museum **6a**, 2; trail devised by Mary Rhodes **11**, 4; leaflet **21**, 7; introduced by Mary Rhodes **25**, 3; find 11 friends & get a badge **25a**, 1; updated trail **31**, 7

Freer, Allan (University of Birmingham): gives AGM talk on casting and foundry work **21**, 3; advises on Tangye crankshaft **34**, 4; **35**, 4

Friends of Bristol Museums, Galleries & Archives: visit **40**, 4

Friends of Herefordshire Museums & Arts (FHMA): support activity and recognition cards for young visitors **05**, 1; supports production of Freddy the Frog leaflets **06**, 4; grant aids pupils' worksheets **10**, 5; Janet Moulton and Kate Renshall meet with HMF at Museum **13**, 4; hold 80th birthday party at Museum **29**, 7; Chair unveils hot-air engine display **35**, 1; **37**, 3 & **39**, 6; financial support to Massington line shaft project **46**, 5

Fuel: oil price shock **29**, 1

Fulford Foundation: approaches Museum to pilot project **06**, 4; Meussen makes mystery visit and offer of support for interpretation and display **07**, 4; Meeke records appreciation **07**, 8; grant for re-display and new plaques **08**, 3; **09**, 3 & 4; **10**, 5 & 7; funds panel displays **11**, 7; Messrs Moerman and Meussen visit **12**, 5; funding six interactive models **13**, 5; **15**, 7; **16**, 8; funds interactives close to relevant exhibits **19**, 3; **20**, 7

Gala Day: Mayor unveils plaques and pumps **09**, 1; Stephen Southall welcomes visitors on 29 June 2003 **13a**, 1; Mayor inaugurates wind pump **14**, 1; programme for 13 Aug 2006 New Build opening & calvacade **22**, 2; Morgan Sports Car Club display **29**, 7; restored engines & pumps extravaganza **29b**, 1; Mayor is guest of honour **32**, 1 & 6; Mayor of Hereford opens Water-on-Tap display **35**, 1 & 6; Mayor opens Balsdean pump display **38**, 6; Mayor inaugurates small pumps display **40**, 1&6; Mayor is guest-of-honour **43**, 1 & 4; Mayor to be guest-of-honour **45**, 8; Mayor attends Anniversary Gala **46**, 1 & 4

Galliers, Ron: recruited as volunteer engineer **20**, 3; improves presentation of outside artefacts **20**, 6; displays stray artefacts **21**, 7; creates water garden **23**, 3; works on Glenfield & Kennedy open crank 1905 water pump **24**, 6

Gardner, L & Sons: Peter Allen rebuilds its rare semi-diesel **17**, 3

Gardner, Samuel & Co: made Fourneyron-type turbines in Armagh **30**, 2

Gas: producer gas plant **00**, 2; difficulties with gas supply **00**, 4; natural (North Sea) for National Gas Engine **01**, 3; supply through redundant water main **02**, 6; engine emergency stop **19**, 6; National Gas engine **11**, 3; **28**, 5; **31**, 4; Suction gas engines **32**, 2; Campbell engine **32**, 4; Dowson & Crossley at Alton Court **39**, 2; **40a**, 2; Norman Rees fits supply to Campbell engine **46**, 3

Gear pumps: hydraulic power uses **25**, 2

Gee, Kathryn: as Chief Exec of WMRMC to help small independent museums with their Registration **8**, 4; of the MLA Council (W Mids) visits with Sue Hubbard and Mary Rhodes **19**, 3

Geography: Teachers conferene at Museum cancelled **14**, 6

Geology: typical marl under Museum suitable for New Build **14**, 8

Geophysics: Brian Williams of Fownhope using magnetometry to survey site of New Build **20**, 4

Geotechnical Engineering Ltd, Gloucester: borehole ground investigation on site of Museum extension **14**, 8; **16**, 7

Gift Aid: adds value to donations of £5 or more **06**, 6;

Gilbert, Gilkes & Gordon Ltd, Kendal: double-vortex turbine **10**, 5; made 1937 Francis-type inward flow reaction turbine for Kington **12**, 2; **28a**, 1; made double-axial turbine from Bryanston at Museum **28a**, 2; turbine governor donation **31**, 5

Gill, Sir Ben: chairs Visit Herefs **37**, 8; Rivers Group **40**, 8

Gladwyn, Amos: of Fownhope supplies faggots **09**, 3

Glas Cymru: Chairman Lord Burns speaks of Museum at opening of Broomy Hill treatment works **16**, 2

Glenfield & Kennedy Ltd: hydrostat from WNWDA to be renovated **11**, 8; hydrostat causing problems **12**, 3; 'Peebles' type sand washer presentation improved **20**, 6; **21**, 7; open crank 1905 water pump donated to Museum from Aldeburgh in Suffolk **23**, 5; Brian Pearson works on pump **24**, 3 & 6; pump commissioned **25**, 3; pump set displayed (photo) **29b**, 2

Going Places: Tourism award **39**, 1

Golden Age Club (Goodrich): visit museum following talk by Noel Meeke **11**, 5

Goldsmith, Rick & Julia (Catcher Media): makes DVDs for Water-on-Tap and Hot-air engine displays **30**, 6; **32**, 7; and **33**, 6

Gooding, Brian: editor, *Vintage Spirit* magazine, visits (photo) **14**, 11

Goulburn Waterworks Museum, NSW, Australia: set up in 1883 - Debbie Sibbick makes contact **15**, 1

Goulds Manufacturing Co: triple water pump for Massington Project **41**, 6; new display of pump **43**, 5; Focus on...**44**, 2

Governance: David Curtis on how the Museum is run **45**, 4

Grampian Transport Museum: donates Wilson oil engine **41**, 1 & 5; **42**, 5; **45**, 5 donated Lister CS engine **44**, 2

Grandparents' Day: we enjoyed it **41**, 8

Grant Motor Co: Dr Sutton & Detroit-built car join Gala cavalcade **32**, 1

Grants: WMRMC for archival facilities and supply to gas engines **00**, 1; WMRMC towards natural gas supply and safe public viewing **02**, 4; HC & DCWW towards Museum admin & running costs **02**, 4; ST & WMRMC towards beam engine installation **03**, 4; from Southall Trust and WMRMC towards beam engine installation, and from DCWW and HC towards running costs **04**, 4; from WMRMC for waterwheel, DCWW for running costs, from ST for engineering projects, from ADAPT Trust and Railtrack plc for access improvements, from Millennium Awards for All and HLF for wall displays and audience development **05**, 4; from ADAPT towards access improvements, WMRMC for teaching packages, FHMA for Freddy Frog leaflets, MGM 2000 for 'welcome days' finance, Clore Foundation for Science Week, HC for secondary education provision and Awards for All for wall displays **06**, 4; **06**, 2; Clore for compartment wheels **07**, 5; Fulford Foundation for redisplay **08**, 3 & **9**, 3; Clore for Archimedes Screw **09**, 3; HC for classroom items **09**, 4; WMRMC for Allen diesel engine barriers **10**, 3; other grants **10**, 5; EH towards repairs etc **11**, 6; WMRMC for Easton, Anderson & Goolden turbine **11**, 7; HC voluntary sector scheme towards model engine diorama, Fulford for interactive models and WMRMC for 3-pumps project **13**, 5; Carnegie Trust for ICT equipment & training **14**, 7; LEADER+ for Herefordshire Rivers Project **15**, 7; news **25**, 7; towards running costs **27**, 3; **31**, 7; donation towards *Blackstone goes to War* book and new website **29**, 6; towards website **35**, 8 (see also Awards, HLF, Southall Trust, WMRMC, Carnegie Trust and Welsh Water); FHMA support to Massington line shaft project **46**, 5

Grapple Imedia: design new website **27**, 1

Gray, Louise: praises Waterworks Museum collections in *Museums Journal* **29**, 6

Gray, Paul (of BMMOT): with Malcolm Keeley on fact-finding visit (photo) **13**, 6

Green & Carter Ltd: simplex donated by Mr P Allen **10**, 6; proprietor Charles Doble offers help with Blakes ram and Easton Turbine **14**, 5; hydraulic ram mfrs **29**, 2

Green Goddess: for fire-service **38**, 2

Greenhouses: heated by Hartley & Sugden boiler at Museum since 1992 **03**, 2

Greenhill, John: Tenbury Museum curator unveils Tenbury engine **09a**, 2; **10**, 8

Greenway, Karl: from Lett & Sweetland architects discusses drainage **21**, 5

Griffiths, Mike: of Ludlow repairs brickwork with Chris Bell **16**, 6 & 7

Grosvenor, Prof Ian: attends Gala on behalf of HLF **35**, 6

Grounds maintenance: grass cutting & strimming **35**, 5

Ground Penetration Radar: operated by Digby Milnes of Terravision Ltd to find underground services ahead of New Build **20**, 4

Group visits: Forest of Dean and Oxford House **05**, 6; Cardiff & Maidstone model railway societies visit **07**, 8; record high **9**, 8; recent group visits to Museum **12**, 4; concatenation of groups visit **14**, 11; group visits welcomed **25a**, 2; Penarth Heritage, Crossroads Care & Fownhope Scouts **38**, 4; Wye Valley Rotary and NHS Retirement Fellowship **46**, 8

Grundfoss Ltd: multi-stage feed pump seal fails **09**, 5

Guest & Chrimes Ltd: water-level indicator renovated **45**, 5

Guidebook: ambitious and collaboratively produced **02**, 5; Mary Rhodes writes 'Apprentice's Guide' for younger visitors **6a**, 2; **8**, 4; & Museum literature **21**, 7

Gunston, Henry: Newcomen Society visit **43**, 8

Guy, David: as Manager of HRP visits Museum to discuss educational aspirations **15**, 7

Hacksaw (mechanical): restored by Lafford & Marshall **24**, **6**

Hadley, Bobbie (Mayoress of Hereford): attends Gala **43**, **1** & **4**

Hadley, Simpson & Locke: fire-engine of c.1805 on display (photo) **14**, **2**

Haley Green pumping station: Museum Tangye unit from **37**, **4** & **38**, **2**

Hampton, George: volunteer **39**, **3**

Hancox, Steve: new volunteer **43**, **3**

Harbar, Vanessa: as HLF senior grants officer visits Museum with Anne Jenkins **12**, **7**; visits with RRA Architects **16**, **7**; agrees to design & build project **19**, **4**; helpful and patient with New Build **20**, **8**; discusses use of volunteers with Alan Marshall **21**, **8**

Harbour, Dominic: meets with Hereford Attractions Forum on behalf of Mappa Mundi, Hereford Cathedral **02**, **4**

Harland Engineering Ltd: 1935 electric water pump donated by Southern Water **23**, **7**; arrived from Rottingdean thanks to Brede Waterworks Trust **27**, **3**; spindle-driven borehole pump from Balsdean, Sussex **30**, **4**; and **35**, **4**

Harris, Lisa: collections manager, Museum of E Anglian Life donates open crank pump **25**, **5**

Hartland, Alan: new volunteer helps with indexing **44**, **3**

Hartley & Sugden Ltd: boiler-feed water pump failure resolved by Watkins **02**, **3**; Focus on...package boiler **03**, **2**; boiler maintenance **09**, **3**; passed inspection **10**, **1**; routine maintenance **11**, **3**; ammeter housing on feed pump supply **13**, **3**; boiler moved to make way for new development project **15**, **7**; new fuel tank for **17**, **7**; recommissioned for new building **23**, **5**; Newton Tucker refits inspection cover **31**, **1**; comes to end of life **32**, **5** & **7**; **33**, **1** & **4**; **34**, **1**

Hartshorne, Richard: from Shire Consulting discusses drainage **21**, **5**

Harvey & Co, Hayle: made 1851 beam engine offered by Welsh Industrial & Maritime Museum **02**, **1**; arrives at Museum **03**, **1** & **4**; features in Silver Anniversary celebration **3a**, **2**; Focus on...installation **04**, **2**

Harwell Laboratories: asks Museum to display three hot-air engine derivitatives by E H Cooke-Yarborough **44**, **8**; experimental rigs displayed and proving popular **45**, **1**

Hawker, Graham CBE: Chief Executive of Hyder plc attends Silver Anniversary **04**, **1**; opens the Tangye House **05**, **2**

Hawkins, Tim: of Fine Furniture Ltd, creates compartment wheel **6a**, **1**; **07**, **5**

Hawthorne, Emma (Education Officer, WMRMC): thanked for advice **08**, **5**

Haynes-Young, Antonia: tries water-carrying yoke **11**, **8**

Hayward-Tyler Ltd: anonymous donation of £250 towards hot-air engine restoration **14**, **7**; hot air engine being restored by Tim Breen **15**, **4**; **16**, **5**; Tim Breen brings to life **17**, **4**; 1880 hot-air engine negotiations with National Trust **23**, **7**; **25**, **5**; two working engines side-by-side **29**, **4**; David Burton & team with engine (photo) **29a**, **1**; both engines (photo) **29b**, **2**; rescuer (see Hermiston) visits **30**, **1**; only museum with two Hayward-Tyler hot-air engines **35**, **2**; **37**, **2**; **38**, **6**; Steam Pump **39**, **4**; working for Stirling Engine Rally **41**, **3**; Focus on...lhp hot-air engine **42**, **2**

Healey, Philip: designs foundations for Tangye House reconstruction **05**, **2**; returns to Museum for his Lister engine **14**, **7**

Health & Safety: safety barriers enhanced **00**, **3**; guard rails donated by Welsh Industrial Museum **02**, **3**; John Drake awarded certificate in First Aid **05**, **4**; Colin Hughes becomes Hon H&S Officer **08**, **4**; routine hazard checking and maintenance **11**, **5**; risk assessment log book kept **13**, **3**; Fred Parkin gives presentation at Museum **14**, **11**; supervised under CDM regulations **16**, **4**; Museum invests in safety tower to work at height **17**, **5**; guard rail installed round Tangye engine **19**, **8**; new warning signs erected **20**, **1**; Tangye engine drive shaft and flywheel tested **20**, **6**; Hereford group hold AGM **25**, **6**

Heaton, Patricia (Trustee): elected as Trustee **15**, **3**; represents visitor services on Council of Management **16**, **8**; stewarding volunteers social **17**, **1**; volunteer viewpoint **19**, **3**; leads visitor services team **27**, **8**; makes birthday cake for chairman's BBQ **32**, **3**; looking for dressing-up clothes **38**, **3**; reports visitor numbers exceed 5,000 **41**, **1**

Heaton, Peter (Trustee, Vice-Chair, Chief Engineer & Safety Officer): elected to the committee **01**, **1**; discussing beam engine instalation **03**, **1**; volunteer viewpoint **03**, **3**; inspecting beam engine floor **04**, **2**; loosens bolts on Blakes ram **05**, **3**; elected Vice-Chair **08**, **4**; reports 'Projects in the Pipeline' **09**, **3**; helps move wooden water pipes to Museum **09**, **6**; taking a break **09**, **8**; pictured with Alen diesel **10**, **3**; Engineering for the 2002 season **11**, **3**; re-setting steps for H&S **11**, **5**; report for 2002 season **12**, **3**; writes about Three Pumps Project **14**, **4-5**; inspects chimney from crane with Robinson **14**, **8**; Engineering project update **15**, **4-5**; **16**, **4**; **17**, **4**; displaying wooden water pipes from Saltmarshe **19**, **6**; writes emergency procedures manual **20**, **1**; lifts manhole covers ahead of New Build **20**, **4**; locates cables on site of Rotherwas house with CAT scanner **20**, **7**; progress report **23**, **7**; replaces valve spring on National Gas Engine **29**, **4**; works on Campbell engine and dipping pond **29**, **5**; compiles Volunteer Handbook **31**, **8**; re-dresses Tangye triple-pump crankshaft bearing **33**, **5**; reports crack in Tangye Engine crankshaft **34**, **1** & **4**; **36**, **4**; removes flywheel from Allen engine **38**, **5**; fits motor drive to Tangye engine **39**, **4**; chef at Chairman's BBQ **29**, **3**; **38**, **3** & **40**, **3**; sets up new signs **40**, **5**; reports on steam-pipe replacement **41**, **4**; at Allen engine start-up **42**, **5** & **43**, **2**; asbestos regulations **43**, **4**; with Campbell gas engine (photo) **45**, **2**; completes emergency procedures manual **45**, **3**; strips and prepares boiler for inspection **45**, **5**

Heir, Mick (DCWW): meets Museum concerned about underground structures on site of New Build **20**, **5**

Henderson, Thomas (Hay-on-Wye): brought Shropshire Steam Society to help set up Museum **01**, **3**; donates Victorian pillar drill and washbasin **15**, **7**; tachometer donated by is fitted to Tangye diesel engine **20**, **6**

Hereford 41 Club: group visit (photo) **14**, **11**

Hereford Access for All: Frank Warr MBE (President) thanks Museum for ADAPT-enabled wheelchair accessibility **07**, 5; Jim Lawes (President) thanks Museum for *Handy Guide for Wheelchair Users* **29**, 6

Hereford Attractions Forum: last meeting held at Museum **02**, 4

Hereford in Bloom: judging day at the Museum, **40**, 1

Hereford City Council: thanked for grant towards publicity **00**, 1

Hereford Concert band: plays music **40**, 6; entertains at Gala Day **43**, 1 & 4; plays at 40th Anniversary Gala **46**, 4

Hereford & District Preservation Society (H&DPS): standing engines event at Museum **14**, 12; successful joint event **20**, 8; Museum hosts gathering **29**, 3; **32**, 8 & **34**, 6; at first open day in steam **37**, 1 & 5; annual visit **40**, 4; visits Museum **42**, 6; fills Museum courtyard with standing engines and vehicles **45**, 6; Graham Prosser an engine exhibitor **46**, 3

Hereford Gas Services Ltd: Norman Rees, director, fits supply to Campbell engine **46**, 3

Hereford Guild of Guides: group visit (photo) **14**, 11

Hereford, James (Regimental Museum): attends HMF meeting at Museum **13**, 4

Hereford Journal: offers no excuse for failing to run Easter ad **13**, 1

Hereford-Muheza Link Society: Dr John Wood and Clare Chizazi visit Museum **32**, 3

Hereford Museum Service: Isabel Churcher appointed head **00**, 1

Hereford Painting Group: Jane Townsend, leader, visits (photo) **14**, 11; visit **29**, 8

Hereford Record Office: to accept archives in event Museum is wound up **16**, 3

Hereford Roofing Services Ltd: use Penhryn slates for re-roofing **15**, 1; **16**, 6; patch-point chimney **16**, 7

Hereford Times: runs wrong ad **13**, 1; press coverage **31**, 8; Jess Phillips, reporter, visits Museum **46**, 3; carries impressive coverage **46**, 6

Hereford Townswomen's Guild: visit **28**, 8

Hereford Waterworks: Building history **08**, 2; Pumping power and development **23**, 2

Herefordshire Archives Forum: Sue Hubbard attends first meeting of Museums Forum sister organisation **20**, 7

Herefordshire Cultural Consortium (HCC): had first meeting **07**, 3; meet at Museum **09**, 7; at Museum for spring meeting with Simon Penn and chair Mike Kimberly **11**, 10

Herefordshire (County) Council (HC): grants £1500 towards Museum running costs **02**, 4; grants £750 towards secondary education provision **06**, 4; grant aids educational equipment **10**, 5; funds model engine tableau used for schools **11**, 7; represented by Mary Sinclair-Powell and Sally-Anne Roberts at HMF meeting at Museum **13**, 4; voluntary sector scheme funds diorama **13**, 5; grants £1000 for wall maps for Education Centre **14**, 7; Planning Officer Kevin Bishop meets to decide external cladding for New Build **20**, 5; Visit Herefs stops 'bedroom browsers' **33**, 8; leases land to Museum for Water Park **35**, 7; Highways Dept **40**, 3; Community Pride Scheme donates projector **41**, 6; threatens 'business rate' on Museum **42**, 8 & **43**, 1 & 8

Herefordshire Federation of WIs: Science Club group visit to Museum **12**, 4

Herefordshire Friends of Museums & Arts (HFMA): grant towards DVD & book *Wye Valley Story of a Great River* **24**, 7; Friends fund CCTV of hydraulic ram **27**, 3; grants towards website improvement **29**, 6; **35**, 8; Friends hold party at Museum **29**, 7; Friends meet at Museum **37**, 3 & **39**, 6

Herefordshire Geography Teachers Network: Jill Jackson invites Museum to address **12**, 6

Herefordshire Health & Safety Group: Fred Parkin gives presentation on behalf of at Museum **14**, 11

Herefordshire Museums Forum (HMF): Isabel Churcher chairs **02**, 4; Spring meeting at Museum **04**, 5; Ian Standing organises course on interpretation **05**, 4; Noel Meeke chairs **07**, 3; meets at Museum **13**, 4; runs disability and disaster planning seminars at Museum **13**, 7; Peter Heaton speaks at about emergency procedures manual **20**, 1; meeting held in clubhouse next door **21**, 8; Museum hosts meeting **34**, 6

Herefordshire Rivers Project (HRP): receive LEADER+ funding, Museum Chairman serves on LAG **10**, 8; David Guy & Dawn Turner visit to discuss synergies with Museum **15**, 7

Hereford Roofing Co: contract for reslating main building **15**, 6;

Herefordshire Society: publishes good articles about Museum **25**, 8; **29**, 6

Herefordshire Society of Model Engineers (HSME): visiting groups see Museum engines **07**, 8; co-ordinate opening times for 2002 season **09**, 7; Xmas social in superb club-house **10**, 6; Ron White a member **12**, 4; John Arrowsmith helps with construction event at Museum **12**, 6; invites Museum members to visit Kyre Valley Railway **13**, 7; hosts 7¼" Gauge Society 2004 AGM **17**, 1 & 6; Moorey & Kempson meet with Museum to address common security problems **19**, 7; hosts summer event for members **20**, 3; hosts winter social event **21**, 3; thanked for helpfulness during New Build **21a**, 1; David Timson, founding member, dies **23**, 8; co-organise Father's Day event **27**, 8; press coverage for **31**, 8; chair (Philip Keating) speaks **37**, 3; donates track to Twyford **39**, 5; stores lattice girders at Museum **41**, 4

Herefordshire Tourism: excellent support from **19**, 5

Herefordshire Water Board: Clive Lafford worked for **07**, 5; WH Austin contributes to Museum archives **17**, 2

Hergest Camp pumping station: steam-driven pumps from **06**, 3

Heritage Lottery Fund: grant for high quality wall displays **05**, 4; preliminary meeting re New Build proposals **9**, 7; schools consultation on bid **10**, 8; application after 16 months of massive effort **11**, 7; application successful **12**, 1; Jenkins and Harbar visit **12**, 7; Chief Executive, Carole Souter, visits **16**, 1; application for time and funds for New Build **17**, 7; **18**, 1-2; agrees funding protocols **19**, 1; Noel Meeke convenes meeting with re New Build **19**, 4; Katie Foster inaugurates display at opening of New Building **23**, 6; Awards for All **24**, 7; **25**, 7; praised for co-funding Rotherwas Project **26**, 1; **26a**, 1; **27**, 5; W Mids staff visit **30**, 3; Chair visits Museum **31**, 1; visit to Museum for 15th anniversary event **33**, 1; Water-on-Tap Project **30**, 1 & 6; **33**, 6; **34**, 6; Prof Grosvenor attends Gala on behalf of **35**, 6; grants £50,300 towards Heritage Water Park **42**, 1 & 4

Heritage Open Day: took part in Sept 2008 **29c**, 1; **30**, 3; Sept 2009 **33**, 3; Sept 2010 **35**, 3; Sept 2014 event had 140 visitors **46**, 6

Heritage Water Park: Project **34**, 1; lease of land for **35**, 7; **36**, 3; **39**, 8; planning issues resolved **41**, 8; gets go-ahead **42**, 1; feature article **42**, 4; Joseph Evans pump installed **43**, 5; civil engineering complete **43**, 6; hedge planted to mitigate stark appearance **44**, 6; more than half way complete with its six interactives **46**, 5

Hermiston, John: donates drawings **30**, 1; originally restored Cliveden hot-air engine **35**, 8

Heveron, Stuart (Penknife Design Ltd): discusses design possibilities with Mary Rhodes (photo) **07**, 3; explains approach to re-display **12**, 5; works with Rhodes on new signs **21**, 6; improves displays **28**, 6; designs *Blackstone at War* book **29**, 6; designs new publicity leaflet **31**, 7; walk-in display designed **32**, 7; Water-on-Tap displays **33**, 6; Balsdean pumps display **35**, 4

Hill, Robin (Head of County Museums Service): guided Museum towards Registration **01**, 1; as Curatorial Adviser helps with archive **17**, 2

Hill Diesel Engine Co (Michigan): generating set donated by farm near Wellington, Herefs being renovated **45**, 5

Hindley, E.S. Ltd (Bourton, Dorset): 'Alcazar' steam donkey engine awaits restoration **09a**, 2; engine restored by Colin Thompson **32**, 8

Hinsley, Mark: Museums officer for staff development at W Mids RMC talks to Mary Rhodes **10**, 7

Hinton Football Club: Bob Semple meets with Museum to address security problems **19**, 7; co-operates with temporary road diversion for New Build **20**, 5; helpful during New Build **21a**, 1; juniors take refreshment at Museum **41**, 3

Hodkinson, Ken: Area Manager of Hyder Utilities accompanies Mayor of Ross for National Gas engine inauguration **02**, 1

Hodson, Tony: recruited **33**, 3; works on Water-on-Tap displays **33**, 6; attends to final details of Water-on-Tap display **35**, 5; refurbishes fan **36**, 5; runs National Gas engine **38**, 5; redisplay Teletalk machine **39**, 4; Volunteer Viewpoint **40**, 3; refurbish Bay Four **40**, 5; renovated water level indicator **45**, 5; creates well cover with Lewis for Water Park (photo) **46**, 5

Hollenberg, Pete: visits with Bert Wood and becomes volunteer **10**, 4; investigates National Gas engine **11**, 3; brings cousin Arie Terluin **11**, 5; completes motorisation of Francis turbine **13**, 3; volunteer viewpoint **14**, 3; improves illumination for rams and pumps **17**, 5; refits Blackstone engine flywheel **24**, 5; cares for 1hp hot-air engine **28**, 4; **29**, 4; volunteer viewpoint **29**, 3; welds framework for hot-air display and wires new boiler **33**, 5; cuts riser pipe for Balsdean display **35**, 4; welds racking **36**, 5; Tangye engine switch gear **39**, 4; installs overhead digi projector **40**, 4; restoring diesel generator **42**, 5; working on Hill Co diesel generating set donation **45**, 5

Holme Lacy College: pupils write in appreciation of their visit to Museum **12**, 8

Holmes, Thomas: of Resources for Learning visits Museum with Dunn for DCWW **12**, 6;

Homelands Farm: Maurice Jones talks about water supply **41**, 6

Hornsby, Ruston-: Peter Allen restores single-cylinder 1½hp petrol engine **24**, 6; 3hp standing engine shown **29**, 3; given makeover **33**, 5; PB engine **37**, 4; PB engine from Homelands Farm **41**, 6

Horsepower: Focus on...indication of, by Ray Morgan **13**, 2

Hot-air engines: new parts fabricated for Hayward-Tyler **16**, 5; 2nd Hayward-Tyler arrives **25**, 5; two engines working side-by-side **29**, 4; DVD for **32**, 7; guard for **34**, 4; Kate Renshall unveils display **35**, 1-2 & 6; Stirling type **35**, 2; **37**, 2; rally **38**, 6; Focus on...Hayward-Tyler engine **42**, 2; leather seals needed for ½ hp engine **44**, 5

Hot-tube engines: Focus on...the Campbell gas engine **45**, 2

Howard, Stuart: organises visit by Hereford Austin 7 Club **43**, 1; becomes volunteer engineer **44**, 3

Hubbard, Sue (Collections Manager): attends HMF meeting at Museum **13**, 4; updates on Museum archives **16**, 3; appointed to Council of Management **17**, 1; hosts visit by Kathy Gee **19**, 3; progresses archive catalogue with Snelgrove & meets Kiberd **19**, 5; to lead transition from museum registration to accreditation **20**, 7; gathers data for accreditation application **24**, 1; clears accessions documentation backlog **25**, 7; discusses MLA accreditation **27**, 1; given credit for **28**, 6; gets data on new website **29**, 1; Museum archives **36**, 2; working with Richard Curtis towards re-accreditation **45**, 8

Hubbard, Cllr Mark: Rivers Group **40**, 8

Hughes, Colin (Trustee & DCWW Area Water Supply Controller): ensures Tangye House made safe after damage by contractor's vehicle **06**, 1; **07**, 1; co-opted as new DCWW representative trustee **07**, 8; elected representative of DCWW **8**, 4; is joined by Mark Johnson **20**, 8

Hughes, Gareth (joiner): installed kitchen in new building **23**, 4

Hughes, Joan (Museum administrator): appointed **9**, 4; reflects on involvement with Museum **15**, 8; stewarding volunteers social **17**, 1; mailing publicity leaflets **19**, 5; new shop **24**, 6; smiling with engineers **28**, 1; volunteer viewpoint **33**, 3; tackles quiz **42**, 3; visitor centre volunteer elected chair Whitecross Townswomen's Guild (photo) **45**, 3

Humour: Scurrilous news from the Waterworks Museum **29a**, 1-2; Serious news from the Waterworks Museum **34a**, 1-2

Hyder plc: Chief Executive Graham Hawker attends Silver Anniversary **04**, 1; Hawker opens the Tangye House **05**, 2

Hydraulic rams: Blakes at Tedstone Court donated by Major Bellville **04**, 6; work of reclamation of Blakes begins **05**, 3; cant recover Blakes duplex due to foot & mouth restrictions **09**, 3; Green & Carter simplex donated by Mr P Allen **10**, 6; donation and operation of Blakes duplex **13a**, 2; Blake compound moved to new plinth in courtyard **21**, 7; CCTV to bring images of to ground level **25**, 7; Focus on... **29**, 2; Warner dismantled & restored **32**, 5; owned by Roger Steed **37**, 6; improved water supply **39**, 4; for farm supply **40**, 2

Hydrostat: Glenfield & Kennedy to be renovated **11**, 8; causing problems **12**, 3

Ilfracombe Museum: donates Lea flow recorder **41**, 1

Illuminated panel displays: attract favourable comments **11**, 7

Impeller: detail from pulsometer pump (photo) **12**, 3

Independent newspaper: features Museum **11**, 6

Industrial archaeology: students from Preston visit with Ken Sharples **04**, 6; Barnwood Society from Gloucester group visit **20**, 8

Infusion pumps: medical uses **25**, 2

Ingersoll-Rand plc: supplies two-stage compressor for National Gas engine **04**, 5

Installations: Beam Engine **04**, 2; Focus on... Waterwheel **06**, 2; Focus on... new boiler **34**, 2

Institute of Physics: members visit Museum **25**, 6

Institution of Civil Engineers: members visit Museum **25**, 6

Institution of Electrical Engineers (IEE): local branch visits Museum **01**, 1; members visit (photo) **11**, 1; donates towards conservation of 1895 dynamo **11**, 7; funds new drive system for 1895 dynamo **13**, 3; Hereford & Worcester branch defrays cost of water-level display **23**, 3

Institution of Engineering and Technology: H&W Branch makes grant to Museum **30**, 6; members visit **40**, 4

Institution of Mechanical Engineers (IME): members visit Museum (photo) **11**, 1; Alan Marshall 50 years a member **20**, 3; Steve Dowling visits as chair of Worcester branch **46**, 3

Insurance: inspection of Hartley Sugden boiler passed **03**, 2; review by Newton Tucker **05**, 6; 3rd party cover becoming expensive for museums **11**, 5; Royal Sun Alliance inspector passes Hartley-Sugden boiler **13**, 4; inspectors require tests of air-pressure vessels **17**, 4

Interactives: displays for children funded by Fulford Foundation **19**, 3; **20**, 8

International Stationary Steam Engine Society (ISSES): advised re WH Allen engine **28**, 3; Chris Allen reports **30**, 5; **37**, 1

Ironbridge: launch of ERIH at, includes Waterworks Museum **25**, 1

Ivy: on chimney cut and died **15**, 1

Jabczynski, Julian: Speller Metcalfe's quantity surveyor discusses drainage **21**, 5; at hand-over (photo) **21a**, 2

Jackson, Andrew: leads visit to Museum by the Worshipful Company of Engineers (& photo) **11**, 1; writes in appreciation **12**, 8

Jackson, Don: of Brede Steam Engine Society, re Harland pump from Balsdean **30**, 4

Jackson, Jill: as teacher at St Mary's High, Lugwardine, complements Museum on Science Week **11**, 9; meets Dr Peter Oliver at Museum **12**, 6

Jakeman, Estelle: meets with Hereford Attractions Forum on behalf of Cider Museum **02**, 4

Janes, Simon: quantity surveyor for new development project **15**, 7

Jay & Davies Crane Hire: helps Penybryn Engineering re-erect wind-pump **13a**, 1; **14**, 4; supplies crane for chimney inspection **14**, 8; moves Hartley & Sugden boiler for New Build **15**, 7; relocate heavy items from back stock **17**, 7; lift Hartley-Sugden boiler back in position **21**, 5; lift Blackstone engine **27**, 2; lift Harland pump from Balsdean **30**, 4

Jaynes, Ronald: great-grandfather George Jaynes, water-works engine driver 1868-88, declined 5/- pay rise **07**, 7

Jenkins, Anne: HLF Manager for W Mids visits Museum **12**, 7; **16**, 1; **31**, 1 & 6

Jennings, Cllr Mike: Mayor of Ross inaugurates National Gas Engine **02**, 1

Johns, Rhiannon (WMRMC Education Officer): discusses secondary school matters with Mary Rhodes (photo) **13**, 6

Johnson, Blight & Dees: architects draw up plans for reconstructing Leominster Tangye House **05**, 2

Johnson, Mark (DCWW): as Unit Manager at Broomy Hill meets Museum concerned about underground structures on site of New Build **20**, 5; co-opted to be Trustee representative from Welsh Water on Council of Management joining Brian Nelson & Colin Hughes **20**, 8; resigns as trustee **24**, 6

Johnson, I. Keith: donates wind turbine from Bridge Sollers **09**, 3; **11**, 8; provided dimensions for wind-pump **13a**, 1; thanked as donor at inauguration **14**, 1; recognised as wind pump donor **28a**, 2

Jolly, Mark et al: Birmingham University reports on Tangye engine crankshaft crack **37**, 5

Jones, Julie: chairs R Wye tourism sub-group **40**, 8; volunteer viewpoint **43**, 3

Jones, Keith: semi-diesel Tangye donkey engine restored **20**, 6; brings Micronette crop-duster to Hereford & District Preservation Society event **20**, 8; Focus on... Tangye donkey engine **21**, 2; has restored about 30 standing engines and pumps **21**, 3; restores Campbell hot-tube gas engine **27**, 7; **29**, 5; & **32**, 4; paints hot-tube gas engine **31**, 5; volunteer viewpoint **32**, 3; bench job **36**, 5; transports Tangye unit from Claymills **37**, 1 & 4; installs 3-engine & pumps **37**, 4; transports Lister CS engine **38**, 4; tractor hauls Tangye fire-pump **41**, 4; with Campbell gas engine (photo) **45**, 2

Jones, Maurice: talks to Noel Meeke about water supply to Homelands Farm **41**, 6

Jones, Poppy & Amber: visit Museum **37**, 1

Joseph, EC & Co Ltd: did civil work & concrete base for wind-pump project **13a**, 1; **14**, 1 & 4; dig exploratory trenches for New Build Project **14**, 8; to carry out civil engineering works for Heritage Water Park **42**, 1; complete civil engineering for Water Park **43**, 6; repaint wind pump **45**, 5

Jubilee: weekend activities **11**, 8

Keating, Philip: speaks at Winter Social **37**, 3

Keeley, Malcolm (of BMMOT): with Paul Gray on fact-finding visit (photo) **13**, 6

Keetch, Paul MP: attends Silver Anniversary celebration **04**, 1; presents volunteer award & hamper **11**, 8; opens new water treatment plant at Broomy Hill **16**, 2

Keir, Liz: volunteer recruit to help with education at Museum **46**, 3

Kempson, Brian: of Hereford Society of Model Engineers meets with Museum to address security problems **19**, 7

Kent, George Ltd, London & Luton: mfr of steam-flow meter in Bay 7 donated by Roy Smith and overhauled by David Timson **06**, 3

Kerr, Lesley-Anne (acting CEO of WMRMC): speaks at HMF seminars held at Museum **13**, 7

Kew Bridge Steam Museum: MWB documents transferred to **04**, 5; Josephine Willis as Education Co-ordinator visits Waterworks Museum **17**, 3; director visits Museum **27**, 8; seminar on future of steam-based heritage sites **37**, 5; KBSM Trust members visit on day of Stirling Engine Rally **44**, 3

Kiberd, Philip: as content co-ordinator for MLA (W Mids) discusses archive plans **19**, 5

Kiel, Peter: donates Easton Anderson & Goolden pumps from Caldecote Hall, Nuneaton **10**, 3; **13a**, 2; **14**, 5; **17**, 4; **20**, 2

Kimberly, Cllr Mike: chairs Herefs Cultural Consortium meetings at Museum **09**, 7; **11**, 10

King Edward Mine, Camborne: trustees & officers visit Museum **42**, 6

Kington, Herefs: Gilkes' Francis-type turbine and water supply for Crooked well pumping Station **12**, 2; **13**, 3; Ken Reeves donates a posher to Waterworks Museum **15**, 8; Kington Museum recommended **25**, 3; Gilkes 1937 turbine installed at weir on River Arrow tributary **28a**, 1

Kirby, Michael & June: Tangye company staff visit Museum **24**, 8

Kitchen: refurbished to comply with new hygiene regs **05**, 5

Kitchenman, John: visits from WH Allen Association **43**, 4; **46**, 6

Knox, Sue (County Museums Development Officer): co-ordinates Heritage Open Day **30**, 3; **33**, 3; **35**, 3; explains MDO role **44**, 6; organises Heritage Open Day **46**, 6

Kremida, Katerina (MLA Accreditation Adviser): talks to Mary Rhodes **21**, 8; visits and advises on accreditation **24**, 1; discusses with Sue Hubbard **27**, 1

Kyre Valley Railway: Tony Marris invites Museum and HSME members to visit **13**, 7; **14**, 10

Kryle, John ('Man of Ross'): provided water supply via cistern on the Prospect in 1698 **14**, 10

Ladies Circle: from Royal Forest of Dean group visit with Norma Denton **12**, 4

Lafford, Clive: creates plinth for Francis turbine (photo) **03**, 4; clears blocked drain (photo) **05**, 4; volunteer viewpoint **07**, 5; with Lister loco (photo) **07**, 7; instals stainless steel plaques **09**, 4; recovering from operation **11**, 5; inspects Tangye drive-end bearings **13**, 3; collects donated pumps from Margaret Price of Mansell Lacy **14**, 7; provided Museum copies of notes of 1839 Ross Improvement Commission **14**, 10; with Marshall restores Easton, Anderson & Goolden turbine-driven water pump **15**, 5; **19**, 6; converting Evans open crank pump of 1937 from Kinwarton as interactive **20**, 6; elected Museum Trustee at AGM **21**, 3; restores mechanical hacksaw **24**, 6; working on Lister & Tangye from Yarkhill **27**, 7; gives tlc to lister diesel and Tangye triple vertical pumps **28**, 5; restores Lister CD engine **29**, 4; moves Warner hand pump and re-shim bearing shells to National Gas engine **31**, 4; re-dresses Tangye triple-pump crankshaft bearing **33**, 5; improves Allen engine display **34**, 5; works on National Gas Engine & cuts grass **35**, 5; runs National Gas engine **38**, 5; works on Allen diesel engine **40**, 5; attends heart-start course **42**, 8; creates display **43**, 5; with Marshall creates operational display of Lister CS and Goulds pump **44**, 2; plants saplings for Heritage Water Park **44**, 6; installs hand pump with Marshall **46**, 5

Laight, Phil: sources silenter for hot-tube gas engine **32**, 4

Lancashire boiler (1895): in Bay 3 (photo) **02**, 2; in use until 1990 at Museum **33**, 1

Lancashire Museums Service: donates Blackstone open-crank engine **41**, 1 & 5

Land: lease with DCWW negotiated and signed to enlarge Museum site **21**, 1

Lathe: Myford machine purchased **37**, 4

Lathwood, James: quantity surveyor for New Build Project **20**, 4

Lattice girders: from HSME stored at Museum **41**, 4

Launder: recirculating arrangement for waterwheel **06**, 2

Lawes, Jim (President of Hereford Access for All): thanks Museum for *Handy Guide for Wheelchair Users* **29**, 6

Lawrence, David: volunteers as steward **10**, 4; volunteer and generous friend, dies **19**, 8

Lawrence, Joan: & family operate pumps **42**, 1

Lawrence, Nicholas: thanked for notifying Museum of the Blackstone Engine **27**, 5

Lawrence, Sir William: congratulates Hereford City Council on new Access Guide **00**, 1

Lawes, Jim (Chairman, Hereford Access for All): champions disabled people in Hereford **00**, 1; secures grant from ADAPT for dropping kerbs and better paving **05**, 4; **07**, 5

Lea, David: brings his Amanco engine to H&DPS event at Museum **14**, 12;

LEADER+: funding for Herefordshire Rivers Project **10**, 8; **15**, 7

Lea instruments: water meter **38**, 4; integrating flow recorder **41**, 1 & 6

Leaflets: Visit Herefs hold swap shop at Museum **45**, 6

Leather seals: needed for ½ hp hot-air engine **44**, 5

Ledbury: Heritage Centre represented by Bob Bradbury attends HMF meeting at Museum **13**, 4; Ladies Circle visit **28**, 8; lineshaft: display **40**, 4

Leigh, Judith (EH Field Monument Warden): visits to view rain entering the 'at risk' building **07**, 6

Leintwardine History Society: visit **43**, 8

Leominster: typhoid fever and water supply for **05**, 2

Lenoir, Étienne: patents gas engine **32**, 2

Lett, Robert: architect decides on external cladding for New Build **20**, 5; hand-over (photo) **21a**, 2; new building generally **23**, 5

Lett & Sweetland: executive architects from Worcester take over New Build **19**, 1; track record **19**, 4; Karl Greenway discusses drainage **21**, 5

Lewis, Howard: donates measuring instruments **43**, 6

Lewis, Michael: recruited **33**, 3; works on Water-on-Tap displays **33**, 6; attends to final details of Water-on-Tap display **35**, 5; volunteer viewpoint **38**, 3; hydraulic ram **39**, 4; redisplay Teletalk machine **39**, 4; refurbish Bay Four **40**, 5; renovated water level indicator **45**, 5; creates well cover with Hodson for Water Park (photo) **46**, 5

Library: books at Waterworks Museum **36**, 2

Liddle, Joan: on duty in Visitor Centre **07**, 7

Liddle John (Trustee): offers help and clears gutters (photo) **07**, 7; tests Coventry-Climax fire pump **13**, 3; installs electrics for EA&G turbine and pumps **15**, 5; improves lighting **16**, 4; Volunteer viewpoint **28**, 3; fits Vent-Axia extraction fan **29**, 5

Lineshaft: display of that from Massington, Ledbury **40**, 4; project proceeding **44**, 6; project progress with Wilson oil engine **45**, 5; Davies Services lift oil engine into place **46**, 5

Linton Historical Society: group visit **29**, 8

Lister, R.A. Co, Dursley: narrow-gauge loco gets a face-lift **07**, 7; diesel loco brought back on track **11**, 2; **19**, 6; Phil Healey recovers his Lister from the Museum **14**, 7; parts required for Museum's D-type **15**, 5; David Ferguson donates two D engines **19**, 7; petrol engine tackled by John Mephram **24**, 6; diesel from Yarkhill, Herefs **27**, 7; D rebuilt by John Mephram **29**, 4; CD engine started by Mayor **32**, 6; Dave Winbow worked for **35**, 3; CS diesel donated by Saltmarshe **38**, 4; loco, transfer to Twyford Waterworks Trust **39**, 5; 'D' engines for farm supply **37**, 4; **40**, 2; CS desel restoration for Massington lineshaft project **41**, 6; CS Diesel drives Gould pump **43**, 5; Focus on Lister engines **44**, 2

Llyn Brenig: dam uses Francis HEP turbines **12**, 2

Lockers: created for volunteer engineers **33**, 5

Locomotives: Museum's narrow gauge 3 ton Lister **07**, 7; **11**, 2; Lister diesel brought back on track **19**, 6

London & NW Railway Soc: visit **43**, 8

Lougee, Jon: visits from WH Allen Association **43**, 4; **46**, 6

Lowther A J & Sons Ltd: buy group ticket at Museum fundraise auction **34**, 6

MacAdam, Robert: made Fourneyron-type turbines in Belfast **30**, 2

Macbeth, Robert: helps with hot-tube restoration **32**, 4

Machine tools: lathe and milling machine purchased **37**, 4

Magamadov, Oleg: brings automotive skills to volunteer team **30**, 3

Magazines: should we dispose *Vintage Spirit & Old Glory* from Archive Room? **45**, 4

Maidstone Model Engineers: Society members visit (photo) **07**, 8

Maitland, James: helps give Lister loco a face-lift **07**, 7

Manifold Valley Bygones Group: visits Museum **42**, 6

Mannequins: found for Museum display **44**, 6

Marine Engines: Thornycroft steam **40**, 5

Marlin Motor: Owners' Club visit Museum (photo) **46**, 4

Marris, Tony: invites Museum and HSME members to Kyre Valley Railway **13**, 7; **14**, 10

Marshall, Alan: becomes volunteer and refurbishes surge-vessel house **09**, 4; inspects drive-end bearings **13**, 3; with Lafford restores Easton, Anderson & Goolden turbine-driven water pump **14**, 5; **15**, 5; **17**, 4; **19**, 6; volunteer viewpoint **20**, 3; converting Evans open crank pump of 1937 from Kinwarton as interactive **20**, 6; elected Museum Trustee at AGM **21**, 3; discusses use of volunteers with Vanessa Harbar **21**, 8; restores mechanical hacksaw **24**, 6; working on Lister & Tangye from Yarkhill **27**, 7; gives tlc to lister diesel and Tangye triple vertical pumps **28**, 5; restores Lister CD engine **29**, 4; move Warner hand pump and re-shim bearing shells to National Gas engine **31**, 4; repaints plaque stands **32**, 5; moves venturi meter and displays from Bay 6 **33**, 5; improves Allen engine display **34**, 5; works on National Gas Engine **35**, 5; gives tour **38**, 5; chef at Chairman's BBQ **40**, 3; works on Allen diesel pin-clutch **40**, 5; manoeuvres Tangye fire-pump into position **41**, 4; creates display **43**, 5; with Lafford creates operational display of Lister CS and Goulds pump **44**, 2; installs hand pump with Lafford **46**, 5

Marshall, Eric: Bob Benson recalls former Museum Operations Manager **05**, 3

Marshall, Patricia: stewarding volunteers social **17**, 1; participates in quiz at Winter social **19**, 5; volunteers with the catering team **24**, 3

Martin, Tom: gunner's papers donated to Museum feature in WWII displays **26a**, 2

Massington Pumping Station, Ledbury: lineshaft from **40**, 4; lineshaft project update **41**, 6; line-shaft project proceeding **44**, 6; project progress **45**, 5; Wilson oil engine lifted into place for display **46**, 5

Mather & Platt Ltd: centrifugal pump of 1938/9 at Rotherwas offered with Blackstone engine **18**, 3; centrigul single-stage pump display improved **20**, 6; **21**, 7; early electric pump at Broomy Hill **23**, 2; working of centrifugal pump and Rotherwas engine **24**, 1; **26**, 2; **26a**, 2

Matlock Travel Society: visits Museum **40**, 4

Matthews, Helen (PR officer, DCWW): grant aids Museum admin costs **02**, 4

Mawdsley's Co of Dursley: alternator **42**, 5

Mayes-Wright, Virginia (Museums Development Officer): participates in quiz at Winter Social **19**, 5; advises on transition from museum registration to accedititation **20**, 7; organises get-together of accreditation applicants **25**, 6; leaves **27**, 1

Mayors of Hereford, Cllrs: Clem Tudge gives Museum access award **00**, 1; Colin Rumsey arrives for the Silver Anniversary **04**, 1; Sue Andrews arrives for Millennium celebration **6a**, 1; **07**, 1; Alan Williams visits on Gala Day **11**, 5; **12**, 1; Ursula Atfield inaugurates wind pump on Gala Day **14**, 1; Robert Preece celebrates 150 year anniversary of Broomy Hill Waterworks **24**, 3; Chris Chappell opens Rotherwas Engine House **27**, 1 & 4; Mayor starts Pelapone diesel engine at Gala **29**, 7; inaugurates restored engines & pumps **29b**, 1; Kevin Wargen writes in appreciation **30**, 6; Sylvia Daniels is guest of honour at Gala **32**, 1 & 6; Anna Toon opens Water-on-Tap displays **35**, 1; Julie Woodward opens pump display **38**, 1 & 6; Brian Wilcox visits **40**, 1&6; David Ravenscroft unveils plaque for the National Gas Engine **40a**, 1; Philip Edwards attends Gala **43**, 1 & 4; Len Tawn attends 40th Aniversary Gala **45**, 8; **46**, 1; Len Tawn also attends Allen Award Day **46**, 1

Mayor of Ross-on-Wye: Cllr Jennings inaugurates National Gas Engine **02**, 1

Measuring: Focus on...indicated horsepower **13**, 2; equipment donation **43**, 6

Meeke, Angela: Focus on...waterborne diseases **10**, 2

Meeke, Barrie: provides structural engineering consultancy re Bay 5 ahead of beam engine **02**, 6; as civil engineer with team of new development project (photo) **15**, 7

Meeke, Fred (Director, FlowServe Europe): Focus on... centrifugal submersible pumps **09**, 2; Focus on... Sea water desalination **31**, 2

Meeke, Noel (Chairman and Editor): appeals for volunteers **00**, 4; writes on history of Museum's triple-expansion engine **02**, 2; prepares to mark Museum's silver anniversary **02**, 6; reflects on 'wonderful season' **04**, 6; Museum makes a pitch for younger

visitors **05**, 6; speaks at AIM conference in Gloucester **06**, 3; astonished by Attfield WCs and encourages charity gift aid **06**, 6; elected to Board of WMRMC **07**, 3; expresses gratitude to Stephen Southall **07**, 7; records appreciation to Fulford Foundation **07**, 8; writes on history of the main building **08**, 2; appointed vice-Chair Herefs Cultural Consortium **09**, 7; receives award from Paul Keetch MP (photo) **11**, 8; upbeat about planning and HLF approvals **12**, 8; Museum short season due to development project **13**, 8; anticipates facilities of new development **14**, 12; appreciates Museum Trustees and volunteers **15**, 8; with HLF Chief Exec **16**, 1; foundation problems with extension **16**, 8; unforeseen problems with New Build **17**, 8; has nightmares about costs of New Build **18**, 4; now more optimistic re New Build **19**, 8; relief at start of New Build **20**, 8; at signing of lease on DCWW land to enlarge Museum site **21**, 1; augur piling passes off without affecting deep pipes **21**, 8; welcome on day of celebration **21a**, 3; unprecedented activity with the New Build **23**, 8; recognition of Museum in national publications **24**, 8; tremendous progress in all depts **25**, 8; invites Mayor to open Rotherwas Engine House **27**, 4-5; praises individual and team effort **27**, 8; reflects on MLA accreditation **28**, 8; on hydraulic rams **29**, 2; on centralisation of merged museum, library and archive functions **29**, 8; on Fourneyron turbines **30**, 2; on volunteering **31**, 8; meets HLF chiefs at Museum **31**, 6; greets Mayor for Gala Day **32**, 1; visits Lincolnshire Museums **32**, 7; gives talk to Midland Wind & Water Mills Group **33**, 3; awarded MBE **33**, 6; berates Visit Herefordshire for stopping 'bedroom browsers' **33**, 8; addresses Ross ex-Round Tablers **34**, 6; editor's tribute to Newton Tucker **34**, 8; attends Gala with Mayor **35**, 6; on financial stringency **36**, 8; on Stephen Southall **38**, 8; edits *WaterWords* **40**, 8; interviews Maurice Jones **41**, 6; comments on 'business rate' threat by Herefordshire Council **42**, 8; accompanies mayoral party on Gala Day, **43**, 1 & 4; talks to Howard Lewis **43**, 6; anticipates 40th anniversary year **44**, 8; writes about the Campbell gas engine **45**, 2; heritage award for Allen engine restoration **45**, 8; receives Allen Award on Museum's behalf (photo) **46**, 6; Museum declines large donations due to shortage of space **46**, 8

Meeke, Susan: wedding reception for, at Museum **25**, 6

Melhuish Simon: visits **40**, 6

Membership: subscriptions (£5) due **01**, 4; invitation to join **3a**, 2; increased number of members **10**, 1; fee still £5 after 28 years **11**, 8; increase in fees 2009 **30**, 8

Mepham, John: joins engineering team **11**, 3; restoring Coventry Climax fire pump **11**, 4; recovering in hospital **13**, 8; works on dosing pump in Bay 4 for interactive **19**, 6; erects safety & information signs **20**, 1; tackles Lister single-cylinder petrol engine **24**, 6; works on Pelapone diesel **27**, 7; & **28**, 2; rebuilt Lister D engine **29**, 4; helped bring Bamford & Evans pump set to operation **29d**, 2; volunteer viewpoint **30**, 3; paints staircase **31**, 4; worked on Balsdean pump starter **35**, 4; outside job **36**, 5; prepares hydrostat for display **38**, 5; paints signs **40**, 5

Mercedes 300SE: in which Graham Ellis brings Mayoral party to Gala **43**, 1 & 4

Meredith, Owen: IT consultant from DOM Computer Services supplies equipment **11**, 7; works on river-based computer programme **17**, 3

Meredith, Shane: volunteers in grounds **40**, 3; and plants spring bulbs **42**, 3; tidies Water Park **46**, 5

Merryweather & Sons Ltd: supplied fire engine in Herefs **14**, 2

Merthyr Tydfil: Crawshay family and the Cyfarthfa ironworks **46**, 2

Metropolitan Water Board (MWB): documents transferred to Kew Bridge Museum **04**, 5

Meussen, Harry: makes mystery visit and offer of support for interpretation & display **07**, 3; Executive Director of Fulford Foundation visits Museum with Moerman **12**, 5

Mid-Glos Engine Preservation Society: visits **30**, 5

MG motor cars: gather for spring get-together at Museum **11**, 5; Owner's club visits Museum **33**, 8

Millennium: Celebration Day **6a**, 1; Brass wind ensemble play at Museum **11**, 1

Miller, Allan: funds DVD film about hot-air engines **33**, 6; sponsors hot-air engine display structure **35**, 1 & 6; hot-air engine model collection display **38**, 6; his experimental hot-air engines shown by Museum **44**, 8

Milln, Jeremy: indexing *WaterWords* **44**, 3

Mills: Midland Wind & Water Group **25**, 1; National Mills Weekend opening **28a**, 1; **29**, 3; activities **33**, 3; Museum participates in National Mills Weekend **45**, 1

Mills, Dr Roger (Trustee & DCWW Communications Manager): writes about safety features at Museum **00**, 3; organised vintage calvacade **04**, 1; resigns from Museum Council of Management **06**, 6; resigns as DCWW trustee representative **08**, 4; hosts convivial evening at Museum **14**, 3

Milne Electricity Museum: Mary Rhodes on committee of **11**, 4

Milnes, Digby: of Terravision Ltd uses ground penetration radar to find underground services ahead of New Build **20**, 4

Ministry of Defence: donates Pelapone Diesel engine from Buckley Barracks **28**, 2

Minton, Treharne & Davies Ltd: report on Tangye crankshaft crack **34**, 4

Misson, Jill: features Waterworks Museum for BBC Hereford & Worcester **32**, 7

Model Workshop: engine tableau for schools funded **11**, 7; creating interactive models **16**, 8; new interactives made **20**, 7

Moerman, R: Chair of Fulford Foundation visits Museum with Harry Meussen **12**, 5

Moorey, Brian: Chair of Hereford Society of Model Engineers meets with Museum to address security problems **19**, 7; hosts Museum members' summer social **20**, 3

Morgan Motor Co: car visits Museum (photo) **3a**, 2; Car Club visits Museum **29**, 7; **42**, 6

Morgan, Doreen (Trustee): on duty in Visitor Centre (photo) **00**, 3; volunteer viewpoint **04**, 5; leads visitor reception team **10**, 5; invited Joan Hughes to Museum to serve tea & cakes **15**, 8; awarded life membership at AGM **21**, 3; Museum Trustee **33**, 3

Morgan, Ray (Trustee, vice-Chair, Chief Engineer): shows Tucker Museum's access award (photo) **00**, 1; writes about Gas Engine supply and trials **00**, 4; writes about problems with the Tangye diesel **01**, 3; plans to receive beam engine in Bay 5 (photo) **02**, 6; **03**, 1; writes Focus on...installing beam engine **04**, 2; surveying for waterwheel (photo) **04**, 3; writes Focus on...installing waterwheel **06**, 2; with Rod Robinson discussing Museum fabric (photo) **07**, 6; with Lister loco (photo) **07**, 7; stands down as vice-Chair **08**, 4; volunteer viewpoint **09**, 6; writes on narrow-gauge railways **11**, 2; lifts Pulsometer spindle pump (photo) **11**, 3; resumes directorship **11**, 10; writes Focus on...indicated horsepower **13**, 2; retires as Trustee **15**, 3; awarded life membership at AGM **21**, 3; Tangye crankshaft **34**, 4; obituary **37**, 8

Morris Marina Owners' Club: calvacade of cars visit Museum (photo) **06**, 6

Morris, Paul: excellent site manager from Speller-Metcalf **20**, 8; discusses drainage for New Build **21**, 5; hand-over (photo) **21a**, 2

Morris, Philip & Son, Hereford: made Victorian forge found in back-stock **14**, 9

Motor cycles: Cheltenham vintage M'cycle Society visits **01**, 1; m'bikes & Michael Lewis **38**, 3; Bridgend British Motor Cycle Club visit Museum **46**, 4

Motor cars: Richard Ridout as motor mechanic **02**, 5; Morris Marina Owners' Club visit **06**, 6; vintage calvacade at Millennium celebration **07**, 1; Vintage & Veteran Club visit **10**, 1; MG cars visit **11**, 5; Austin 7 visit **14**, 12; calvacade programme **22**, 2; classic & vintage vehicle rally **27**, 6; Gareth Prosser's Daimler at Gala **35**, 1; clubs visit Museum **42**, 6; calvacade for Gala Day **43**, 1 & 4; **46**, 4; Marlin Owners' Club at Museum **46**, 4

Mould family: (Sophie, Lucie, Henry & Evan) visit Museum **30**, 1

Moult, Janet (of FHMA): meets with HMF at Museum **13**, 4

Mudge, Norma: Volunteer Viewpoint **39**, 3

Multi-stage flash: desalination **31**, 2

Munitions Factory, Rotherwas: Blackstone diesel engine from **17**, 7; **25**, 4; **26a**, 1; displays re WWII and explosion **26a**, 2; **27**, 6

Munn, Keith: erects new admission signs **44**, 1; volunteer viewpoint **45**, 3

Museum accreditation/registration: guided by Robin Hill **01**, 1; Museum receives MGC registration **05**, 3; gathering data **24**, 1; application made **25**, 3; awarded with commendation **27**, 1; accreditation as on-going process **28**, 8

Museum constitution: amended in favour of Hereford Record Office **16**, 3; aims **26a**, 2

Museum Development Officer: role explained and mannequins found **44**, 6

Museum Development Association: satisfied by Evaluation Report **12**, 6

Museum Documentation Association: advises on archive **17**, 2

Museum of East Anglian Life: donated Glenfield & Kennedy pump set from Aldeburgh, Suffolk **29b**, 2

Museum on the Move: delighted with bus visit **46**, 7

Museums & Galleries Commission (M&GC): Museum meets all requirements for Phase 2 registration **05**, 4

Museums & Galleries Month 2000 (MGM 2000): awards Museum £985 for children's Water Weekend **05**, 4; financed two 'welcome days' for children **06**, 4; **07**, 3

Museums, Libraries & Archives (MLA, aka Re:source, prev M&GC): set up to succeed Regional Museums Councils **10**, 7; Kathy Gee as Chief Exec of MLA Council (W Mids) visits with Sue Hubbard and Mary Rhodes **19**, 3; Philip Kiberd discusses archiving with Hubbard & Snelgrove **19**, 5; emergency procedures manual written for Museum accreditation **20**, 1; Katerina Kremida and Paula Brikci discuss accreditation with Mary Rhodes **21**, 7; benchmarks independent museums **28**, 6; centralisation of merged Regional Museum Council / Library & Archive sectors is bad for independent museums like the Waterworks **29**, 8; review & action plan **32**, 8; grant for data logging equipment **34**, 6

Museums Journal: praises Waterworks Museum **29**, 6

Music: Millennium Brass wind ensemble play at Museum **11**, 1; Hereford Concert Band play at 40th Anniversary Gala **46**, 4

Myford lathe: purchased for Museum **37**, 4

Narrow-gauge railways: track ballast washed away **04**, 5; Focus on... **11**, 2; ballast work following floods **13**, 3; 7¼" Gauge Society AGM **17**, 6

Nash, Katy: dresses up as apprentice **19**, 1

National Accessibility Scheme: Museum goes for highest rating **25**, 1

National Curriculum: DCWW links strategy for *Living & Learning with Water* **14**, 6; **25**, 7

National Gas Engine Co (Ashton-under-Lyne): Focus on gas engine of 1912 from Alton Court **00**, 2; to run on natural (North Sea) gas **01**, 3; inaugurated by Mayor of Ross **02**, 1; installation complete **02**, 3; new Ingersoll-Rand compressor for **04**, 5; inlet and exhaust valves of 1912 machine investigated **11**, 3; emergency stop button fitted **19**, 6; producer gas engine

overhauled **28**, 5; Peter Heaton replaces valve spring **29**, 4; bearing shells e-shimmed **31**, 4; water circulation for improved **35**, 5; Alton Court **39**, 2; commemorative centenary plaque unveiled by Cllr Ravenscroft **40a**, 1; **41**, 1

National Health Service (NHS): Retirement Fellowship group visit (photo) **46**, 8

National Museums & Galleries of Wales (NMGW): director Anna Sothall inaugurates waterwheel **06**, 1; loan 1895 dynamo **09**, 3; rescued overshot waterwheel now at Museum **28a**, 1; visit **43**, 8

National Science Week: school pupils exercises at Museum **11**, 9; theme for 2003 is *How do you measure water?* **13**, 1

National Service: Peter Williams **37**, 3

National Trust: following long negotiation with, hot-air engine arrives from Cliveden **25**, 5; Focus on...Hayward-Tyler Engine from Cliveden **42**, 2

Nationwide Building Society: Community Award for Museum **30**, 6

Naylor, John OBE: Chief Executive of Carnegie Trust compliments Museum **12**, 6

Nelson, Brian (Trustee): writes about Dŵr Cymru Welsh Water conservation work **00**, 4; succeeded Keith Stokes as DCWW representative **01**, 3; as Head of Environment and Education at DCWW supports lease of additional land to Museum **20**, 1; retires as trustee representative and becomes trustee of the Museum in his own right **28**, 6

Nesbitt, Brian: advises on reciprocating pump donated by Museum of E Anglian Life **25**, 5

Network of Volunteer Bureaux in Herefordshire (NVBH): organise event where Museum volunteers win hamper **11**, 8

New Build (Development Project): ideas emerge for new space to integrate needs of Museum for visitor reception, education, display and workshop **07**, 6; 'machine ethic' design concept presentation by Rod Robinson **07a**, 1; **8**, 1 & 3; good progress on proposals **09**, 7; planning consent and HLF granted **12**, 1; Robinson explains architectural approach **12**, 7; plans displays for visitors to see **13a**, 2; exploratory trenches dug under Gary Thomas' supervision **14**, 8; work begins with re-roofing **15**, 1; clearing site and relocating standing engines in readiness **15**, 6; museum extension HLF funding & EH approval **18**, 1-2; piling required for **19**, 1; programme and players for **19**, 4; start finally made **20**, 1; ground surveys **20**, 4; impressive progress **21**, 4-6; day of celebration and official opening **21a**, 1-3

Newcomen, (Thomas) Society: Bulletin praises facilities for youngsters **29**, 6; Derek Duffett speaks at conference **37**, 6; atmospheric engine **43**, 2; Society visit **43**, 8; Society members tour with Duffett during Stirling Rally **44**, 3

Newton, Isaac (1643–1727): Laws of motion and turbines **20**, 2

New Zealand: enquiry from re Blakeborough equipment at Hutt **36**, 3

Nicholas, Glyn: joins as steward **04**, 4; volunteer viewpoint **10**, 4; obituary **46**, 8

Norfolk Museums Service: donates horizontal triple water pump **42**, 8; pump to be used with Wilson oil engine and Massington line-shaft **44**, 6

Norman, Jesse, MP: addresses Broomy Hill Residents' Association AGM **36**, 1; visits **40**, 1; made flying visit (photo) **46**, 3

North Wales Engineering Society: group visit **09**, 8;

Nunn, Keith: new volunteer (admin & school tours) **42**, 3; photographs Austin 7 Club visit **43**, 1

Nu-Way Ltd, Droitwich: supplied manual for Hartley Sugden boiler burner **03**, 2

Obituaries: Howard Wagner **02**, 3; William Austin (1912-98) **04**, 3; Eric Marshall (1913-99) **05**, 3; Don Saunders **14**, 12; Ray Morgan and John Drake **37**, 8; Stephen Southall **38**, 8; Bob Benson **40**, 8; Tony Palmer **45**, 8; Glyn Nicholas **46**, 8

Oil Engines: see Engines, oil

Office & Meeting Rm: created by volunteers **10**, 6; **33**, 5

Old Glory: magazine features Waterworks Museum **11**, 6; **32**, 7; magazines to be disposed? **45**, 4; features Museum **46**, 6

Oliver, Dr Peter: Director of Earth Heritage Trust meets Jill Jackson at Museum **12**, 6

Open crank reciprocating pump: from Museum of E Anglian Life **25**, 5

Oral history: reminiscences of life before piped supplies sought for Millennium Awards for All project **05**, 5; captured some reminiscences **07**, 8; Age Concern H&W seeking Herefordshire River reminiscences **15**, 7

Otto cycle: in gas engines **32**, 2

Overhead digital projector: **40**, 4

Owen Bros: thanked for lending vehicle and hoist for 1938 Joseph Evans pump **12**, 3

Owen Pell & Co: building work to Tangye House **07**, 1

Oxford House Industrial History Society: October 1999 group visit (photo) **05**, 6

Packham, Tom (Estates Business Manager, Welsh Water): representative at Museum **39**, 3; Rivers Group **40**, 8; speaks at AGM **41**, 8

Painting: another bay done **01**, 1; Hereford artists group visit **29**, 8

Palmer, Prof Marilyn: complements *WaterWords* on its AIA award **29**, 1

Palmer, Tony (Trustee & Company Secretary): creates plinth for Francis turbine (photo) **03**, 4; with Crompton-Parkinson motor (photo) **04**, 3; volunteer viewpoint **05**, 5; with Lister loco (photo) **07**, 7; dismantles Allen diesel gearbox **08**, 6; finishing touches to pump display **09**, 4; pictured with Alen diesel **10**, 3; recovering from operation **11**, 5; helps Year 9 pupils from Weobley High School **13**, 1; final touches to fire hydrant **13**, 3; obituary **45**, 8

Parkin, Fred: as Hon Chair Herefs Health & Safety Group gives presentation **14**, 11

Pearson, Brian: new volunteer engineer **24**, 3; resites Pelton turbine within Bay 2 **28**, 5; viewpoint **31**, 3; safety fencing **34**, 5; technical drawing for Balsdean pump **35**, 4; reconstructs covers **38**, 5; visits Snibston **36**, 3; **39**, 8; covers compartment wheel **40**, 5; on automatic fire pump sets **41**, 2; plans Water Park **42**, 5; plants saplings and tests pump for Heritage Water Park **44**, 6; work on capstan pump with Depledge **46**, 5

Pearson, Marion: Volunteer Viewpoint **36**, 3

Pelapone Engines Ltd, Derby: 1955 diesel engine donated by MoD **23**, 7; **27**, 7; Focus on... **28**, 2; engine started by Mayor at Gala **29**, 7; **29b**, 2; powers 4-stage fire pump **41**, 2

Pelton, Lester: Focus on...turbines **15**, 2; wheel resited within Bay 2 **28**, 5; invented impulse turbine during North American gold rush **28a**, 1

Penarth Heritage & History Group: visits **38**, 4

Penhale, Herbert: as Treasurer of water board visited Hereford waterworks with Stephen Southall **01**, 3; remembered at 30 year anniversary **18**, 4

Penknife Design (Cardiff) Ltd: produce six displays on history of water supply **6a**, 2; Stuart Heveron discusses possibilities with Mary Rhodes **07**, 3; create stainless steel plaques **09**, 4; explain approach to re-display **12**, 5; engineering time-line **16**, 8; face-lifts new leaflet 24,000 printed **19**, 5; Heveron and Rhodes work on new signs **21**, 6; produce souvenir book of the Museum **23**, 1; improve displays **28**, 6

Penn, Dr Simon: Director of Avoncroft visits with HCC **11**, 10

Penryhn Quarry: supplies new roof slates for main building **19**, 7

Penybryn Engineering, Hengoed Ltd: reconstructed Harvey beam engine **3a**, 2; Nigel Brake on beam engine reconstruction **04**, 2; takes down, renovates and re-erects wind-pump **13a**, 1; **14**, 1 & 4

Peristaltic pumps: medical & industrial use **25**, 2

Phillips, Jess: visits Museum from *Hereford Times* (photo) **46**, 3

Phillips, Sharon: Abergavenny teacher on secondment to DCWW arranges education visits **43**, 7; hosts schools visits **44**, 7; **45**, 7; **46**, 7

Photography: Snelgrove cataloguing slides in Museum archive **20**, 7

Pickering, Thomas R: governor missing from Hindley engine from Tenbury **09a**, 2

Picnic tables: for visitors in the courtyard (photo) **25a**, 2; installed by dipping pond **36**, 6

Pipes: Folbrigg fabricate new steam pipes **04**, 3; wooden water from Saltmarshe displayed **09**, 6; **19**, 6; Victorian suction intakes from the River **20**, 1 & 4; deep pipes unaffected by augur piling **21**, 8

Plaque(s): engraved stainless steel **09**, 3 & 4; by Penknife Design Ltd **12**, 5; unveiled by Mayor **29**, 7; **32**, 6; centenary for National Gas Engine unveiled by Cllr Ravenscroft **40a**, 1

Pleuger Ltd: Dŵr Cymru Welsh Water donates submersible pumps to Museum **08**, 3; Focus on... **09**, 2; pump lifted by crane for DCWW (photo) **13**, 7; DCWW in 1974 installed pumps **22**, 1; **23**, 2

Policy: document on working with vulnerable people **25**, 3

Polo shirts: with Museum logo to become available **20**, 7

Pond: picnic tables set up by **36**, 6; dipping with Mary Watkins **31**, 7; **33**, 1; **38**, 1; **40**, 6; dipping day **46**, 1

Poplar trees: damaged by gales **08**, 5

Portable appliance testing: annual requirement **17**, 4; **36**, 4

Powell, Mervyn H.P. (of Clifford, contractors): strengthens floor in Bay 5 for Harvey beam engine **03**, 4; **04**, 2; construction for waterwheel **05**, 5; **06**, 2; work in Museum for DCWW **09**, 3; raised and moved wooden water pipes from Saltmarshe to Museum **09**, 6

Preece, Cllr Robert (Mayor): attends opening of new Museum building **23**, 6; celebrates 150 year anniversary of Broomy Hill Waterworks **24**, 3

Preedy, Hilary: meets with Hereford Attractions Forum on behalf of City Council **02**, 4

President appointed for Museum: **39**, 1

Press: National Gas Engine well covered **02**, 5; coverage by *Bulletin of the Association of Independent Museums, Round and About, Old Glory* and *Independent* newspaper **11**, 6; coverage by *Old Glory, Vintage Spirit, Stationary Engine and Model Engineer* **24**, 8; review of recent articles about Museum **31**, 8

Price, Beatrice: dresses up **37**, 6

Price, Daniel, James & Lucy: enjoy Piglet Playtime Day **45**, 6

Price, Margaret: donated water pumps from Mansell Lacy collected by Allen and Lafford **14**, 7

Probus Clubs: group visits **29**, 8; **30**, 5

Producer gas plant: from Alton Court Waterworks, Ross-on-Wye **00**, 2

Projector: donated by Herefordshire Council **41**, 6

Prosser, Gareth: his Daimler transports mayor **32**, 6; brings Daimler to Gala **35**, 1; with Campbell gas engine (photo) **45**, 2

Prosser, Graham: engineering volunteer recruit **41**, 8; tends Campbell engine **43**, 5; volunteer viewpoint **46**, 3

Prossor, Ursula: artist sketches Museum **21**, 7

Publications: 20,000 leaflets distributed **00**, 3; article on Museum's Easton turbine in *World Pumps* **14**, 5; Museum *guidebook* from Wye Valley Printers **02**, 5; 7¼" Gauge Society Journal **17**, 6; new leaflet by Penknife 24,000 printed **19**, 5; Museum guide and leaflets **21**, 7; Souvenir book of the Museum **23**, 1; DVD and book *Wye Valley Story of a Great River* **24**, 7; articles in *Herefordshire Society* **25**, 8; **29**, 6; *Blackstone goes to War* on sale **29**, 6; new publicity leaflet **31**, 7; Books (*Pumping & Lifting*, *Water-on-Tap* and *Hot-air Engines*) and DVD films **33**, 6; great publicity from *Hereford Times*, *Ross Gazette* and *Vintage Spirit* **46**, 6

Pullen, David: displays Blackstone paraffin engine at H&DPS event at Museum **14**, 12; restored Joseph Evans twin pumps (photos) **29b**, 2; **29d**, 1

Pullen, Dorothy (Dot): loan of restored Joseph Evans pumps from Anglesea for Southall Gallery **28**, 3; **29d**, 1-2; **30**, 1 & 5

Pulsometer centrifugal spindle pump (c.1950): installation in Bay 6 progressing **11**, 3; motorised and illuminated for viewing **12**, 3; shown on Heritage Day (photo) **29c**, 2

Pumping stations: Broomy Hill (Hereford) **23**, 2; Balsdean (Brighton) **23**, 7; Masington (Ledbury) **40**, 4

Pumps: well-spindle pump moved to Bay 6 **03**, 1; steam-driven pumps from Hergest Camp donated **06**, 3; Tangye triple-throw of 1932 from Milton Springs **07**, 2; Centrifugal submersible **09**, 2; Grundfoss multi-stage feed **09**, 5; hydraulic ram donaton **10**, 6; pulsometer spindle installation in Bay 6 progressing **11**, 3; and motorised and illuminated for viewing **12**, 3; 3-pumps (wind, turbine & ram) project **13a**, 1; fire pumps in Herefs **14**, 2; dosing pump in Bay 4 for interactive **19**, 6; Easton, Anderson & Goolden pumps **20**, 2; 1854 Agreement from Wm Simpson for Hereford's first pumping engine **17**, 2; Joseph Evans open crank pump of 1937 from Kinwarton as interactive **20**, 6; Joseph Evans horizontal steam, Mather & Platt, Pulsometer and Pleuger electric pumps for water tower **23**, 2; Mather & Platt at Rotherwas **24**, 1; Small-scale (peristaltic, infusion, gear and rotary vane) **25**, 2; Glenfield & Kennedy commissioned **25**, 3; open-crank reciprocating **25**, 5; Coventry-Climax fire tender in WWII display **26a**, 2; Harland from Rottingdean **27**, 3; Joseph Evans pumps **28**, 3; **29b**, 2; **29d**, 1; **30**, 1 & 5; Warner hand pump moved **31**, 4; Worthington-Simpson dismantled **32**, 5; boiler feed pump **34**, 4; display in Tangye House **35**, 5; Climax and Lister installed **37**, 4; Balsdean **38**, 1; WWII Tangye Units **38**, ; Coventry Climax at Museum **38**, 2; Crossley, Joseph Evans and Allen at Alton Court **39**, 2; Hayward-Tyler steam **39**, 4; automatic fire sets **41**, 2; Goulds triple for Masington project **41**, 6; horizontal triple water pump donation **42**, 8; Goulds working with Lister CS **44**, 2; vacuum pump on triple-expansion engine dismantled **44**, 5; Tangye of 1944 unveiled by Mayor Cllr Len Tawn **46**, 4

Purser, Alison & Martin: donate hand-pump **35**, 5

Raglan, Lord: visits with Trustees of Usk Museum (photo) **14**, 11

Raglan Marl: found by borehole investigation under Museum extension **16**, 7

Railway: track ballast washed away **04**, 5; model railway societies visit **07**, 8; Focus on...narrow gauge **11**, 2; Branch-line Society group visit **12**, 4; 7¼" Gauge Society 2004 AGM held **17**, 1 & 6

Railtrack plc: provides funding for ADAPT grant for access improvements **05**, 4

Rallies: calvacade organised by Richard Ridout **09**, 1; Austin 7 Club **14**, 12; vintage & classic vehicles **24**, 3; **27**, 6

Ravenscroft, Cllr David & Mrs Doreen: as Mayor unveils plaque commemorating centenary of National Gas Engine **40a**, 1; **41**, 1 & 5

Rawlins, Eric: attends HMF meeting at museum representing Railways in Miniature **13**, 4

Read family: visit museum **42**, 1

Reading, Brian: chairs 7¼" Gauge Society AGM visit **17**, 6

Reading, Nick (Architect, EH): meets Rod Robinson to review condition of Museum building **07**, 6; with Robinson during re-roofing **16**, 6; signs off completed refurbishment **17**, 7; acts as monitor for New Build project **19**, 4; meets re external cladding **20**, 5; shows new building to group of W Mids conservation architects **23**, 1

Reciprocating pumps: Joseph Evans of 1938 donated by Severn Trent **12**, 3; triple from Francis turbine displayed **21**, 7; open crank type of 1905 donated by Museum of E Anglian Life **25**, 5; for Heritage Water Park **42**, 4

Rees, Norman: for Hereford Gas Services fits supply to the Campbell hot-tube gas engine **46**, 3

Reeves, Ken (curator, Kington Museum): donates a posher (posser or dolly) for laundry display **15**, 8; also chair of Herefordshire Museums Forum **25**, 3

Rees, Howell: helps install electrics in new building **23**, 4

Renshall, Kate (of FHMA): meets with HMF at Museum **13**, 4; unveils hot-air engine display **35**, 1;

Reservoirs: Elan Valley centenary **18**, 4

Resources for Learning Ltd: education consultants Holmes and Dunn appointed by DCWW to assess education provision at Museum **12**, 6

Reverse osmosis: desalination **31**, 2

Rhodes, Mary (Trustee, Director & Education Officer): joins as volunteer steward **04**, 4; becomes Trustee and Hon Education Officer **05**, 4; reports on primary school work and Science Week 2000 **06**, 5; meets Stuart Heveron of Penknife Ltd re interpretation & display **07**, 3; writes 'Apprentice's Guide' for younger visitors **08**, 4; packs sent out to schools **09**, 5; primary school programme **08**, 5; education matters **10**, 7; volunteer viewpoint **11**, 4; meets with HMF at Museum **13**, 4; discusses secondary school matters with Rhiannon Johns of WMRMC **13**, 6; thanks HC for voluntary sector grant **13**, 6; develops new education initiative with DCWW **14**, 6; looks forward to new education centre and exhibition space **15**, 5; with HLF chiefs **16**, 1; interactive models **16**, 8; with Josephine Willis and Owen Meredith **17**, 3; hosts visit by Kathy Gee **19**, 3; interactives developed by **20**, 7; working with Heveron of Penknife on new signs **21**, 6; with Year 8 pupils from Kingstone **24**, 7; retires as Trustee **25**, 3; improves displays **28**, 6

Richards, Amber & Jamie: visit museum **34**, 1

Ridehalgh, Alan & Margaret: celebrate silver wedding anniversary **30**, 3

Rider, Alexander: hot-air engine development **35**, 2

Ridge, Barbara: becomes a Museum volunteer **14**, 3; volunteer viewpoint **21**, 3

Ridout, Andrea (Trustee): awarded Certificate of Achievement in Food Hygiene **05**, 5; retires as Trustee **15**, 3

Ridout, Phillip & Martin: help with ram & preserve picnic tables **05**, 3; help give Lister loco a face-lift **07**, 7

Ridout, Richard (Trustee): volunteer viewpoint **02**, 5; reclaiming Blakes ram from Tedstone **04**, 6; writes about ram reclamation **05**, 3; organises vehicle calvacades **07**, 1; **09**, 1; calvacade for Gala **12**, 1; thanked re Joseph Evans 1938 reciprocating pump **12**, 3; retires as Trustee **15**, 3

Rigby, Rosemary (Violette Szabo Museum): attends HMF meeting at Museum **13**, 4

Rivers, Gabrielle (Judge's Lodging, Presteigne): attends HMF meeting at Museum **13**, 4

Rivett, Isobel: holds ruby balloon at 40th Anniversary Gala (photo) **46**, 4

Roberts, Peter: new volunteer engineer **27**, 3; cares for 1hp hot-air engine **28**, 4; **29**, 4; assists BBQ **29**, 3; oils Bamford engine (photo) **29d**, 2; paints Rotherwas Engine House floor **31**, 4; fits fire bars to hot-air engine **32**, 5; Volunteer Viewpoint **34**, 3; keep hot-air engines in order **35**, 2 & 6; repairs ablutions tap **35**, 5; fitting hot-air engine guard **36**, 5; fabricates stand for hot-air engine models **38**, 5; creates exhibition stand **39**, 4; move water pump **40**, 5 helps refurbish Hayward-Tyler hot-air engine **42**, 5; seeks new leather seals for ½ hp hot-air engine **44**, 5

Roberts, Sally-Anne (Tourism officer, HC): attends HMF meeting at Museum **13**, 4; thanks Museum for leaflet exchange **45**, 6

Robinson, John: donor of Swainshill hot-air engine **35**, 2

Robinson, Rod: architect reports on damage to Tangye House caused by vehicle accident **06**, 1; reports on history and condition of building fabric **06**, 4; meets with Nick Reading of EH and Ray Morgan re 'at risk' report (photo) **07**, 6; gives presentation on proposals for new covered space **07a**, 1; **08**, 1 & 3; applies for planning & listed building consent **10**, 8; **11**, 7; explains architectural approach to new development **12**, 7; inspects Museum chimney from crane **14**, 8

Rolls Royce: Stephen Southall's Silver Ghost for Silver Anniversary (photo) **3a**, 2; conveys Mayor to Gala **09**, 1; Silver Ghost brings Mayor to Gala **12**, 1; **14**, 1; conveys Lord & Lady Brecon at Museum opening on 6th April 1975 **19**, 2; Richard Donovan's vintage model conveys Mayor to/from Museum **24**, 3

Roman compartment wheel: Newcomen Society bulletin admires value to youngsters **29**, 6

Ross Gazette: carries impressive coverage of Museum **46**, 6

Ross-on-Wye Waterworks: Alton Court and producer gas plant **00**, 2; town water supply in 1839 from archives **14**, 10; Focus on ...pumping station **40a**, 2

Rotary Club: Hereford group visit Museum **23**, 8; co-organise Father's Day event **27**, 8; Wye Valley group visit **46**, 8

Rotary Equipment Services Ltd: Stuart Cairncross supplies seals for Grundfoss pump **09**, 5; offers use of steel-ball shot blasting machine for de-rusting **17** 1

Rotary vane pumps: operation & use **25**, 2

Rotherwas Engine: initial planning **17**, 7; Project **18**, 1 & 3; planning permission and funding agreed **20**, 7; new engine house built like a bunker **24**, 1; restoration progress **24**, 4-5; **25**, 4; recalls WW2 in Hereford **26**, 1; **26a**, 1-2; grant-funded by HLF & Southall Trust **27**, 3; story **27**, 4-5; opened by Mayor of Hereford **27**, 1 & 5; engine house floor painted **31**, 4

Royal Navy: WH Allen engine of 1919 from patrol boat **28**, 3

Royal Sun Alliance: insurance inspector passes Hartley-Sugden boiler **13**, 4

RRA Architects: Rod Robinson with Nick Reading **16**, 6; and with Vanessa Harbar **16**, 7; New Build and Rotherwas projects **18**, 1-3; Garry Thomas picks up baton **19**, 1; contacts Nick Reading at EH **19**, 4

Rumsey, Cllr Colin: as Mayor, attends Silver Anniversary **3a**, 2; and photo **04**, 1

Ruston-Hornsby: see Hornsby

Ryder, Chris: carries water using yoke (photo) **15**, 8

Saltmarshe Estate: wooden water pipes from displayed **09**, 6; **19**, 6; donates Lister CS engine **38**, 4

Sand washers: Museum's Peebles machine awaits restoration **11**, 2; Tim Breen dismantles Glenfield & Kennedy machine ready to restore **19**, 8; **20**, 6; displayed **21**, 7

Saunders, Don (Trustee): complements DCWW on its generosity to the Museum **00**, 1; assure you of warm welcome **01**, 4; thanks benefactors **04**, 4; retires as Museum administrator **9**, 4; recovering in hospital **13**, 8; obituary **14**, 12

Saunders, Ellen (Trustee): writes about volunteering 'behind the scenes' **00**, 3; retires as Trustee **15**, 3; stewarding volunteers social **17**, 1; volunteer viewpoint **27**, 3; visitor centre volunteer thanked for being chair Whitecross Townswomen's Guild (photo) **45**, 3

Scaffold: Museum invests in safety tower **17**, 5

Schools visits: Pershore High VI form **02**, 4; Gwernyfed, Brecon, Trinity County & St James CE Primaries **04**, 4; St Francis Xaver **8**, 6; Haberdashers' Monmouth with Newton Tucker & Pencombe C of E with Mary Rhodes **09**, 5; St. Mary's High, Lugwardine with Jill Jackson and The Minster College, Leominster with Bob Benson, plus Pembridge Primary **11**, 9; Margaret Allen, St Weonards, St Francis Xaver and Our Lady's primaries and St Mary's High and Whitecross High secondary schools participate in Wores Construction Training Group event **12**, 6; Hallow and Kington primaries **12**, 8; St Mary's and Weobley high schools for 2003 National Science Week **13**, 1; Dilwyn and St Mary's C of E Primaries and Whitecross High School **14**, 6; Dilwyn School the last to visit before Museum closed for development (photo) **15**, 5; Kingstone Year 8 with Mary Rhodes **24**, 7; St Francis Xavier RC and Weobley Primaries **25**, 7; Radnor Valley & Brookfield Primaries and Leominster Junior **27**, 7; St Francis Xavier and Shobdon Primaries **28**, 1; Burghill, St Mary's and Trinity Primaries **28**, 7; Brookfield, Riverside and Kingston & Thrupton Primaries **29**, 5; Mary Watkins explains what happens on a schools visit **30**, 7; Pencombe Bromyard, St Mary Credenhill, Wellington Hereford Primaries **31**, 7; Brockhampton & Eardisley Primaries, Coleg Morgannwg and Hereford College of Technology **32**, 7; St. Mary's Credenhill, St Thomas Cantilupe, Canon Pyon Primaries and 9th Hereford Brownies & Rainbows **33**, 7; Brockhampton, Broadlands, St Francis Xavier Primaries and Leominster Junior **34**, 7; St Paul's, Ashfield Park, Walford Primaries **36**, 7; Orleton, St Francis Xavier, Riverside, St Paul's Primaries & Hereford home-educated group **37**, 7; St Paul's C of E, Canon Pyon, St Thomas Cantilupe, Brockhampton, Chilton-upon-Teme and Madley primaries **38**, 7; Ashfield, Marlbrook, King's Capel, Holme Lacy, St Francis Xavier, Lord Scudamore primaries **39**, 7; Leominster Junior, Home Education Group, Lucton, Orleton & Burley Gate primaries **40**, 7; Mordiford, St. Martin's, St Thomas Cantilupe and Wigmore Primaries **41**, 7; Marlbrook, Sutton, Walford, Ashfield Park, Orleton & Riverside Primaries and Lord Scudamore Academy **42**, 7; Leominster, Lucton and St James primaries **43**, 7; St Martin's and Ashfield Park Primaries with Sharon Phillips **44**, 7; Orleton, Sutton, Lord Scudamore & Riverside Primaries and Cricklade Home Study Group **45**, 7; Marlbrook, St James' & Lord Scudamore Primaries and Lucton School with Sharon Phillips **46**, 7

Science: BAAS engineering and technology education week funded by COPUS and WMRMC **01**, 4; **02**, 4 & 6; **04**, 4; **08**, 4; Science Week 2000 **06**, 5; Engineering Employers' Federation and EMBARK **11**, 7 & 9; Club group WI visit to Museum **12**, 4; Science Week 2003 **13**, 1

Scott, Peter & Christine: donate steam whistle to Museum (photo) **46**, 5

Scrap iron: £70 raised from sale **02**, 3

Seat (garden): donated to Museum in memory of Howard Wagner **02**, 3

Sea water desalination: Focus on... **31**, 2

Security: system installed by Arrow following break-ins **03**, 4; extra PIR lights after trespass and birds shot with air rifles **13**, 3; addressed with CCTV after windows shot with air rifle **19**, 7

Seftel, Avril: visits museum with newborn son **36**, 1

Semper-O'Keefe, Elizabeth: as Principal Archive Officer advises amendment to Museum Constitution in favour of Hereford Record Office **16**, 3

Simple, Bob (Chairman): of Hinton Football Club meets with Museum to address security problems **19**, 7; co-operates with temporary road diversion for New Build **20**, 5

Senior, Paul: Rivers Group **40**, 8

Sensors for Water Interest Group: meets at Museum **39**, 6

Severn Trent Water Ltd: donated 1938 Joseph Evans reciprocating pump from Sugar Brooke **12**, 3; donated 1937 open crank pump from Kinwarton **20**, 6

Seven ¼" Gauge Society: 2004 AGM held at Museum **17**, 1 & 6;

Shaft (water): source of river water for triple-expansion engine revealed **11**, 6

Sharples, Ken: with industrial archaeology students visit from Preston **04**, 6

Shaw, Alan (Trustee): writes about the double-vortex water turbine **01**, 2; with Hazel Wagner (photo) **02**, 3; writes Focus on... Hartley & Sugden boiler **03**, 2; with Philip Shaw constructs steel grillage for Tangye House reconstruction **05**, 2; investigating National Gas Engine (photo) **11**, 3; researching 1895 dynamo **11**, 7; reports on Francis turbine **12**, 1; recovers

Blake ram baseplate from Tedstone **14**, 5; installs three-phase supply for beam engine motor **17**, 5; awarded life membership at AGM **21**, 3

Shaw, Liz: HLF Development Mgr visits Museum **33**, 1

Shire Consulting: structural engineers of Bromsgrove appointed to New Build **19**, 1; track record **19**, 4; Richard Hartshorne discusses drainage **21**, 5

Shop at Museum: polo shirts with Museum logo **20**, 7; more items on sale **24**, 6; new gifts in stock **25**, 8; sells *Blackstone goes to War* £2 book **29**, 6

Shot blasting: machine offered by Rotary Equipment Services Ltd **17**, 1

Shropshire Steam Engine Society: helped Museum with Tommy Henderson **01**, 3; group visit with Bob Benson **09**, 8

Sibbick, Debbie: makes contact from Waterworks Museum in Goulburn, New South Wales **15**, 1

Signs: information and safety **20**, 1

Silver, Natalia: meets with Hereford Attractions Forum on behalf of City Council **02**, 4; initiates stickers for vans **02**, 5

Simpson, William: Simpson beam engine of 1856 removed in 1930s **02**, 6; scrapped **03**, 1; beam engines of 1856 and 1862 for Hereford Waterworks **08**, 2; agrees in 1854 to supply first pumping engine **17**, 2

Sinclair-Powell, Mary (Heritage Services, HC) attends HMF meeting at Museum **13**, 4

Slates: for main roof from Penrhyn Quarry **15**, 1; **19**, 7

Small, A.P: in 1886 designed Alton Court Pumping Station **40a**, 2

Smith, Colin: family member and Secretary of Tangye company visit Museum **24**, 8

Smith, David: wedding reception for, at Museum **25**, 6

Smith, Roy: donates George Kent Ltd steam-flow meter overhauled by David Timson **06**, 3

Smiths Industries plc: donated £500 towards waterwheel **04**, 4; **05**, 5

Snelgrove, Fred (Trustee and Collections Officer): becomes a volunteer at the Museum **14**, 3; assists Ron White to modify low pressure cylinder on triple expansion engine **15**, 4; helps with archive cataloguing **16**, 3; cleans triple-expansion engine and refurbishes dehumidifier **17**, 5; discusses archiving with Kiberd & Hubbard **19**, 5; cataloguing Museum's slides and accessions **20**, 7; elected Museum Trustee at AGM **21**, 3; volunteer viewpoint **23**, 3; creates water garden **23**, 3; assists Sue Hubbard gather data for MLA accreditation application **24**, 1; helps clear accessions documentation backlog **25**, 7; hosts Claymills PET visit **25**, 6; given credit for archive work **28**, 6; gets data on new website **29**, 1; tests Worth-Mackenzie engine **35**, 5; Museum archives **36**, 2; painting Bay Six **38**, 5; hydraulic ram **39**, 4; in old workshop **40**, 5; lime repoints brickwork **41**, 4; at Allen engine start-up **42**, 5; dismantles vacuum pump on triple-expansion engine **44**, 5; on archive activities **45**, 4; receives whistle donation from Scott **46**, 5

Snibston Discovery Park, Leics: water exhibits **36**, 3; **39**, 8

Snow, John (1813-58): physician links disease and water quality **10**, 2

Spas: Tenbury Wells history brief history of **09a**, 1;

Souter, Carole: as HLF Chief Executive, visits Museum **16**, 1

Southall, Anna: as Director of NMGW, inaugurates waterwheel **06**, 1; **6a**, 1; presses button to start waterwheel **07**, 1

Southall Gallery displays: Story of Water in Herefs **24**, 8; Hayward-Tyler engine **25**, 5; restored engines & pumps **29b**, 1; hot-air engines **33**, 6; Lea meter **38**, 4; enhanced **39**, 4

Southall, Phillipa (Trustee & President): hosts Winter Social event **19**, 5; **24**, 7; unveils plaque for Byworth boiler **34**, 1; appt Museum President **39**, 1; attends Winter Social **39**, 6; hosts Winter Social **44**, 3; celebrates 90th birthday (photo) **45**, 1

Southall, Stephen (President): writes 'how it all began' **01**, 3; writes welcome to Silver Anniversary celebration **3a**, 1; his Silver Ghost conveys Mayor to Gala **04**, 1; remembers W H Austin **04**, 3; unveiled History of Water display **07**, 7; conveys Mayor to Gala again **09**, 1; **14**, 1; welcomes visitors to 29 June 2003 Gala **13a**, 1; remembered at 30 year anniversary **18**, 4; with Rolls Royce on 6th April 1975 for Museum opening **19**, 2; turns 90 in June 2006 **21a**, 3; turns on Southall Water Garden **23**, 3; hosts Winter Social **24**, 7; obituary **38**, 8

Southall Trust (ST): helps with beam engine installation **03**, 4; grants £11,000 for engineering developments & waterwheel **05**, 4 & 5; donates floor coverings and folding seats for visitor centre **08**, 4; funds office furniture **09**, 4; funds wind-pump project **10**, 5; grant for office/meeting room conversion **10**, 6; grant-aids three-pumps project **13**, 3 & 5; funds up fronts costs for New Build Project **18**, 2; funds Easton, Anderson & Goolden turbine restoration and display **20**, 2; grant towards DVD & book *Wye Valley Story of a Great River* **24**, 7; praised for co-funding Rotherwas Project **26**, 1; **26a**, 1; **27**, 5; supports Heritage Water Park **42**, 1 & 4

Southwell, John: new engineering volunteer **15**, 3; renovates the Blake ram **16**, 4; offered help with de-rusting **17**, 1; brickwork to Tangye static steam engine plinth **17**, 3 & 5; **19**, 6

Speller-Metcalf Ltd: Stephen Speller helps reduce build costs **17**, 8; put together new team following New Build problems **19**, 1; track record **19**, 4; design & build **20**, 1; praise from Museum Chairman **20**, 8; Julian Jabczynski, Bill Cave and Paul Morris discuss drainage **21**, 5; hand-over at completion of New Build **21a**, 2; constructs new Museum building **23**, 1 & 4; team includes Paul Morris (site mgr), Bill Cave (contract mgr) and Julian Jabczynski (quantity svyr) **23**, 5

Sperring, Chris: becomes a volunteer at the Museum **14**, 3; helps Tim Breen overhaul hot-air engine **15**, 4; uses rotary mower **16**, 4; encourages hot-air engine to start **16**, 5

Spoor, Janet & Josh: celebrate silver wedding anniversary **30**, 3

Stafford Borough Archaeologists: group visit with Newton Tucker **09**, 8

Stamper, Paul (English Heritage Inspector): advises at presentation on new build proposal **08**, 3; backed steel & glass extension **21a**, 3

Standing, Ian (curatorial adviser): replaces Churcher in role **05**, 3; organises interpretation course for Herefordshire Museums Forum **05**, 4; helpful re grant applications **06**, 4; attends HMF meeting at Museum **13**, 4; advises transition from museum registration to accreditation **20**, 7; introduces Allan Freer AGM speaker **21**, 3

Stationary Engine: magazine carries article about the Museum's hot-air engines **29**, 6; magazines to be retained **45**, 4; features Museum **46**, 6

Stationary Engines: International Stationary Steam Engine Society **08**, 3; **30**, 5; **31**, 8; **37**, 1; Preservation Society display **40**, 4; **45**, 6

Steam: uses of in industry today **34**, 2; seminar on future of Museums with steam engines **37**, 5; history & development **43**, 2 (see also Engines, steam)

Steamboat Association: visits Museum for its AGM **42**, 8

Steam-flow meter: overhauled by David Timson **06**, 3

Steam pipes: replacement by VAS Engineering **41**, 4

Steam pumps: Worthington-Simpson displayed **21**, 7

Steampunk Society (Chepstow & Dist): visits for Stirling Engine rally **44**, 4

Steeds, Roger & Shiela: hydraulic ram owner, visits Museum **37**, 6

Steelwork: contractor erects frame for New Build **21**, 6

Stickers: on vans advertising Hereford's museums **02**, 5

Stirling engines: Focus on... **37**, 2; National Rallies **37**, 5 & **38**, 6; **41**, 3; **44**, 1 & 4; derivative engines by Allan Miller at Museum **44**, 8; Museum a centre of excellence for display **45**, 1;

Stirling, Rev Robert (1790-1879): hot air engines **35**, 2; **37**, 2; **41**, 3

Stoke Lacy, Bromyard: estate fire engine from displayed in Bay 2 **14**, 2

Stokes, Keith (Trustee): first representative of DCWW to the Museum **01**, 3

Strategic Plan: Museum 5-yr Plan for families **31**, 7

Submersible Pumps: donated by Dŵr Cymru Welsh Water **08**, 3; centrifugal **09**, 2 & 4; **10**, 5; installed & renovated **09**, 3

Suction gas engines: Focus on **32**, 2

Suction sump wells: preserved under New Build with man holes **20**, 4

Sugar Brooke Pumping Station: Severn Trent donates 1938 Joseph Evans reciprocating pump from **12**, 3

Summer social: event hosted by Hereford Society of Model Engineers **20**, 3

Surge-vessel house: Alan Marshall refurbishes **9**, 4; history and purpose to serve triple-expansion engine **11**, 6

Sussex & Kent Weald Stationary Engine Club: visit **28**, 8

Sutton, Dr R A: brings his Grant Co car to Gala **32**, 1

Sweetman, Lt Col James: donates £250 on behalf of the Institution of Electrical Engineers **11**, 1

Tachometer: donated by Tom Henderson fitted to Tangye diesel engine **20**, 6

Talks given: to Midland Wind & Water Mills Group **33**, 3; to Bromyard LHS, St John's Methodist Church & Tenbury LHS **40**, 3

Tangye Bros & Co, Smethwick, Birmingham: crankshaft crack and compressor journal repaired **01**, 3; crankshaft fracture passes test **02**, 3; Focus on...engine and pumps **07**, 2; diesel engine winter maintenance **10**, 6; routine inspection of drive-end bearings **13**, 3; small single cylinder semi-diesel and air compressor & receiver **16**, 5; single-cylinder diesel due for inspection **17**, 4; work on compressor and static engines **17**, 5; Peter Heaton instals guard rail **19**, 8; semi-diesel donkey engine restored by Peter Allen & Keith Jones **20**, 6; Tangye engine drive shaft and flywheel tested **20**, 6; Focus on...semi-diesel donkey engine of 1932 from Pembroke Dock **21**, 2; two pump sets of 1955 from RAF Hullavington **23**, 5; reciprocating pumps driven by Lister **24**, 6; staff and family visit **24**, 8; triple pumps from Yarkhill, Herefs **27**, 7; **28**, 5; twin pump sets from Buckley Barracks donated by MoD **29b**, 2; Lafford & Heaton re-dress triple-pump crankshaft bearing **33**, 5; crack in crankshaft **34**, 1 & 4; **35**, 4; **36**, 4; **37**, 5; closing pump rebuilt **35**, 5; Claymills pumping set arrives **37**, 1; Focus on WWII Units **38**, 2; fitted with motor drive **39**, 4; 80th anniversary of diesel engine **40a**, 1; fire pumps in Southall Gallery **41**, 2; pump of 1944 display unveiled by Mayor Cllr Len Tawn **46**, 4

Tangye House: Focus on...reconstruction of Leominster waterworks building **05**, 2; damaged by vehicle accident **06**, 1; repaired and reopened **07**, 1; static engines from are stored at Rotherwas **12**, 3; small engines & pumps unveiled **40**, 1;

Tanks: boiler-feed **33**, 4

Tawn, Cllr Len: Mayor to visit Museum for 40th anniversary Gala **45**, 8; attends with Mrs Jenny Tawn both the Anniversary Gala and the Allen Heritage Award Day **46**, 1

Taylor, Virginia: Conservative PPC visits Museum with Noel Meeke **14**, 7

Teachers: primary school & LEA involvement **08**, 5; Museum to speak to Herefordshire Geography Teachers Network **12**, 6

Teddy Bears' Picnic: **40**, 6; **46**, 1

Tedstone Delamere: Blakes ram from **04**, 6; **05**, 3; cant yet recover ram due to foot & mouth restrictions **09**, 3; ram now at museum in rusty state **13a**, 2; Blakes ram from **14**, 5; **16**, 4

Telegraph Newspaper: offers discounted entry to Museum **42**, 8

Telephone: lack of dedicated line at Museum commented by Visit Britain **31**, 6

Teletalk machine: progress by Phil Witting **31**, 7; **33**, 5; redisplay **39**, 4

Tenbury Wells Spa Museum: offers vertical single-cylinder steam engine from brine spa **06**, 3; donates 1911 Thorneycroft marine steam engine **08**, 3; displayed running in steam **09**, 3; brief history & engine restoration **09a**, 1-2; curator John Greenhill unveils donkey engine **10**, 8

Terluin, Arie (of Alkmaar): Pete Hollenberg's cousin erects new spot lights for display boards **11**, 5

Terravision Ltd: Digby Milnes uses ground penetration radar to find underground services ahead of New Build **20**, 4

Thomas, Garry: supervises exploratory trenches and boreholes **14**, 8; with project team (photo) **15**, 7; as Project Architect, tours with HLF chiefs **16**, 1; explains conservation work **16**, 6; picks up baton **19**, 1

Thompson, Colin: encouraged Tony Palmer to become Museum volunteer **05**, 5; volunteer viewpoint **06**, 5; dismantles Allen diesel gearbox **08**, 6; volunteer engineer obituary **32**, 8

Thompson, Margaret (director of Cider Museum, Hereford): attends HMF meeting at Museum **13**, 4; meeting with **16**, 8

Thomson, James: patented double-vortex water turbine **01**, 2

Thorneycroft Ltd: marine steam engine of 1878 donated by Tenbury Museum **08**, 3; displayed running in steam **09**, 3; Admiral Edwards appreciates information **12**, 8; engine withdrawn **40**, 5

Three Pumps Project: Blake ram, wind turbine and Easton, Anderson & Goolden set **14**, 4

Thwaites, Lt Col Charles (High Sheriff of Herefs): visits **40**, 6

Time-line Project: illustrates technological progress to children **19**, 3

Timson, David Hume: overhauls George Kent steam-flow meter **06**, 3; repairs Gilkes vortex turbine from Bryanston sawmill **07**, 3; refurbishes Cardew voltmeter from Burghill (photo) **15**, 7; pays tribute at death of friend and Museum steward David Lawrence **19**, 8; obituary **23**, 8

Timson, June: visitor centre volunteer came 2nd in Whitecross Townswomen's Guild competition (photo) **45**, 3

Toon, Cllr Anna: Mayor of Hereford opens Water-on-Tap displays **35**, 1 & 6;

Tourism: Action Programme for Skills (TAPS) funds HMF interpretation course **05**, 4; Visit Herefs formed **37**, 8; Going Places Award **39**, 1; Visit Herefs group at Museum **40**, 8

Townsend, Jane: leader of Hereford Painting Club visits (photo) **14**, 11

Townsend, John (Museum's first curator): became first curator and tireless worker **01**, 3; installed narrow-gauge railway in 1975/6 **11**, 2; in 1974 established archive **17**, 2; remembered at 30 year anniversary **18**, 4; how it began 30 years ago **19**, 2

Townson, Anne-Marie: lost cat Sheba found in boiler house and returned by Mary Rhodes **14**, 7

Townswomen's Guild: Doreen Morgan key role **04**, 5

Traction engines: Black Country Live Steamers visit Museum with scaled replicas **46**, 7

Tractors: Case brought by Compton to Hereford & District Preservation Society event **20**, 8; tractor vaporising oil (TVO) **29d**, 2

Treatment works: opening of new works at Broomy Hill **16**, 2; Actiflo system installed in 1990 **22**, 1; Focus on ... desalination **31**, 2

Trees: poplars damaged by gales **08**, 5; Austrian pines lost to gale **09**, 3; diseased ash tree felled by DCWW (photo) **13**, 7; preservation orders on **35**, 7

Trevithick, Richard: compound engine **43**, 2

Triple-Expansion (steam) Engine of 1895: improved safety barriers for (photo) **00**, 3; Focus on... **02**, 2; shaft for found and photographed **11**, 2; surge vessel for found and restored **11**, 6; low-pressure cylinder modification **15**, 4; cleaned by Fred Snelgrove **17**, 5; at Broomy Hill **23**, 2; Engine's vacuum pump is dismantled **44**, 5

Trustees: welcome Sue Hubbard's appointment **17**, 1; welcome Richard Curtis' appointment **44**, 3

Tucker, Newton (Trustee & Treasurer): shown Museum's access award **00**, 1; with van sticker (photo) **02**, 5; reports on Blakes ram at Tedstone **04**, 6; reviews Museum's insurances **05**, 6; 'Under Pressure' and supervises Enough Water in Wye project

09, 5; with Stafford Borough Archaeologists 09, 8; working on triple-expansion condenser (photo) 11, 3; lubricates beam engine's parallel motion 12, 3; volunteer viewpoint 13, 4; relays steam pipe and sews up cotton cover 16, 4; drives Lister diesel loco 19, 6; attends Winter Social 24, 7; overhauls National gas engine 28, 5; refits boiler inspection cover 31, 1; obituary 34, 8; family visit 39, 3

Tudge, Cllr Clem: Mayor gives award for access to Museum 00, 1; with van sticker (photo) 02, 5

Turbines: Williamson Bros double-vortex 01, 2; repair of Gilkes vortex turbine from Bryanston 07, 3; Gilbert Gilkes & Gordon, Francis and Easton, Anderson & Goolden 10, 5; Francis 12, 2; E, A & G turbine installation 13a, 2; Focus on ... waterwheels to turbines 15, 2; E, A & G turbine 10, 3; 16, 5; Focus on... E, A & G turbine & pumps 20, 2; impulse and reaction 20, 2; Pelton wheel impulse resited 28, 5; Fourneyron 30, 2; wind for farm supply 40, 2

Turbine governor: donation of Gilbert, Gilkes & Gordon 31, 5

Turner, Dawn: as administrator for HRP visits to discuss educational aspirations of the Museum 15, 7

Twyford Waterworks Trust: visit Museum 33, 8; transfer loco 39, 5

Typhoid fever: outbreak in Leominster 05, 2; waterborne disease 10, 2; epidemics before piped water 30, 1

University of the Third Age (U3A): Abergavenny branch visit 03, 3; Chairman speaks to Ross branch 43, 1

Underground structures: assessment ahead of New Build 20, 4-5

Usk Museum of Rural Life: group visit with Lord Raglan (photo) 14, 11

Vacuum pump: on triple-expansion engine dismantled 44, 5

Vaile, Susan: attends opening of Rotherwas House on HLF behalf 27, 4; congratulates the Museum 28, 6; appreciates *Blackstone goes to War* book 29, 6;

Valves: pressure reducing 34, 5

Vandalism: security addressed as windows shot with air rifle 19, 7

Van De Vyver, Ceris: organises Welsh Water group visit 38, 1

Van Elle Ltd: drilled some fifty piles for New Build 21, 4

Vanguard Engineering: contractors for moving 1932 Tangye diesel pump from Milton Springs at Pembroke Dock to Museum 07, 2

VAS Engineering Ltd: installs Byworth Boiler 32, 5 & 33, 4; 34, 2; replaces steam pipe to boiler 41, 4

Ventilator: to Bay 3 repaired 16, 1

Venturi flow meter: moved from Bay 6 by Marshall & Lafford 33, 5

Victorian Age: workshop offered from Alton Court 00, 2; WCs donated by Clarence Attfield 06, 6; forge & bellows found in back-stock 14, 9; items for loo & laundry displays required 15, 8; celebrated by Steampunk Society visit during Stirling Engine rally 44, 4

Vintage & classic vehicles: calvacade organised by Roger Mills 04, 1; cavalcade organised by Richard Ridout 09, 1; Car Club visit 10, 1; Gala day calvacade 11, 5; rallies 24, 3; 27, 6; clubs visit Museum 42, 6

Vintage Spirit: Editor Brian Gooding visits (photo) 14, 11; magazine reviews *Blackstone goes to War* 29, 6; magazines to be disposed? 45, 4; carries five-page article on Museum 46, 6

Visit Britain: confers accolade on Museum 31, 1 & 6

Visit Herefordshire: Sally-Ann Roberts MD thanks Museum for leaflet exchange 45, 6

Visitor Centre: new kitchen area for 05, 5; plans for cafe, education/seminar room, meeting room etc 07a, 1; poplar tree crashes through roof 08, 5; 'ambassadors' greet visitors 10, 5; building of 1990 sold to a garden centre to make way for New Build Project 14, 9; 15, 6; spacious atrium at hand-over of New Build 21a, 3; NBP to completion 23, 4-5; designed to be relaxing 25a, 2; book compares Museum with Bodleian 37, 1; digital projector for 41, 6

Visitor matters: nearly 1800 visitors in 1997 01, 1; scope for more group visits 02, 5; 03, 3; record numbers 05, 1; sympathetic of special needs 09, 5; record visitor numbers 10, 1; improved visitor services 16, 8; stewarding volunteers social 17, 1; Numbers better than expected 31, 6; *Visit Herefs* meeting 38, 4; Attraction Quality Assurance Scheme 40, 3; Herefs Rivers Group 40, 8; numbers exceed 5,000 for first time 41, 1; record numbers at Easter 42, 1; modest increase in numbers 43, 1

Vitruvius: inspires re-creation of Roman compartment wheel, AKA tympanum 6a, 2; 07, 5

Volunteering: behind the scenes 00, 3; stewards required for open days 01, 1; appeal for help 03, 1; engineers take a break 09, 8; Volunteer Bureaux in Herefs event 11, 8; recruitment lunch & get-together 13, 1; Snelgrove, Sperring and Ridge are new volunteers 14, 3; info assembled for handbook by Peter Heaton 31, 8; more recruits than ever 44, 1; Liz Keir recruited 46, 3

Volunteer Viewpoint: Ellen Saunders/Doreen Morgan 00, 3; Richard Ridout 02, 5; Peter Heaton 03, 3; Doreen Morgan 04, 5; Tony Palmer 05, 5; Colin Thompson 06, 5; Clive Lafford 07, 5; Bob Benson 08, 5; Ray Morgan 09, 6; Glyn Nicholas 10, 4; Mary Rhodes 11, 4; Ron White 12, 4; Newton Tucker 13, 4; Pete Hollenberg 14, 3; Les Birch 15, 3; Derek Duffett 16, 3; Peter Allen 17, 3; Patricia Heaton 19, 3; Alan Marshall 20, 3; Barbara Ridge 21, 3; Fred Snelgrove 23, 3; Patricia Marshall 24, 3; Tim Breen 25, 3; Ellen Saunders 27, 3; John Liddle 28, 3; Pete Hollenberg 29, 3; John Mephram 30, 3; Brian Pearson 31, 3; Keith Jones 32, 3; Joan Hughes 33, 3; Peter Roberts 34, 3; Dave Winbow 35, 3; Marion Pearson 36, 3; Peter Williams

37, 3; Michael Lewis 38, 3; Norma Mudge 39, 3; Tony Hodson 40, 3; Phil Witting 41, 3; Brian Davies 42, 3; Julie Jones 43, 3; John Depledge 44, 3; Keith Munn 45, 3; Graham Prosser 46, 3

VSO: Mary Watkins leaves for Rwanda 43, 3

Waddington, Andrew: architect in charge New Build project 09, 7

Wagner, Howard: remembered for engineering work with seat 02, 3; remembered for work recommissioning Hartley Sugden boiler 03, 2

Walthamstow Pump House Museum: John Collier visits from 35, 8

Wargen, Cllr Kevin & Mrs Lynne: Mayor & Mayoress visit on Gala Day 29, 1 & 7; 29b, 1; writes appreciatively 30, 6

Warner, J: made new pumps in 1889 for Kington water supply 12, 2

Warner, Robert & Co: hydraulic ram from Tedstone Court 29, 2

Warr, Frank MBE (President of Hereford Access for All): appreciates ADAPT-enabled wheelchair accessibility 07, 5

Wash basin: displayed Edwardian 31, 5

Water: DCWW Efficiency Group meet at Museum 29, 7; sea water & desalination 31, 2; Sensors Interest Group 39, 6; Heritage Park 39, 8

Waterborne diseases: cryptosporidium, typhoid, cholera etc 10, 2; 16, 2; Hereford people suffered from 'general malaise' before 1854 22, 1

Water closets: collection of Victorian examples donated by Clarence Attfield 06, 6

Water garden: created by Galliers & Snelgrove, dedicated to Stephen & Philippa Southall 21a, 4; 23, 3

Water-on-Tap Project: planning and fund-raising 29, 6; starts 30, 1 & 6; progress 31, 7; work by George Williams & Stuart Heveron 32, 7; grant-aided DVD & books 33, 6; Mayor of Hereford opens displays 35, 1, 3 & 6; prof Witting fixes gremlin 36, 5; project team 36, 6

Water level: Guest & Chrimes indicator renovated 45, 5

Water measurement: topic for National Science Week 2003 13, 1; donation of Lea Recorder meter 38, 4

Water supply: Millennium Awards for All to support display on history 6a, 2; 150 years for City 22, 1; by fire brigade at times of crisis 24, 2; story of drinking water displayed 25a, 2; treatment display moved from Bay 6 33, 5; on-Tap Project display in Bay 4 34, 6; Farm supplies 40, 2

Water tower: Built 1883/4 in Italianate style 22, 1; 23, 2; model made for water-level display 23, 3; photo of 30, 1

Waterwheel(s): 12' 9" diameter overshot of 1906-7 from Aberystwyth offered by WI&MM, Cardiff 02, 3; 03, 1; planning consent granted for 3a, 2; preparations for installation 04, 3; grant aided by WMRMC 05, 4; work begins on foundations and A-frame support piers 05, 5; waterwheel turns (photo) 06, 1; Focus on...installation 6, 2; started by Anna Southall 6a, 1; use of 6a, 2; 07, 1; for Kington water supply 12, 2; Focus on.. waterwheels to turbines 15, 2; overshot waterwheel from Carmarthenshire barn at Museum 28a, 1; Roman compartment wheel admired by Newcomen Society bulletin 29, 6; removing detritus from 32, 5; for farm supply 40, 2;

WaterWords: wins 2003 AIA best Newsletter 14, 1; AIA's best Newsletter of the Year Award 29, 1; 30, 6; from Editor's workbench 40, 8

Waterworks Museum: opens Tuesdays 04, 4; Rod Robinson reports on history & condition for EH 06, 4; plans for the future 07a, 1; building history 08, 2; Goulburn Waterworks Museum 15, 1; refurbishment 17, 7; constraints on piling due to SAM status 19, 1; building development history 22, 2; New Build project to completion 23, 4-5; aims of the Museum 26, 2; buildings and engines of the Museum site 29c, 1; history of main building 29c, 2; archive & library 36, & 37, 8; governance 45, 4

Watkins Engineering Ltd (Coleford): resolved problem of water pump to Hartley Sugden boiler 02, 3

Watkins, Mary (teacher): appointed 27, 7; peripatetic primary science teacher 28, 7; makes use of every minute 29, 5; explains schools' visits 30, 7; on pond dipping 33, 1; Children's activities 35, 7; what happens on a schools visit 36, 6; copes with increased education visits 37, 1; 38, 1; 40, 6; *au revoir* 43, 3; returns from VSO in Rwanda 46, 7

Watt, James: pioneered production of steam power indicator 13, 2; steam engine development 43, 2

Weather: heavy rain washes ballast from narrow-gauge railway 04, 5; mixed summer 35, 1;

Weather vane: renovated by Museum volunteers 16, 1 & 6

Website: development supported by Carnegie Trust 09, 4; funding sought to put collections catalogue on-line 25, 7; new site launched with archive catalogue, education resources, events listing, shop goods etc 27, 1 & 3; new websites launched 29, 1; praised by Visit Britain 31, 6; improved thanks to grant 35, 8; 36, 6

Wedding: reception for Susan Meeke and David Smith at Museum 25, 6

Wells: water shaft found under narrow-gauge track 11, 6; Crooked Well & Francis turbine, Kington 12, 2; suction sump wells found under New Build 20, 4; well & windlass at Heritage Water Park 42, 4

Wells Evening Society: visit Museum (photo) 45, 6

Welsh Industrial & Maritime Museum (WI&MM), Cardiff: offers Cornish beam engine by Harvey & Co 02, 1; 03, 1; offers

overshot waterwheel and safety rails **02, 3**; loans c.1890 dynamo from Barry **03, 3**

Welsh National Water Development Authority (WNWDA): donated Glenfield & Kennedy hydrostat in 1975 **11, 8**; Welsh Water **22, 1** & see Dŵr Cymru (DCWW)

West, Rev. Michael: visits Museum with engineers (photo) **11, 1**

West Midlands Cultural Consortium (WMCC): film Museum attractions **11, 10**

West Midlands Regional Museums Council (WMRMC): grant aids archival facilities and supply for gas engines **00, 1**; **01, 1**; grant aids facilities for safe public viewing **02, 4**; helps with beam engine installation **03, 4**; funded set99 schools event **04, 4**; grant aids waterwheel installation **05, 4 & 5**; funds teaching packages for primary school pupils **06, 4**; elects Noel Meeke to Board **07, 3**; grant aids Allen diesel engine barriers etc **10, 3**; grant aids restoration of Easton, Anderson & Goolden turbine **11, 7**; grant-aids three-pumps project **13, 3 & 5**; acting CEO Lesley-Anne Kerr speaks at HMF seminars at Museum **13, 7**

Westlake, Ann: complementary of visit with Golden Age Club of Goodrich **11, 5**

Wheelchairs: Museum accessible for thanks to ADAPT improvements **07, 5**; Museum publishes *Handy Guide for Wheelchair Users* **29, 6**

Whistles: in silver engraved 'Rhona Crawshay Christmas 1914' found at Museum (photo) **46, 2**; Peter & Christine Scott donate steam whistle **46, 5**

White, Ron: checks steam pipe flange **04, 3**; visits Museum with engineers (photo) **11, 1**; uses new safety staging (photo) **11, 3**; with Meredith and IT equipment (photo) **11, 7**; volunteer viewpoint **12, 4**; made show case for steam engine diorama **13, 5**; modifies triple-expansion engine low-pressure cylinder **15, 4**; plants shrub **17, 3**; refurbishes Worth McKenzie engine **17, 5**; maintains triple expansion engine **40, 5**

Whitecross Townswomen's Guild: meet at Museum **45, 3**

Whitworth Gloster Aircraft Co: **40, 3**

Wickton Workshops of Stoke Prior: dismantles Leominster Tangye House for reconstruction at Museum **05, 2**

Wigg, Laura: curatorial adviser, Claymills PET visits **25, 6**

Wilcox, Cllr Brian (Mayor): visits **40, 1 & 6**

Williams & Co, Hay-on-Wye: bought 1931 Bamford petrol engine displayed at Museum **29b, 2**

Williams, Cllr & Mrs Alan (Mayor & Mayoress): visit Museum on Gala Day **11, 5**; **12, 1**

Williams, Brian: of Fownhope using magnetometry to survey site of New Build **20, 4**

Williams, George: makes display for Edwardian wash basin **31, 5**; passes away & obit **32, 7-8**

Williams, Peter: works on Ruston-Hornsby engine **34, 3**; Volunteer viewpoint **37, 3**; works on & installs 3-engine & pumps **35, 5**; **37, 4**; tests injector for Lister CS engine **38, 5**; works on Lister CS diesel for Massington project **41, 6**; encouraged Keith Munn to volunteer **45, 3**

Williamson Bros, Kendal: made double-vortex Gilkes water turbine of c.1881 from Bryanston **01, 2**; repaired at Museum **07, 3**

Willis, Josephine: Education co-ordinator at Kew Bridge Steam Museum visits **17, 3**

Willis, Keith: of Speller Metcalfe Ltd does bricklaying **21, 5**

Wilson Hartnell Ltd: dynamo of 1895 producing power **11, 3**

Wilson Engine Co (Aberdeen) horizontal single-cylinder oil engine donated by Grampian Transport Museum **41, 1 & 5**; Peter Allen helps restore **42, 5**; **43, 5**; to be used with Massington line-shaft **44, 6**; project progress **45, 5**; oil engine lifted into place for Massington display **46, 5**

Winbow, Dave: new volunteer engineer **27, 3**; cares for 1hp hot-air engine **28, 4**; **29, 4**; helped bring Bamford & Evans pump set to operation **29d, 2**; fits fire bars to hot-air engine **32, 5**; fitting hot-air engine guard **34, 4**; keep hot-air engines in order **35, 2**; volunteer viewpoint **35, 3**; **36, 5**; fabricates stand for hot-air engine models **38, 5**; creates exhibition stand **39, 4**; attends to Hayward-Tyler hot-air engines **35, 2**; visits Snibston **39, 8**; move water pump **40, 5**; helps refurbish Hayward-Tyler hot-air engine **42, 5**; seeks new leather seals for ½ hp hot-air engine **44, 5**

Wind pump: from Keith Johnson of Bridge Sollars **11, 4**; planning consent refused **11, 8**; Nigel Brake refurbishing tower, turbine and gear box **12, 3**; re-erected by Penybryn Engineering **13a, 1**; **14, 4** (photos); inaugurated by Mayor Attfield on Gala Day **14, 1**; more sophisticated than appears with gear box converting rotary to reciprocating motion **28a, 2**; Alton Court **39, 2**; **40a, 2**; for farm supply **40, 2**; pump repainted by E C Joseph Ltd **45, 5**

Wind turbine: discuss location of Mr Johnson's donation **09, 3**

Winter maintenance: volunteers busier than ever **10, 6**; work on smaller engineering projects **15, 4**

Winter Social: hosted by Herefordshire Society of Model Engineers **10, 6**; **21, 3**; DVD and quiz about R Wye **24, 7**; **29, 3**; superb buffet **31, 3**; postponed due to snow **34, 3**; event **37, 3**; excellent evening **42, 3**; memorable evening hosted by President **44, 3**

Winter Waterland: **36, 1**

Witting, Phil: new volunteer engineer **31, 7**; progresses with Teletalk machine **33, 5**; fixes gremlins **36, 5**; Volunteer Viewpoint **41, 3**

Women's Institute: Herefordshire Federation Science Club group visit to Museum **12**, 4

Wood, Bert: visits Museum for 100th birthday **10**, 4

Wood, Dr John: visits Museum with Clare Chizazi of Hereford-Muheza Link Society **32**, 3

Wood, Julian: examines Cooke-Yarborough generator with Stirling Engine Society **44**, 8

Wood, Michael: discovers wooden water pipes at Norton, Saltmarshe near Bromyard **09**, 6

Wooden water pipes: from Saltmarshe Estate to be displayed **09**, 6; **19**, 6

Woodward, Cllr Julie (Mayor): opens Balsdean pump display **38**, 1 & 6

Worcester Locomotive Society: group visit (photo) **14**, 11; visits **35**, 8

Worcestershire Construction Training Group: arrange event for children at Museum **12**, 6

Workshop: Focus on... Alton Court Victorian Workshop **0**, 2; present Museum workshop in Bay 3 very unsatisfactory **07**, 6; new planned for maintenance **18**, 2; enhanced facilities at handover of New Build **21a**, 3; fitted out **24**, 6

World Pumps: journal carries article on Museum's Easton, Anderson & Goolden turbine **14**, 5

World War 2: Displays at Museum **26**, 2; **26a**, 2; Exhibition of Rotherwas Munitions Factory **27**, 5; Mayor takes interest in exhibition **32**, 6; Tangye Pumping Units arrive at Museum **37**, 1; Focus On **38**, 2

Worshipful Company of Engineers: visit Museum with Andrew Jackson **11**, 1; Jackson writes in appreciation and admiration of Museum **12**, 8

Worthington-Simpson Co: steam pump of 1906 benefited from TLC **16**, 4; steam pump displayed **21**, 7; epitomises era of stationary steam pumping engines **21a**, 4; dismantled **32**, 5; rebuilt **33**, 5; boiler feed **34**, 4

Worth-Mackenzie Ltd, Stockton-on-Tees: Focus on...the triple-expansion engine **02**, 2; supplies rotary steam engine **08**, 2; Ron White refurbishes engine **17**, 5; installed in 1895 with high pressure boiler with another in 1906 for the tower **22**, 1; centenary of installation at Broomy Hill **24**, 8; pumps lifted water to Broomy Hill (photos) **29c**, 2; temperature tested **35**, 5;

Wye River: enough water Science week project **09**, 5; Wye Valley Studies Centre at Museum **14**, 7; education project **19**, 3; DVD and book produced **24**, 7

Wye Valley Art Group: visit Museum **12**, 4

Wye Valley Printers: helped with Museum *Guidebook* **02**, 5;

Wye Valley Rotary: Club group visit Museum (photo) **46**, 8

Yarkhill pumping station, Herefs: Tangye triple-throw water pump set from **27**, 7; **28**, 5

Waterworks Museum, Hereford *WaterWords* Issues

No	Year	Issue
00	1997	Autumn
01	1997/98	Winter
02	1998	Summer/Autumn
03	1999	Spring
03a	1999	27 th June (Silver sp edn)
04	1999	Summer/Autumn
05	1999/2000	Winter
06	2000	Spring/Summer
06a	2000	25 th June (sp edn)
07	2000	Autumn
07a	2001	January (sp edn)
08	2001	Spring
09	2001	Summer
09a	2001	August (sp edn)
10	2001	Winter
11	2002	Spring/summer
12	2002/2003	Winter
13	2003	Spring
13a	2003	29 th June (sp edn)
14	2003	Summer/Autumn
15	2004	Winter
16	2004	Spring/Summer
17	2004	Autumn
18	2004	December (sp. Edn)
19	2005	Spring
20	2005	Autumn
21	2006	Winter
21a	2006	25 th June (sp edn)
22	2006	13 th August (sp edn)
23	2006	Autumn
24	2007	Winter
25	2007	Spring/summer
25a	2007	Summer (sp edn)
26	2007	September (sp edn)
26a	2007	30 th Sept (sp edn)
27	2007	Autumn
28	2008	Spring
28a	2008	11 th May (sp edn)
29	2008	Summer
29a	2008	19 th July
29b	2008	27 th July (Gala Day sp edn)
29c	2008	14 th Sept (Heritage Open Day sp edn)
29d	2008	26 th Oct (Joseph Evans sp edn)
30	2008	Autumn
31	2009	Spring
32	2009	Summer
33	2009/2010	Winter
34	2010	Spring
34a	2010	17 th July (sp edn)
35	2010	Autumn
36	2010/2011	Winter
37	2011	Summer
38	2011/12	Winter
39	2012	Spring
40	2012	Summer
40a	2012	30 th Sept (sp edn)
41	2012/13	Winter
42	2013	Spring
43	2013	Autumn
44	2014	Spring
45	2014	Summer
46	2014	Autumn